

Resolution #13838

AN ORDINANCE REVISING THE CRITICAL AREAS ORDINANCE OF GARFIELD COUNTY, WASHINGTON

WHEREAS, Garfield County is required by the Growth Management Act to update to its Comprehensive Plan and Development Regulations which includes the Critical Areas Ordinance, and;

WHEREAS, the County Commissioners did consider the following Findings of Fact, and;

WHEREAS, after entering these Findings, having fully considered all public testimony and the entire public record, as well as the requirements of the Growth Management Act (GMA) including the submission of a draft Critical Areas Ordinance to the GMA review team, and;

WHEREAS, the proposed revisions and content of the Critical Areas Ordinance are necessary to protect the health, safety and general welfare of the community and its residents, and;

WHEREAS, Garfield County did allow for and encourage public participation in the review and update process of the Critical Areas Ordinance, and;

WHEREAS, the proposed Critical Areas regulations have been found consistent with existing development regulations and State and federal laws, and;

WHEREAS, the proposed Critical Areas Ordinance does not produce a significant adverse environmental impact, and;

WHEREAS, the Garfield County Planning Commission has reviewed the proposed Critical Areas Ordinance and recommended adoption of said document;

NOW, THEREFORE, the Board of Commissioners of GARFIELD COUNTY does hereby ORDAIN to adopt by reference the Garfield County Critical Areas Ordinance.

This ordinance shall be in full force and effect as so provided in the Garfield County Code.

ADOPTED this 4 day of August, 2008.

[Signature]
Chair

[Signature]
Member

[Signature]
Member

ATTEST:

APPROVED AS TO FORM:

[Signature]
Clerk of the Board

[Signature]
County Attorney

SECTION 1.0

1.1 STATEMENT OF PURPOSE

The Critical Areas Ordinance (CAO) is intended to protect the functions and values of critical areas including wetlands, critical aquifer recharge areas, fish and wildlife habitat conservation areas, frequently flooded areas, and geologically hazardous areas.

It is the purpose of this ordinance to promote the public health, safety, and general welfare, and to minimize public and private losses due to flood conditions in specific areas by provisions designed:

- To protect human life and health;
- To minimize expenditure of public money and costly flood control projects;
- To minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;
- To minimize prolonged business interruptions;
- To minimize damage to public facilities and utilities such as water and gas mains, electric, telephone and sewer lines, streets, and bridges located in areas of special flood hazard;
- To help maintain a stable tax base by providing for the sound use and development of areas of special flood hazard so as to minimize future flood blight areas;
- To ensure that potential buyers are notified that property is in an area of special flood hazard; and,
- To ensure that those who occupy the areas of special flood hazard assume responsibility for their actions.

SECTION 2.0

2.1 DEFINITIONS

Unless specifically defined below, words or phrases used in this ordinance shall be interpreted so as to give them the meaning they have in common usage and to give this ordinance its most reasonable application.

"ADMINISTRATOR" means the Zoning Official.

"APPEAL" means a request for a review of the interpretation of any provision of this ordinance or a request for a variance.

"AREA OF SHALLOW FLOODING" means a designated AO, or AH Zone on the Flood Insurance Rate Map (FIRM). The base flood depths range from one to three feet; a clearly defined channel does not exist; the path of flooding is unpredictable and indeterminate; and, velocity flow may be evident. AO is characterized as sheet flow and AH indicates ponding.

"AREA OF SPECIAL FLOOD HAZARD" means the land in the flood plain within a community subject to a one percent or greater chance of flooding in any given year. Designation on maps always includes the letters A.

“AQUIFER RECHARGE AREAS” mean areas designated as high susceptibility for aquifer contamination are those areas which lie within the A Zone on the FEMA maps. All development and all uses which lie within these areas shall be connected to the Town’s sewer system. No new uses on a septic system are permitted in high susceptibility areas of critical aquifer recharge.

“AQUIFER, SOLE SOURCE” means an area designated by the U.S. Environmental Protection Agency under the Safe Drinking Water Act of 1974, Section 1424(e). The aquifer(s) must supply fifty percent (50%) or more of the drinking water for an area without a sufficient replacement available.

"BASE FLOOD" means the flood having a one percent chance of being equaled or exceeded in any given year. Also referred to as the "100-year flood." Designation on maps always includes the letters A.

"BASEMENT" means any area of the building having its floor subgrade (below ground level) on all sides.

“BEST AVAILABLE SCIENCE” means current scientific information used in the process to designate, protect, or restore critical areas, that is derived from a valid scientific process as defined by WAC 365-195-900 through –925.

"BREAKAWAY WALL" means a wall that is not part of the structural support of the building and is intended through its design and construction to collapse under specific lateral loading forces, without causing damage to the elevated portion of the building or supporting foundation system.

“CLASS V INJECTION WELL” means a shallow disposal systems that are used to place a variety of fluids below the land surface.

“CRITICAL AQUIFER RECHARGE AREA” means areas designated by WAC 365-190-080(2) that are determined to have a critical recharging effect on aquifers used for potable water as defined by WAC 365-190-030(2).

"CRITICAL FACILITY" means a facility for which even a slight chance of flooding might be too great. Critical facilities include, but are not limited to schools, nursing homes, hospitals, police, fire and emergency response installations, installations which produce, use or store hazardous materials or hazardous waste.

"DEVELOPMENT" means any human-made change to improved or unimproved real estate, including but not limited to buildings or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations or storage of equipment or materials located within the area of special flood hazard.

"ELEVATED BUILDING" means for insurance purposes, a non-basement building which has its lowest elevated floor raised above ground level by foundation walls, shear walls, post, piers, pilings, or columns.

“EMERGENCY” means a serious situation or occurrence that happens unexpectedly and demands immediate action such as those causing hazardous situations including flooding, snow, or ice storms high winds or other natural events.

"EXISTING MANUFACTURED HOME PARK OR SUBDIVISION" means a manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including, at a minimum, the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) is completed before the effective date of the adopted floodplain management regulations.

"EXPANSION TO AN EXISTING MANUFACTURED HOME PARK OR SUBDIVISION" means the preparation of additional sites by the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads).

"FLOOD" or "FLOODING" means a general and temporary condition of partial or complete inundation of normally dry land areas from:

The overflow of inland or tidal waters and/or

The unusual and rapid accumulation of runoff of surface waters from any source.

"FLOOD INSURANCE RATE MAP (FIRM)" means the official map on which the Federal Insurance Administration has delineated both the areas of special flood hazards and the risk premium zones applicable to the community.

"FLOOD INSURANCE STUDY" means the official report provided by the Federal Insurance Administration that includes flood profiles, the Flood Boundary-Floodway Map, and the water surface elevation of the base flood.

“FLOOD LOSS/FLOOD DAMAGE” means property damage due to flood events.

"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.

“FREQUENTLY FLOODED AREAS” means lands in the flood plain subject to a one percent (1%) or greater chance of flooding in any given year. Frequently flooded areas perform important hydrologic functions and may present a risk to persons and property as designated by WAC 365-190-080(3). Classifications of frequently flooded areas include, at a minimum, the 100-year flood plain designations of the Federal Emergency Management Agency and the National Flood Insurance Program.

“GEOLOGICALLY HAZARDOUS AREAS” means areas susceptible to erosion, sliding, earthquake, or other geological events. They pose a threat to the health and safety of citizens when incompatible development is sited in areas of significant hazard. Such incompatible development may not only place itself at risk, but also may increase the hazard to surrounding development and

use. Areas susceptible to one or more of the following types of hazards shall be designated as a geologically hazardous area:

- Erosion hazard;
- Landslide hazard;
- Seismic hazard;
- Mine hazard;
- Volcanic hazard; and
- Other geological events including tsunamis, mass wasting, debris flows, rock falls, and differential settlement.

“GROUND WATER” means water in a saturated zone or stratum beneath the surface of land or a surface water body.

"LOWEST FLOOR" means the lowest floor of the lowest enclosed area (including basement). An unfinished or flood resistant enclosure, usable solely for parking of vehicles, building access or storage, in an area other than a basement area, is not considered a building's lowest floor, provided that such enclosure is not built so as to render the structure in violation of the applicable non-elevation design requirements of this ordinance found at Section 2.3.3(B).

"MANUFACTURED HOME" means a structure, transportable in one or more sections, which is built on a permanent chassis and is designed for use with or without a permanent foundation when attached to the required utilities. The term "manufactured home" does not include a "recreational vehicle."

"MANUFACTURED HOME PARK OR SUBDIVISION" means a parcel (or contiguous parcels) of land divided into two or more manufactured home lots for rent or sale.

“MITIGATION” means a negotiated action involving the avoidance, reduction or compensation for possible adverse impacts. In the following order of preference this includes:

- Avoiding the impacts altogether by not taking action;
- Minimizing impacts by limiting degree or magnitude;
- Rectifying impacts by repairing, rehabilitating or restoring;
- Minimizing or eliminating the hazard by restoring or stabilizing the hazard area;
- Reducing or eliminating impacts by preservation or maintenance;
- Compensating for impacts by in kind replacement; or
- Monitoring impacts by a planned evaluation process.

"NEW CONSTRUCTION" means structures for which the "start of construction" commenced on or after the effective date of this ordinance.

"NEW MANUFACTURED HOME PARK OR SUBDIVISION" means a manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including at a minimum, the installation of utilities, the

construction of streets, and either final site grading or the pouring of concrete pads) is completed on or after the effective date of adopted floodplain management regulations.

“PERMEABILITY” means the capacity of an aquifer or confining bed to transmit water. It is a property of the aquifer or confining bed and is independent of the force causing movement.

“QUALIFIED PROFESSIONAL” means a person with experience and training in the applicable critical area. A qualified professional (usually) must have obtained a B.S. or B.A. or equivalent degree in biology, engineering, environmental studies, fisheries, geomorphology or related field, and two years of related work experience.

- A qualified professional for habitats or wetlands must have a degree in biology and professional experience related to the subject species.
- A qualified professional for a geological hazard must be a professional engineer or geologist, licensed in the state of Washington.
- A qualified professional for critical aquifer recharge areas means a hydrogeologist, geologist, engineer, or other scientist with experience in preparing hydrogeologic assessments.

“RECREATIONAL VEHICLE” means a vehicle which is:

- Built on a single chassis;
- 400 square feet or less when measured at the largest horizontal projection;
- Designed to be self-propelled or permanently towable by a light duty truck; and
- Designed primarily not for use as a permanent dwelling but as temporary living quarters for recreational, camping, travel, or seasonal use.

“SPECIAL PROTECTION AREAS” means aquifer recharge areas defined by WAC 173-200-090 that require special consideration or increased protection because of unique characteristics, including, but not limited to:

- Ground waters that support an ecological system requiring more stringent criteria than drinking water standards;
- Ground water recharge areas and wellhead protection areas, that are vulnerable to pollution because of hydrogeologic characteristics; and
- Sole source aquifer status.

“START OF CONSTRUCTION” includes substantial improvement, and means the date the building permit was issued, provided the actual start of construction, repair, reconstruction, placement or other improvement was within 180 days of the permit date. The actual start means either the first placement of permanent construction of a structure on a site, such as the pouring of slab or footings, the installation of piles, the construction of columns, or any work beyond the stage of excavation; or the placement of a manufactured home on a foundation. Permanent construction does not include land preparation, such as clearing, grading and filling; nor does it include the installation of streets and/or walkways; nor does it include excavation for a basement, footings, piers, or foundations or the erection of temporary forms; nor does it include the installation on the property of accessory buildings, such as garages or sheds not occupied as dwelling units or not part of the main structure. For a substantial improvement, the actual start of construction means the first alteration of any wall,

ceiling, floor, or other structural part of a building, whether or not that alteration affects the external dimensions of the building.

"STRUCTURE" means a walled and roofed building including a gas or liquid storage tank that is principally above ground.

"SUBSTANTIAL DAMAGE" means damage of any origin sustained by a structure whereby the cost of restoring the structure to its before damaged condition would equal or exceed 50 percent of the market value of the structure before the damage occurred.

"SUBSTANTIAL IMPROVEMENT" means any repair, reconstruction, or improvement of a structure, the cost of which equals or exceeds 50 percent of the market value of the structure either:

- Before the improvement or repair is started; or
- If the structure has been damaged and is being restored, before the damage occurred. For the purposes of this definition "substantial improvement" is considered to occur when the first alteration of any wall, ceiling, floor, or other structural part of the building commences, whether or not that alteration affects the external dimensions of the structure.

The term does not, however, include either:

- Any project for improvement of a structure to correct existing violations of state or local health, sanitary, or safety code specifications which have been identified by the local code enforcement official and which are the minimum necessary to assure safe living conditions, or
- Any alteration of a structure listed on the National Register of Historic Places or a State Inventory of Historic Places.

"VARIANCE" means a grant of relief from the requirements of this ordinance which permits construction in a manner that would otherwise be prohibited by this ordinance.

"WATER DEPENDENT" means a structure for commerce or industry which cannot exist in any other location and is dependent on the water by reason of the intrinsic nature of its operations.

"WATER TABLE" means that surface in an unconfined aquifer at which the pressure is atmospheric. It is defined by the levels at which water stands in wells that penetrate the aquifer just far enough to hold standing water.

"WELL" means a bored, drilled or driven shaft, or a dug hole whose depth is greater than the largest surface dimension for the purpose of withdrawing or injecting water or other liquids.

"WETLAND OR WETLANDS" means areas that are inundated or saturated by surface water or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas. Wetlands do not include those artificial wetlands intentionally created from nonwetland sites, including, but not limited to, irrigation and drainage ditches, grass-lined swales, canals, detention facilities, wastewater treatment facilities, farm ponds, and landscape amenities, or those wetlands created after July 1, 1990, that

were unintentionally created as a result of the construction of a road, street, or highway. Wetlands may include those artificial wetlands intentionally created from nonwetland areas created to mitigate conversion of wetlands.

“WETLAND, EMERGENT” means a regulated wetland with at least thirty percent (30%) of the surface area covered by erect, rooted, herbaceous vegetation extending above the water surface as the uppermost vegetative strata.

SECTION 3.0

3.1 DESIGNATION OF THE LOCAL ADMINISTRATOR

The administrator is hereby appointed to administer and implement this ordinance by granting or denying development permit applications in accordance with its provisions.

3.2 DUTIES AND RESPONSIBILITIES OF THE LOCAL ADMINISTRATOR

Duties of the administrator shall include, but not be limited to:

Permit Review

- A. Review all development permits to determine that the permit requirements of this ordinance have been satisfied.
- B. Review all development permits to determine that all necessary permits have been obtained from those Federal, State, or local governmental agencies from which prior approval is required.
- C. Review all development permits to determine if the proposed development is located within a critical area.

3.3 RECORD OF NOTICE

All designated critical areas shall be recorded on all documents of title of record for all affected property. Property owners with land adjacent to critical areas must be notified of critical area buffers on their lands. Boundaries of a critical area must be clearly marked prior to construction activities.

ESTABLISHMENT OF CRITICAL AREAS AND NATURAL RESOURCES LANDS: PROVISION OF DATA MAPS

4.1 LIST OF CRITICAL AREAS

The following critical areas are hereby delineated within the unincorporated area of Garfield County, where appropriate:

- A. Wetlands
- B. Critical aquifer recharge areas

- C. Fish and wildlife conservation areas
- D. Frequently flooded areas
- E. Geologically hazardous areas

4.2 LIST OF RESOURCE LANDS

The following resource lands are hereby delineated within the unincorporated area of Garfield County, where appropriate:

- A. Agricultural Resource Lands
- B. Mineral Resource Lands
- C. Forest Resource Lands

4.3 DATA MAPS

Resource lands and critical areas are hereby designated on a series of data maps maintained at the Garfield County Planning Department. These maps contain the best available graphic depiction of resource lands and critical areas and will be continuously updated as reliable data becomes available. These maps are for information and illustrative purposes only and are not regulatory in nature, with the exception of the FEMA flood maps, which are used to regulate development in the floodplain.

The resource lands and critical areas data maps are intended to alert the development community, appraisers, and current or prospective property owners of a potential encounter with a use or development limiting factor based on the natural systems. The presence of a critical area or resource designation on the data maps is sufficient foundation for the designated county official (i.e., Inspector, Garfield County Planning Department) to order an analysis for the factor(s) identified prior to acceptance of a development application as being complete and ready for processing under the Garfield County Zoning Ordinance, Platting and Subdivision Ordinance, Shorelines Management, S.E.P.A., or other land use regulation.

4.4 PRELIMINARY IDENTIFICATION OF RESOURCE LANDS AND CRITICAL AREAS: MAPS AND REFERENCE MATERIAL

Resource Lands may be depicted generally on the Soil Conservation Service's maps, the Department of Natural Resource's Forest Resource Lands maps and on the maps prepared by Howard Consultants, Inc. pertaining to mineral resources.

Critical Areas may be depicted generally on the Federal Emergency Management Agency's (FEMA) FIRM and Floodway maps; National Wetlands Inventory maps; The Federal Manual for Identifying and Delineating Jurisdictional Wetlands (1987 revised edition); Washington State Tier Wetlands Rating System as it pertains to Category I-III wetlands; Washington State Department of Natural Resources Geologic Hazard Areas maps; Washington State Department of Natural Resources Mine Hazard Area maps base; U.S. Bureau of Land Management Mine Hazard Area maps; Washington State Department of Fish and Wildlife Priority Habitats and Species maps; Washington State Department of Natural Resources Water Type maps; U.S.G.S landslide activity and slope maps; U.S. Soil Survey's National Soils Survey Interpretations Handbook; Uniform Building Code Seismic Risk Zone maps.

The dates of all of the foregoing maps shall precede the date of this Ordinance. Revised maps as issued by various governmental authorities after the date of adopting this ordinance shall not be utilized as a preliminary source of information until such time as utilization of such maps are authorized by amendments to this ordinance, with the exception of the Priority Habitats and Species Maps which are frequently updated to reflect new information as gathered by field biologists, other resource experts and the public. This ordinance is designed to protect Resource Lands and Critical Areas based upon the best available information at this time, which information has been subject to considerable review and comment from the general public as well as from scientific and technical sources. Utilization of revised maps must be subject to that same critique prior to adoption by the County.

These maps are used as a general guide to the location and extent of Resource Lands and Critical Areas. Any presumption created by these maps may be rebutted by a preponderance of the evidence. These maps are also intended to alert the development community, county residents, as well as current and prospective land owners of the possibility of site development constraints which may limit or alter development plans. This ordinance does not apply if resource lands or critical areas do not exist on a given parcel.

SECTION 5.0

INTERPRETATION OF DATA MAPS

5.1 INTERPRETATION OF DATA MAPS

The designated county official of Garfield County is hereby declared the Administrator of this ordinance for the purpose of interpreting data maps. An affected property owner or other party with standing has a right to appeal the administrative determination to the Garfield County Planning Commission, using the same procedure identified in the Washington State Planning Enabling Act for the changing of a zone made through the administrator of the ordinance, with the applicant supplying supporting documentation as to the justification for the appeal, such as a notarized affidavit from a qualified professional.

The data maps are to be used as a general guide to the location and extent of resource lands and critical areas. Resource lands and critical areas indicated on the data maps are presumed to exist in the locations shown and are protected under all provisions of this chapter. The exact location of resource lands and critical areas shall be determined by the applicant as a result of field investigations performed by a qualified professional using the definitions found in this chapter. All development applications are required to show the boundary(s) of all resource lands and critical areas on a scaled drawing prior to the development application being considered "complete" for processing purposes.

5.2 EFFECT OF DATA MAPS

The conclusion by the administrative authority that a parcel of land or a part of parcel of land that is the subject of a proposed development applications with the boundary(s) of one or more critical areas or resource lands as shown on the data maps, shall serve as cause for additional investigation and analysis to be conducted by the applicant. The site specific analysis shall be limited to those resource lands and critical areas indicated on the data maps. In the event of multiple designations, each subject matter will be addressed independently and collectively for the purpose of determining development limitations and appropriate mitigating measures.

SECTION 6.0

DETERMINATION OF CONSISTENCY

6.1 DEVELOPMENT OR REGULATED ACTIVITY -- DETERMINATION OF CONSISTENCY REQUIRED

1. Any proposed non-exempt land use development or activity requires the applicant to complete a development permit application. The application shall include the following:
 - a. a scaled drawing of the site and the proposed development;

- b. identification of the site location by section, township and range;
- c. the general location of all existing land uses, structures, public and private access roads;
- d. a completed SEPA checklist, if applicable; and
- e. other applicable permit applications.

An application shall be deemed "complete" only when all required information is furnished.

2. The Building Inspector shall compare the site of the proposed development or activity against the Resource Lands and Critical Areas Maps so as to ascertain the following:
- a. if the proposed development or activity falls within or near any resource area;
 - b. if the mapped resource exists;
 - c. if the development is likely to have a significant adverse impact on the functions and values of the Resource Lands and Critical Areas;
 - d. if a Resource Lands and Critical Areas Special Study is required.
 - e. If all necessary permits have been obtained from those Federal, State or local governmental agencies from which prior approval is required.

Upon completion of the initial review, the Building Inspector shall determine whether the development as proposed is consistent with the standards set forth in this ordinance. If the development as proposed is found to be consistent, a Determination of Consistency shall be issued.

3. If a Determination of Consistency cannot be issued, the applicant is required to submit a Development Checklist which shall contain the following information:

- a) Legal description of the land, and assessor's parcel number.
- b) As defined herein, the location of the following, if applicable:
 - 1. Wetlands
 - 2. Aquifer recharge areas
 - 3. Geologically hazardous areas
 - 4. Frequently flooded areas
 - 5. Priority Habitats
 - 6. Prime agriculture lands
 - 7. Forest resource lands
 - 8. Mineral resource lands
- c) Any voluntary methods or activities anticipated by the applicant pertaining to critical areas, including incentives being offered by local or state government.
- d) Duplicate plans drawn to scale showing the nature, location, dimensions and elevations of the area in question, including existing or proposed structures, estimated amount of fill material, drainage facilities, significant natural features, and the location of the above items, if applicable. Survey quality documents will not normally be required.
- e) The requirement for delineating the location of possible critical areas will be waived if field investigation by county staff indicated the following:
 - 1. Sufficient information exists for staff to estimate the boundaries of any critical areas without a delineation by the applicant; or
 - 2. No structures and uses, except for exempt activities, are proposed to be located within any possible critical area.

- f) Subject to field investigation by county staff, or other reliable and relevant information, the information submitted by the applicant shall be presumed valid for all purposes under this ordinance.

4. Upon review of the Development Checklist, the Building Inspector shall determine whether the development as proposed is consistent with the standards set forth in this ordinance and, if so, a Determination of Consistency shall be issued. If the development is still likely to have a significant impact on the functions of resource, the applicant is required to conduct a "Resource Lands and Critical Areas Special Study."

6.2 RESOURCE LANDS AND CRITICAL AREAS SPECIAL STUDY -- REQUIREMENTS

1. The purpose of the Resource Lands and Critical Areas Special Study is to adequately evaluate the proposal and all potential significant impacts on the resource. The study may be included as part of the environmental review process under the SEPA as administered by Garfield County, in accordance with the provisions of this ordinance.
2. The study shall be performed by a professional who is licensed or qualified as an expert in the resources at issue. The study shall include the following when applicable:
 - a. the resume of the principal author(s) which disclose(s) their technical training and experience and demonstrates their stature as a qualified professional;
 - b. identification and characterization of the critical area resource(s);
 - c. an assessment of any potential hazards associated with the proposed development;
 - d. an assessment of the impacts of the development proposal on any critical area resource(s);
 - e. a mitigation plan which reduces impacts to an insignificant level and specifies maintenance, monitoring and bonding measures (where necessary).
 - f. any other site analysis and/or development plans specifically listed under the resource sections in Sections 7 through 14.

6.3 ISSUANCE

A Determination of Consistency will be issued when it can be demonstrated, and the county finds that:

- a. after consideration of all feasible Best Management Practices, including alternative designs, scale (size), locations, and management plan, the proposed development meets the standards of this ordinance, protects the function and values of resource lands and critical areas, and the required mitigation reduces impacts to insignificant levels on an individual and /or cumulative project basis; or,
- b. significant impact to resource lands and critical areas function and values are both unavoidable and necessary because of public health and safety, or specific local or regional economic consideration which override the public interest in the protection of resource lands and critical areas, or because all reasonable economic uses for the property would be denied as a result of circumstances peculiar to the subject

property; and all unavoidable significant impacts shall be offset by enhancement of other resource lands and critical areas on or off-site.

6.4 ISSUANCE -- GENERAL REQUIREMENTS -- PROPERTY OWNER

1. Upon the Issuance of a Determination of Consistency, the owner of any property wholly or partially with a Resource Lands and Critical Area on which a regulated activity is undertaken or proposed shall record a "Notice of Critical Area Protection" with the Garfield County Auditor's Office. The notice is to identify the presence of a critical area resource and buffer, the application of this ordinance to the property, and that limitations on action in or affecting such critical areas and buffers may exist.
2. The form of the notice shall be provided by the Planning Department and shall contain, at a minimum, a description of the specific resource protected, i.e., wetland, riparian corridor, and a map or legal description which identifies the resource boundary and the gross acreage within it. For the purposes of assessment, the filing of such a notice shall also designate the critical area resource and buffer lands eligible for reduced tax assessments.
3. The notice shall run with the land and failure to provide such notice to any purchaser prior to transferring any interest in the property shall be a violation of this ordinance.
4. Prior to commencing construction activities on a development site, the applicant shall mark, as is required by the County, the boundary of designated critical area resources in a highly visible manner, with an item such as, but not limited to, yellow caution tape. These areas must remain so marked until all construction activities in the vicinity of the sensitive area are completed. All development related activities must stay outside the marked boundary.
5. Performance and maintenance bonds or other forms of surety may be required to insure the completion of mitigation, restoration, enhancement or remediation requirements associated with any development impacting a critical areas resource.

6.5 APPEAL OF DECISION OF BUILDING INSPECTOR

1. An applicant or any person may appeal the Building Inspector's decision to:
 - a. require or not require a Special Study;
 - b. issue or issue with conditions a Determination of Consistency;
 - c. deny the issuance of a Determination of Consistency;
 - d. extend or deny the extension of a Determination of Consistency.
2. The written appeal shall be made to the Building Inspector within ten (10) working days from the date of the action. The appeal shall state clearly the resource issue and the specific findings or element of the action which are being contested.
3. The Building Inspector shall convene a review committee of resource agency representatives and the appellant no more than 21 working days from the date of the filing of an appeal with the Planning Department. The review committee shall review the decision of the Building Inspector relative to the issues on appeal. The review committee shall support the original determination or recommend changes in writing to the Building Inspector within 7 working days of convening.
4. The final determination of the review committee may be appealed to the Board of Adjustment within 20 working day of the Building Inspector's receipt of the review committee's determination.

6.6 TERM -- EXTENSION REQUIREMENTS

The Determination of Consistency shall be valid for two years from the date of issuance. An extension of the Determination of Consistency shall not be required when substantial construction of the development has occurred within two years of issuance. Upon demonstration that the applicant has been diligently seeking required permits, a one year extension of the Determination of Consistency will be granted upon request of the original permit holder or successor in title.

When neither substantial construction nor diligence in seeking permits can be demonstrated, then prior to the granting of each one year extension, the Building Inspector shall review the original findings and may require updated information and /or assistance from persons or agencies having technical expertise. The Building Inspector may require additional mitigation measures in order to extend the Determination, if the circumstances at the time of the original findings have been altered, or if the applicant has failed to abide by the terms of the original Determination.

6.7 NONCONFORMING USES AND ACTIVITIES

Nonconforming uses and activities inside resource lands and critical resource areas and buffers are allowed. Nonconforming uses are those legally established uses in existence on the date this ordinance becomes effective.

1. Existing buildings may be remodeled, reconstructed or replaced provided that the construction activity does not cause significant adverse impact to the function and values of resource lands and critical area resources.
2. New construction or related activity connected with an existing single family residence shall not be considered a significant adverse impact to, or displacement of, the functions and values of a critical resource, where ground coverage is not increased by more than 20 percent and when no portion of any structure is located closer to the critical resource than the existing structure. This non-conforming status is not applicable if the structure is in a designated floodway.

6.8 PRIVATE PROPERTY RIGHTS

Private property shall not be taken for public use without just compensation having been made. The property rights of landowners shall be protected from arbitrary and discriminatory actions. The county shall evaluate proposed regulatory or administrative actions to assure that such actions do not result in an unconstitutional taking of private property.

6.9 TEMPORARY EMERGENCY PERMIT

Notwithstanding the provisions of this ordinance or any other law to the contrary, the Administrator may issue a temporary wetlands permit through oral or written authorization, provided a written permit is accomplished within three working days, if it deems that an unacceptable threat to life or severe loss of property will occur if an emergency permit is not granted. The emergency permit may be terminated at any time without process upon a determination by the Administrator that the action was not or is no longer necessary to protect human health or the environment. The Administrator

may, within 90 days of the emergency permit, require that the action be reconsidered as an after-the-fact permit, subject to any or all of the terms and provisions of this ordinance.

6.10 REASONABLE USE EXCEPTION

"Reasonable Use" means the minimum use to which a property owner is entitled under applicable state and federal constitutional provisions, including takings and substantive due process. Reasonable use shall be liberally construed to protect the constitutional property rights of the applicant. A reasonable use exemption may only be secured by using the Town's conditional use process.

A reasonable use exemption may be secured only if:

- A. The strict application of the CAO would deny reasonable use of the property.
- B. There is no other reasonable use that would result in less impact on the critical area. Any alterations permitted to the critical area shall be the minimum necessary to allow for reasonable use of the property.

6.11 MITIGATION

Mitigation Shall Be Required in the Following Order of Preference:

- A. Avoiding the impact altogether by not taking a certain action or parts of an action;
- B. Minimizing impacts by limiting the degree or magnitude of the action and its implementation, by using appropriate technology, or by taking affirmative steps, such as project redesign, relocation, or timing, to avoid or reduce impacts;
- C. Rectifying the impact to wetlands, critical aquifer recharge areas, frequently flooded areas, and habitat conservation areas by repairing, rehabilitating, or restoring the affected environment to the historical conditions or the conditions existing at the time of the initiation of the project;
- D. Minimizing or eliminating the hazard by restoring or stabilizing the hazard area through engineered or other methods;
- E. Reducing or eliminating the impact or hazard over time by preservation and maintenance operations during the life of the action;
- F. Compensating for the impact to wetlands, critical aquifer recharge areas, frequently flooded areas, and habitat conservation areas by replacing, enhancing, or providing substitute resources or environments; and
- G. Monitoring the hazard or other required mitigation and taking remedial action when necessary.
- H. Mitigation for individual actions may include a combination of the above measures.



SECTION 7.0 MINERAL RESOURCE LANDS

7.1 IDENTIFICATION OF MINERAL RESOURCE LANDS -- CLASSIFICATION AND MAPS

For planning purposes, the general distribution, location and extent of the three classes of Mineral Resource Land are as discussed in the report for Garfield County prepared by Howard Consultants, Inc. and as defined by the individual classifications. The report and map are on file with the Garfield County Engineer's office.

The designated Mineral Resource Lands Classification is as follows:

CLASS I: Areas which are **Highly Productive** Mineral Resource Lands; there are none known to exist in the County.

CLASS II: Areas which are **Productive** Mineral Resource Lands; these would specifically include sand, gravel, crushed rock and similar sites.

CLASS III: Areas which are **Non-Productive** Mineral Resource Lands; these would include all other areas not included in Class I or II.

7.2 DESIGNATED MINERAL RESOURCE LANDS -- APPLICATION FOR DEVELOPMENT

An application for development shall be made as per the process found in Section 6.0 above.

7.3 DEVELOPMENT STANDARDS

The following development standards apply to all land use within protected mineral resource lands:

1. those uses as provided in the underlying zoning district subject to the standards set forth herein and in other federal, state and local requirements;
2. quarrying and mining of minerals or materials, including, but not limited to: sand and gravel, rock, clay and peat;
3. the exploitation, primary reduction, treatment and processing of minerals or materials, together with the necessary buildings, structures, apparatus or appurtenances on said property where at least one of the major mineral or material constituents being exploited is from said property, including, but not limited to: concrete, asphalt mixing, brick, tile, terra cotta and concrete products, manufacturing plants, and rock crushers and the use of accessory minerals and materials from other sources necessary to convert the minerals or materials to marketable products;
4. dwellings used and required by mining or quarrying operations for those who provide continuous supervision such as for a caretaker or superintendent and his immediate family; and

5. dwellings on the same premises which are being used for agricultural purposes, when such dwellings are occupied only by persons employed on the same premises and their immediate families.

7.4 BUFFER REQUIREMENTS

1. For any mineral extraction and associated activities located on mineral resource lands, physical buffers shall be required, where appropriate, to protect adjacent use from any potential noise and pollution as well as from unsightly mining activities. Physical buffers may include: open space, noise attenuation berms or structures, and screening vegetation.

2. On any proposed development on property adjacent to Mineral Resource Areas, physical buffers shall be required, where appropriate, to protect sensitive uses such as residential, commercial, office and recreational from the potential of adjacent noise and pollution as well as from unsightly mining activities. Physical buffers may include: open space and screening vegetation.

7.5 COMMENCEMENT AND CONDUCT OF MINING OPERATIONS

1. Mining operations may be commenced upon the granting of a Mineral Resource Protection designation; provided, that a Surface Mining Permit has been granted by the Department of Natural Resources or a Conditional Use Permit has been granted by Garfield County.

2. Mining operations and facilities shall be operated in a manner which is consistent with all applicable federal, state, and local regulations.

7.6 SITE RESTORATION

1. Restoration of a site shall be as directed by the Administrative Official and shall occur upon the exhaustion of minerals or upon the permanent cessation of mining activities. The site shall be restored to a condition which mitigates long-term impacts to the environment and protects the public health and safety.

2. Restoration of a site on which mining operations have been undertaken pursuant to a DNR Surface Mining Permit shall be made as directed by the Department of Natural Resources and in accordance with the Reclamation Plan required under the State Surface Mining Act, Chapter 78.44 RCW.

2. Prior to or during reclamation, all buildings, structures, apparatus, or appurtenances incidental to or directly part of the mining operation shall be removed or otherwise dismantled to the satisfaction of the Administrative Official; provided, that such removal may not be required if it is permitted to continue due to the underlying zone classification.



SECTION 8.0 AGRICULTURAL RESOURCE LANDS

8.1 IDENTIFICATION OF AGRICULTURAL RESOURCE LANDS -- CLASSIFICATION AND MAPS

For planning purposes, the general distribution, location and extent of the three classes of Agricultural Resource Lands are exhibited on maps and studies of the Soil Conservation Service. This information is on file with the local Soil Conservation Service office. Agricultural land" means land primarily devoted to the commercial production of horticultural, viticultural, floricultural, dairy, apiary, vegetable, or animal products or of berries, grain, hay, straw, turf, seed, Christmas trees not subject to the excise tax imposed by *RCW [84.33.100](#) through [84.33.140](#), finfish in upland hatcheries, or livestock, and that has long-term commercial significance for agricultural production.

The designated Agricultural Resource Lands Classification is as follows:

CLASS I: Areas which are **Highly Productive**; these would specifically include agricultural lands which have been identified as being capable of historically producing greater than 60 bushels of winter wheat or 50 bushels of spring wheat or 3,00 pounds of winter barley or 2,800 pounds of spring barley per acre.

CLASS II: Areas which are **Productive**; these would include agricultural lands which have been identified as being capable of historically producing between 40-59 bushels of winter wheat or 30-49 bushels of spring wheat or 2,00-2,999 pounds of winter barley or 1,700-2,799 pounds of spring barley per acre.

CLASS III: Areas which are **Marginally or Non-Productive**; these would specifically include agricultural lands which have been identified as being capable of historically producing less than 40 bushels of winter wheat or less than 30 bushels of spring wheat or less than 2,000 pounds of winter barley or less than 1,700 pound of spring barley per acre.

8.2 DESIGNATED AGRICULTURAL RESOURCE LANDS -- APPLICATION FOR DEVELOPMENT

An application for development shall be made as per the process found in Section 6.0 above.

8.3 DEVELOPMENT STANDARDS

The following development standards apply to all land uses within protected Agricultural Resource Lands:

1. those uses as provided in the underlying principal use district subject to the standards set forth herein and in other federal, state and local requirements;
2. commercial agriculture and horticulture;
3. structures which are customarily accessory and clearly incidental and subordinate to permitted use.

4. dwellings used and required by agricultural operations for those who provide continuous supervision such as for a caretaker or superintendent and his immediate family; and
5. dwellings on the same premises which are being used for agricultural purposes, when such dwellings are occupied only by persons employed on the same premises and their immediate families.



SECTION 9.0 FOREST RESOURCE LANDS

9.1 IDENTIFICATION OF FOREST RESOURCE LANDS -- MAPS

For planning purposes, the general distribution, location and extent of the three classes of Forest Resource Lands are as mapped by the Department of Natural Resources and are on file with the Garfield County's Engineer's office. Forest land" means land primarily devoted to growing trees for long-term commercial timber production on land that can be economically and practically managed for such production, including Christmas trees subject to the excise tax imposed under *RCW [84.33.100](#) through [84.33.140](#), and that has long-term commercial significance. In determining whether forest land is primarily devoted to growing trees for long-term commercial timber production on land that can be economically and practically managed for such production, the following factors shall be considered: (a) The proximity of the land to urban, suburban, and rural settlements; (b) surrounding parcel size and the compatibility and intensity of adjacent and nearby land uses; (c) long-term local economic conditions that affect the ability to manage for timber production; and (d) the availability of public facilities and services conducive to conversion of forest land to other uses.

The designated Forest Resource Lands Classification is as follows:

CLASS I: Areas which are **Highly Productive** Forest Resource Lands; these would specifically include lands which have stands of Douglas Fir or Ponderosa Pine greater than 95 feet in height.

CLASS II: Areas which are **Productive** Forest Resource Lands; these would include lands which have stands of Douglas Fir and Ponderosa Pine between 69 and 94 feet in height.

CLASS III: Areas which are **Marginally Productive** Forest Resource Lands; these would include all other forest lands not included in Class I or II.

9.2 DESIGNATED FOREST RESOURCE LANDS -- APPLICATION FOR DEVELOPMENT

An application for development shall be made as per the process found in Section 6.0 above.

9.3 DEVELOPMENT STANDARDS

The following development standards apply to all land uses within protected Forest Resource Lands:

1. those uses as provided in the underlying principal use district subject to the standards set forth herein and in other federal, state and local requirements;
2. uses to conserve soil, air and water quality and to provide for fish and wildlife resources, agriculture and recreational opportunities appropriate in a forest environment;
3. forest operations or forest practices including, but not limited to, reforestation of forest land, road construction and maintenance, harvesting of a forest tree species, application of chemicals, and disposal of slash;
4. dwellings used and required by forestry management operations; and
5. dwellings on the same premises which are being used for agricultural purposes, when such dwellings are occupied only by persons employed on the same premises and their immediate families.



SECTION 10.0 WETLANDS

10.1 IDENTIFICATION OF WETLANDS -- CLASSIFICATION AND MAPS

Wetlands shall be rated according to the August 2004 Washington State - Wetland Rating System found in the Washington State Wetland Rating System for Western Washington, or as revised by Ecology.

"Wetland" or "wetlands" means areas that are inundated or saturated by surface water or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas. Wetlands do not include those artificial wetlands intentionally created from nonwetland sites, including, but not limited to, irrigation and drainage ditches, grass-lined swales, canals, detention facilities, wastewater treatment facilities, farm ponds, and landscape amenities, or those wetlands created after July 1, 1990, that were unintentionally created as a result of the construction of a road, street, or highway. Wetlands may include those artificial wetlands intentionally created from nonwetland areas created to mitigate conversion of wetlands

The designated Wetlands Area Classification is as follows:

CLASS I: Areas which meet the following criteria:

- A. Documented habitat for endangered or threatened fish or animal species or for potentially extirpated plant species recognized by state or federal agencies; or
- B. High quality native wetland communities, including documented Class I or II quality Natural Heritage wetland sites and sites which qualify as Class I or II quality Natural Heritage wetland; or
- C. High quality, regionally rare wetland communities with irreplaceable ecological functions, including sphagnum bogs and fens, estuarine, wetlands or mature forested swamps; or
- D. Wetlands of exceptional local significance.

CLASS II: Areas which meet the following criteria:

- A. Regulated wetlands that do not contain features outlined in Class I; and
- B. Documented habitats for sensitive plant, fish or animal species recognized by federal or state agencies; or
- C. Rare wetland communities listed in Class I (C) which are not high quality; or
- D. Wetland types with significant functions which may not be adequately replicated through creation or restoration.
- E. Regulated wetlands with significant habitat value based on diversity and size.
- F. Regulated wetlands contiguous with salmonid fish-bearing waters, including streams where flow is intermittent; or

G. Regulated wetlands with significant use by fish and wildlife.

CLASS III: Regulated wetlands that do not contain features outlined in Class I, II or IV.

CLASS IV: Areas which meet the following criteria:

- A. Regulated wetlands which do not meet the criteria of a Class I or II wetland; and
- B. Isolated wetlands that are less than or equal to one acre in size; and have only one wetland class; and have only one dominant plant species (monotypic vegetation); or
- C. Isolated wetlands that are less than or equal to two acres in size and have only one wetland class and a predominance of exotic species.

10.2 REGULATED ACTIVITIES

Regulated activities within or adjacent to wetlands must be sited, designed and operated in a manner which protects the functions and values of the wetland and shall meet the requirements of this title.

10.3 BOUNDARIES

The guidelines in the 1987 Federal Manual for Identifying and Delineating Jurisdictional Wetlands shall be used when precise delineation of a wetland boundary is necessary.

10.4 DESIGNATED WETLANDS -- APPLICATION FOR DEVELOPMENT

An application for development shall be made as per the process found in Section 6.0 above.

10.5 ADDITIONAL REPORT REQUIREMENTS – WETLANDS

- A. Critical Area Report
Critical area reports for wetlands must meet the requirements of this Section. Critical area reports for two or more types of critical areas must meet the report requirements for each relevant type of critical area.
- B. Report Requirements:
 - 1. Preparation by a Qualified Professional. A critical area report for wetlands shall be prepared by a Professional Wetland Scientist.
 - 2. Area Addressed in Critical Area Report. The following areas shall be addressed in a critical area report for wetlands:
 - a. The project area of the proposed activity;
 - b. All wetlands and recommended buffers within three hundred (300) feet of the project area. Critical area reports should consider wetlands and other critical areas within three hundred (300) feet due to the maximum potential buffer size for wetlands. Critical area size and characteristics beyond the project area may be estimated through aerial photographic interpretation and discussions with agency staff if the adjacent property owner denies access; and

- c. All shoreline areas, water features, floodplains, and other critical areas, and related buffers within three hundred (300) feet of the project area.
3. Wetland analysis. A critical area report for wetlands shall contain an analysis of the wetlands including the following site- and proposal-related information at a minimum:
- a. A written assessment and accompanying maps of the wetlands and buffers within three hundred (300) feet of the project area, including the following information at a minimum:
 - 1. Wetland delineation and required buffers;
 - 2. Existing wetland acreage;
 - 3. Wetland category;
 - 4. Vegetative, faunal, and hydrologic characteristics;
 - 5. Soil and substrate conditions;
 - 6. Topographic elevations, at two-foot or five-foot contours (as determined by the Administrator), and
 - 7. A discussion of the water sources supplying the wetland along with documentation of hydrologic regime (locations of inlet and outlet features, water depths throughout the wetland, evidence of recharge or discharge, evidence of water depths throughout the year – drift lines, algal layers, moss lines, and sediment deposits).
 - b. A discussion of measures, including avoidance, minimization, and mitigation, proposed to preserve existing wetlands and restore any wetlands that were degraded prior to the current proposed land use activity.
 - c. A habitat and native vegetation conservation strategy that addresses methods to protect and enhance on-site habitat and wetland functions.
 - d. Functional evaluation for the wetland and adjacent buffer using a local or state agency staff-recognized method and including the reference of the method and all data sheets.
 - e. Proposed mitigation, if needed, including a written assessment and accompanying maps of the mitigation area, including the following information at a minimum:
 - 1. Existing and proposed wetland acreage;
 - 2. Vegetative and faunal conditions;
 - 3. Surface and subsurface hydrologic conditions including an analysis of existing and future hydrologic regime and proposed hydrologic regime for enhanced, created, or restored mitigation areas;
 - 4. Relationship within watershed and to existing water-bodies;
 - 5. Soil and substrate conditions, topographic elevations;
 - 6. Existing and proposed adjacent site conditions;
 - 7. Required wetland buffers (including any buffer reduction and mitigation proposed to increase the plant densities, remove weedy vegetation, and replant the buffers);
 - 8. Property ownership; and
 - 9. Associated wetlands and related wetlands that may be greater than three hundred (300) feet from the subject project.

- 10. A Map drawn to a scale appropriate to show relevant features and information of the development proposal site and adjacent area.
 - 11. A discussion of ongoing management practices that will protect wetlands after the project site has been developed; including proposed monitoring and maintenance programs.
- f. A bond estimate for the installation (including site preparation, plant materials and installation, fertilizers, mulch, stakes) and the proposed monitoring and maintenance work for a minimum of five years.
- C. Additional Information. When appropriate, the Administrator may also require the critical area report to include an evaluation by the state Department of Ecology or an independent qualified expert regarding the applicant's analysis and the effectiveness of any proposed mitigating measures or programs, and to include any recommendations as to improving effectiveness.
 - D. Affidavit. If the development proposal site contains or is within a wetland area, the applicant shall submit an affidavit, which declares whether the applicant has knowledge of any illegal alteration to any or all wetlands on the proposed site and whether the applicant previously had been found in violation of any wetland-related ordinance. If the applicant has been found previously in violation, the applicant shall declare whether such violation has been corrected to the satisfaction of the jurisdiction.
 - E. The Administrator shall determine if the mitigation and monitoring plans and bonding measures proposed by the applicant are sufficient to protect the public health, safety, and welfare, and the functions and value of the affected wetland, consistent with the goals, purposes, objectives and requirements of this ordinance.

10.6 ALLOWED USES WITHOUT A PERMIT

All land uses shall comply with the buffer and/or mitigation requirements of this section.

10.7 AREA OF REVIEW

The area of review for designated wetlands shall be within 500 feet for Category I and II, within 300 feet for Category III and within 200 feet for Category IV.

10.8 BUFFER REQUIREMENTS

The buffer requirements for designated wetlands shall be as shown below.

Category	Point of Measurement For Buffer	Width of Buffer
I	From edge of Wetland	200 ft. min.
II	From edge of Wetland	100 ft. min.
III	From edge of Wetland	50 ft. min.
IV	From edge of Wetland	25 ft. min.

10.9 PROTECTION OF WATER QUALITY

The following provisions shall be followed to ensure the protection of the quality of water.

1. New surface water discharged to wetlands from developments, including retention/detention facilities, pre-settlement ponds, or other surface water management structures may be allowed provided that the discharge does not decrease the water quality of the wetland;
2. Category I and II wetlands may be used for regional retention/detention facilities only when the use will employ the use of pre-settlement ponds and the use will not lower the wetland's level of function and value, or its category;
3. Use of wetland buffers for surface water management activities other than retention/detention facilities, such as energy dissipaters and associated pipes, may be allowed only if:
 - a. no practicable alternative exists; and
 - b. the functions of the buffer or the wetland are not adversely impacted.

10.10 RESTORATION AND REPLACEMENT

1. Restoration and replacement of wetlands to an optimum degree of productivity and function is required when an approved development proposal alters a buffer or uses a wetland for a retention/detention facility or other approved use.
2. To the extent feasible, restoration and replacement shall:
 - a. replicate the original wetland configuration including depth, width, length, and gradients on-site or at the original location;
 - b. replicate the original soil types;
 - c. restore the edge and buffer configuration to as near the original condition as feasible;
 - d. replant the wetland, edge and buffer areas with native vegetation which replicates the original in species and densities; and
 - e. restore the original functional values, including water quality and wildlife habitat functions.
3. On-site and In-kind: unless otherwise approved, all alteration of wetlands shall be replaced or enhanced on-site using the following formulas:

Category of Wetland	Replacement Ratios
I	6:1
II	Forested 3:1 Scrub-Shrub 2:1 Emergent 1.5:1
III	Forested 3:1 Scrub-Shrub 2:1 Emergent 1.5:1
IV	1.25:1 flood plain only

4. Off-site and In-kind: the Building Inspector may consider and approve off-site replacement or enhancement where the applicant can demonstrate that the off-site location is in the same drainage sub-basin and that greater biological and hydrological values will be achieved. The replacement/enhancement formulas required above shall apply for off-site replacement.

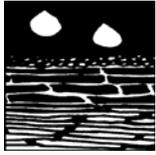
5. Wetponds established and maintained for control of surface water shall not constitute replacement or enhancement for wetland alterations.
6. The indigenous biotic community shall be protected. The intentional introduction of any plant or wildlife which is not indigenous to the region into any wetland sensitive area is prohibited unless authorized by a State or Washington or a federal license or permit.

10.11 WETLAND ENHANCEMENT

Enhancement may be considered as a basis for approval when a development proposal will alter a wetland but will improve the habitat and /or hydrologic functions. Surface water management or flood control alterations shall not be considered enhancement unless other functions and values are simultaneously increased. Where enhancement is proposed, a wetlands enhancement plan or program shall be submitted as an element of the proposal. Minimum performance standards for enhancement shall be established in the administrative rules to allow for project-specific criteria.

10.12 SIGNS AND FENCING OF WETLANDS

- A. Temporary Markers. The outer perimeter of the wetland or buffer and the limits of those areas to be disturbed pursuant to an approved permit or authorization shall be marked in the field in such a way as to ensure that no unauthorized intrusion will occur during construction and is subject to inspection by the Administrator prior to the commencement of permitted activities. This temporary marking shall be maintained throughout construction and shall not be removed until permanent signs, if required, are in place.
- B. Permanent Signs. As a condition of any permit or authorization issued pursuant to this Chapter, the Administrator may require the applicant to install permanent signs or markers along the boundary of a wetland or buffer.
- C. Fencing.
 1. The Administrator shall determine if fencing is necessary to protect the functions and values of the critical area. If found to be necessary, the Administrator shall condition any permit or authorization issued pursuant to this Chapter to require the applicant to install a permanent fence at the edge of the wetland buffer, when fencing will prevent future impacts to the wetland.
 2. The applicant shall be required to install a permanent fence around the wetland or buffer when domestic grazing animals are present or may be introduced on site.
 3. Fencing installed as part of a proposed activity or as required in this Subsection shall be designed so as to not interfere with species migration, including fish runs, and shall be constructed in a manner that minimizes impacts to the wetland and associated habitat.



SECTION 11.0 CRITICAL AQUIFER RECHARGE AREA

11.1 IDENTIFICATION OF CRITICAL AQUIFER RECHARGE AREA -- CLASSIFICATION AND MAPS

For planning purposes, the general distribution, location and extent of the three classes of Aquifer Recharge Areas has not been comprehensively mapped but rather will need to be determined on a specific site basis. Therefore, the designation is based upon performance criteria as set forth in the classification system. "CRITICAL AQUIFER RECHARGE AREA" means areas designated by WAC 365-190-080(2) that are determined to have a critical recharging effect on aquifers used for potable water as defined by WAC 365-190-030(2).

The designated Aquifer Recharge Area Classification is as follows:

CLASS I: Areas which are *Highly Vulnerable* to contamination upon the Aquifer recharge area.

CLASS II: Areas which are *Vulnerable* to contamination upon the Aquifer recharge area.

CLASS III: Areas *Not Vulnerable* to contamination upon the Aquifer recharge area; land which is not included in Class I or II.

11.3 AREAS OF DEVELOPMENT REVIEW

For the purposes of this ordinance, the area of review for Critical Aquifer Recharge Areas is that proposed for: all rivers and creeks and including floodplains (FEMA) and wetlands; within 100 feet of all irrigation district main canals; and in areas of high groundwater identified by the Garfield County Health District. These areas shall be consistent with Department of Ecology's [Critical Aquifer Recharge Areas \(CARAs\)](#) guidance.

11.4 DESIGNATED CRITICAL AQUIFER RECHARGE AREA -- APPLICATION FOR DEVELOPMENT

An application for development shall be made as per the process found in Section 6.0 above.

11.5 DEVELOPMENT -- SITE ANALYSIS -- UNCONFINED

The Building Inspector may require some or all of the following information relative to an unconfined aquifer in order to conduct the site analysis:

1. depth to groundwater;
2. hydro-geological susceptibility to contamination and contamination loading potential;

3. hydraulic conductivity and gradient on-site and for relevant adjacent land;
4. soil permeability and contamination attenuation;
5. a Vadose zone analysis including permeability and attenuation properties;
6. existing aquifer water quality analysis;
7. a summary of the proposed development's potential effect on the water quality of the unconfined aquifer (upper).

11.6 SITE ASSESSMENT REPORT

The scope of the Site Assessment Report shall be determined based on the initial project review. The scope of the report may be reduced by utilizing appropriate mitigation measures, or if the water quality or quantity issue(s) are already known.

The Site Assessment Report shall be prepared by, or under the direction of, and signed by a professional engineer, licensed in the State of Washington, trained and qualified to analyze geologic, hydrologic, and groundwater flow systems; or by a geologist or hydro-geologist who earns his or her livelihood from the field of geology and/or hydrogeology and has received a degree in geological sciences from an accredited 4 year institution of higher education and who has relevant training and experience analyzing geologic, hydrologic, and groundwater flow systems.

A. Site Assessment Report Requirements.

A site plan shall be prepared in accordance with the requirements of the Administrator. In addition, a site assessment report shall include:

1. A description of the project including those activities, practices, materials, or chemicals that have a potential to adversely affect the quantity or quality of underlying aquifer(s).
2. Identification of appropriate mitigation measures and description of how they will prevent degradation of underlying aquifer(s).
3. A site plan or another appropriately sealed map showing the approximate location of known or geologically representative well(s) (abandoned and active), spring(s), and surface watercourses within 1,000 feet of the subject project property. All well logs available through the County Health Department for identified wells within 1000 feet of the project property shall be included.
4. A description of the site-specific hydro-geologic characteristics regarding impact to the quantity or quality of underlying aquifer(s). At a minimum this will include a description of the lithology, depth to and static water level of known underlying aquifer(s), and depiction of groundwater flow direction and patterns on the appropriate map.
5. Identification of the initial receptors of potential adverse impacts located hydraulically down-gradient from the project within 1,000 feet or as other wise directed by the Administrator.

B. Additional Site Assessment Elements.

After the initial project review, one or more of the site assessment elements listed below may be required based upon the proposed project activity, aquifer recharge area classification, complexity of underlying hydro-geologic conditions, and/or the perceived

potential to adversely impact hydraulically down-gradient receptors. One or more of these additional elements may also be required if the Applicant chooses to demonstrate that certain mitigation measures are not necessary to protect the quantity or quality of the underlying aquifer(s), or that the project does not pose a detrimental risk to hydraulically down-gradient receptors.

1. Lithologic characteristics and stratigraphic relationships of the affected aquifer(s) and overlying geologic unites (includes soil types) including thickness, horizontal and vertical extent, permeability, and infiltration rates of surface soils.
2. Delineation of identified structural features such as faults, fractures, and fissures.
3. Aquifer characteristics including determination or recharge and discharge areas, transmissivity, storage, hydraulic conductivity, porosity, and estimate of groundwater flow direction, velocity and patterns for the affected aquifer(s).
4. Estimate of precipitation, evaporation, and evapotranspiration rates for the project area.
5. Preparation of appropriate hydro-geologic cross sections depicting at a minimum underlying lithology and stratigraphy, aquifer(s), and potential or probable contaminant pathways from a chemical release.
6. Contaminant fate and transport including probable migration pathways and travel time of potential contaminant release(s) from the site through the unsaturated zone to the aquifer(s) from the site through the unsaturated zone to the aquifer(s) may be attenuated within the unsaturated zone and aquifer(s). Include consideration of advection, dispersion, and diffusion of contaminants in the groundwater.
7. Delineation of areas potentially affected by contaminant migration on the ground surface and/or through the affected aquifer(s).
8. Determination of background or existing groundwater quality underlying the project area.
9. Development of groundwater monitoring program to measure potential impacts of the development of underlying aquifer(s).
10. Development of a spill plan and/or contingency plan describing the specific actions, which will be taken if a release of a contaminant(s) occurs, or if groundwater monitoring results indicate a contaminant(s) from the site has entered the underlying aquifer(s).
11. The degree of continuity between groundwater and nearby surface water including potential impact to "closed" or "low-flow" streams from proposed groundwater withdrawals, and potential impacts to surface water quality from site runoff or contaminated groundwater discharge.
12. Applicable projects shall be required to determine appropriate pumping rates and schedules that maintain appropriate pumping rates and schedules that maintain dynamic draw down levels above mean seal level.
13. Applicable projects such as special use permits, short plats, or long plats shall test existing and/or test wells for nitrate levels and where appropriate calculate the nitrate loading rate at full build-out of the project. If the calculated nitrate loading in the intended water supply equals or exceeds 5 mg/L nitrate as nitrogen, the proposal will need to develop a mitigation plan. The point of compliance shall be determined based on project specifics.

14. A description of wetlands and FWHCAs and their buffers when such occur within 300 feet of the recharge area.

11.7 REGULATED DEVELOPMENT -- REGULATED SUBSTANCES -- GENERAL INFORMATION REQUIREMENTS

The Building Inspector may require any of the following where regulated substances are associated with a regulated development which has potential impact to an aquifer:

1. a description of operations and an identification of regulated substances associated with the project;
2. a list of names and volumes of toxic or concentrated organic substance which will be used on the property;
3. a list of all substances to be monitored;
4. a detailed description of how substances are to be handled at the site;
5. a description of the containment devices to be used to comply with the requirements of this ordinance and other applicable state and federal requirements;
6. a proposed "Regulated Substance Management Plan" or a "Site Management Plan"
7. a description of the procedures for inspection and maintenance to assure the proper functioning of containment devices and systems;
8. a site map showing the location of the facility and property boundaries and the locations within the facility where regulated substances in containers larger than five (5) gallons or forty (40) pounds are stored, unloaded, tested, used, and/or produced. The location of each containment device system (if there is one) shall also be shown.

11.8 PROTECTION OF WATER QUALITY

1. The contamination of groundwater by surface water use, discharge, or runoff shall be prevented.
2. New developments during both construction and operational phases which generate surface drainage or runoff to ground or surface water shall:
 - a. assure that the use, handling, discharge, or disposal of regulated substances be accomplished in a manner which prevents their entry into ground or surface waters;
 - b. retain and clean, to current state discharge standard, runoff prior to its discharge into ground or surface water;
 - c. ensure that runoff stormwater drainage will not result in soil erosion or water quality degradation.
3. Water quality standard for critical aquifer recharge areas shall correspond with appropriate State and Federal standards.
4. The following activities are prohibited in Class I areas due to the probability and/or potential magnitude of their adverse effects on groundwater:
 - A. Landfill activities as defined in WAC 173-304 and WAC 173-351.
 - B. Class V injection wells, including:

1. Agricultural drainage wells;
 2. Untreated sewage waste disposal wells;
 3. Cesspools;
 4. Industrial process water and disposal wells; and
 - C. Radioactive waste disposal
 - D. Radioactive disposal sites.
5. Prohibited activities in Critical Aquifer areas:
- A. Mining
 1. Metals and hard rock mining.
 2. Sand and gravel mining are prohibited in critical aquifer recharge areas determined to be highly susceptible or vulnerable unless a stormwater quality management plan is approved by the Town Council.
 - B. Wood Treatment Facilities. Wood treatment facilities that allow any portion of the treatment process to occur over permeable surfaces (both natural and manmade).
 - C. Other prohibited uses or activities
 1. Activities that would significantly reduce the recharge to aquifers currently or potentially used as a potable water source;
 2. Activities that would significantly reduce the recharge to aquifers that are a source of significant base-flow to a regulated stream; and
 3. Activities that are not connected to an available sanitary sewer system are prohibited from critical aquifer recharge areas associated with sole source aquifers.

11.9 DEVELOPMENT STANDARDS

The following development standards apply to all land uses within protected Critical Aquifer Recharge Areas:

1. The site analysis will create a water quality baseline which will serve as a minimum standard that shall not be degraded by proposed development.
2. The creation of additional impervious surfaces shall be limited to the amount described in the site analysis that will ensure adequate aquifer recharge and water quality protection.
3. Development approvals shall ensure that all best management practices are employed to avoid introducing pollutants into the aquifer. This includes the complete collection and disposal of storm water outside of the aquifer recharge area for all development of impervious surfaces.
4. In addition, all development within Garfield County must be in compliance with all of the following requirements:
 - a. Any and all applicable ground water management areas (G.W.M.A. 's) regulations, as designated by the State of Washington (including Chapter 173-100 WAC, Chapter 173-124 WAC, and Chapter 173-128A WAC, Chapter 173-130A WAC, Chapter 173-134A WAC).

- c. State requirements regarding protection of upper aquifer zones and ground water quality (Chapter 173-154 WAC and Chapter 173-200 WAC, respectively).
- d. Any and all applicable regulations set forth by any Irrigation Districts regulated by the United States Department of the Interior, Bureau of Reclamation.
- e. Any and all regulations set forth by the Washington State Department of Health, the Garfield County Health District and the Washington State Department of Ecology.

11.10 WELLHEAD PROTECTION MITIGATION.

Where a wellhead protection plan that addresses the project area exists, the Administrator shall use the recommendations contained in the wellhead protection plan as a basis for formulating mitigations. In the absence of such mitigation plan, the Administrator shall contact the Public Water System Water Purveyor and jointly develop mitigations, a summary of which shall be signed by the Applicant and recorded with the Applicant's property title. Where the project includes 5 or more lots of 2 acres or less in size and is proposed to be served by individual wells, the Applicant shall prepare a Wellhead Protection Plan which must be approved by and kept on file with the Garfield County Health Department.



SECTION 12.0 FREQUENTLY FLOODED AREAS

12.1 IDENTIFICATION OF FREQUENTLY FLOODED AREAS -- CLASSIFICATION AND MAPS

The areas of special flood hazard identified by the Federal Insurance Administration on Flood Hazard Boundary Maps (FHBM) are hereby adopted by reference and declared to be a part of this Ordinance. The maps are on file at the Garfield County Courthouse. The best available information for flood hazard area identification shall be the basis for regulation until base flood elevations have been established. “FREQUENTLY FLOODED AREAS” means lands in the flood plain subject to a one percent (1%) or greater chance of flooding in any given year. Frequently flooded areas perform important hydrologic functions and may present a risk to persons and property as designated by WAC 365-190-080(3). Classifications of frequently flooded areas include, at a minimum, the 100-year flood plain designations of the Federal Emergency Management Agency and the National Flood Insurance Program.

For planning purposes, the general distribution, location and extent of the three classes of Frequently Flooded Areas are exhibited on the Federal Emergency Management Agency Flood Hazard Boundary Maps and as defined by the individual classifications. These Maps are on file with the Garfield County Engineer's Office and the FEMA Office in Seattle.

When base flood elevation data has not been provided or is unavailable, the local administrator shall obtain, review, and reasonably utilize any base flood elevation and floodway data available from a Federal, State or other source, in order to administer Section 12 of this Ordinance.

Where base flood elevation data is provided through the Flood Insurance Study or as required above, obtain and record the actual elevation (in relation to mean sea level) of the lowest floor (including basement) of all new or substantially improved structures, and whether or not the structure contains a basement. For all new or substantially improved floodproofed structures, the County shall verify and record the actual elevation in relation to mean sea level, and maintain the required floodproofing certifications. All records pertaining to the provisions of this Ordinance shall be maintained for public inspection.

The designated Frequently Flooded Area Classification is as follows:

CLASS I: Areas which are **Highly Vulnerable** to Flood Hazard; the areas within the Floodway channel of a stream.

CLASS II: Areas which are **Vulnerable** to Flood Hazard; land which is within the Flood Plain subject to a one percent or greater chance of flooding in any given year.

CLASS III: Areas *not vulnerable* to Flood Hazard; land which is not included in Class I or Class II.

12.3 AREAS OF DEVELOPMENT REVIEW

The following Area of Review shall be administered as a means of achieving the goals and objectives of this ordinance and the Washington State Growth Management Act.

Width of Boundary Review	Width of Buffer
Flash flood areas and FEMA 100-year flood Maps	N/A

12.4 DESIGNATED FREQUENTLY FLOODED AREAS -- APPLICATION FOR DEVELOPMENT

An application for development shall be made as per the process found in Section 6.0 above.

12.5 REGULATED DEVELOPMENT -- GENERAL INFORMATION REQUIREMENTS

1. New development is permitted when sited and designed in a manner which does not alter the direction, velocity, or volume of flood water in a manner which adversely impacts other property.
2. All developments must follow the provisions of the Garfield County Resource Lands & Critical Areas Development Ordinance;
3. The handling of regulated substances must comply with the provisions of this ordinance;
4. Water quality standards for frequently flooded areas shall correspond with appropriate state and federal standards.

12.6 PROTECTION OF WATER QUALITY

1. The contamination of groundwater by surface water use, discharge, or runoff shall be prevented.
2. New developments during both construction and operational phases which generate surface drainage or runoff to ground or surface water shall:
 - a. assure that the use, handling, discharge, or disposal of regulated substances be accomplished in a manner which prevents their entry into ground or surface waters;
 - b. retain and clean, to current state discharge standard, runoff prior to its discharge into ground or surface water;
 - c. ensure that runoff stormwater drainage will not result in soil erosion or water quality degradation.
3. Water quality standard for Frequently Flooded Areas shall correspond with appropriate State and Federal standards.

PROVISIONS FOR FLOOD HAZARD REDUCTION

12.7 GENERAL STANDARDS

In all areas of special flood hazards, the following standards are required:

12.7-1 Anchoring

- (1) All new construction and substantial improvements shall be anchored to prevent flotation, collapse, or lateral movement of the structure.
- (2) All manufactured homes must likewise be anchored to prevent flotation, collapse, or lateral movement, and shall be installed using methods and practices that minimize flood damage. Anchoring methods may include, but are not limited to, use of over-the-top or frame ties to ground anchors (Reference FEMA's "Manufactured Home Installation in Flood Hazard Areas" guidebook for additional techniques).

12.7-2 Construction Materials and Methods

- (1) All new construction and substantial improvements shall be constructed with materials and utility equipment resistant to flood damage.
- (2) All new construction and substantial improvements shall be constructed using methods and practices that minimize flood damage.
- (3) Electrical, heating, ventilation, plumbing, and air-conditioning equipment and other service facilities shall be designed and/or otherwise elevated or located so as to prevent water from entering or accumulating within the components during conditions of flooding.

12.7-3 Utilities

- (1) All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of flood waters into the system;
- (2) New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of flood waters into the systems and discharge from the systems into flood waters; and,
- (3) On-site waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding.

12.7-4 Subdivision Proposals

- (1) All subdivision proposals shall be consistent with the need to minimize flood damage;
- (2) All subdivision proposals shall have public utilities (where available) and facilities such as sewer, gas, electrical, and water systems located and constructed to minimize flood damage;
- (3) All subdivision proposals shall have adequate drainage provided to reduce exposure to flood damage; and,

- (4) Where base flood elevation data has not been provided or is not available from another authoritative source, it shall be generated for subdivision proposals and other proposed developments which contain at least 50 lots or 5 acres (whichever is less).

12.7-5 Review of Building Permits

Where elevation data is not available either through the Flood Insurance Study or from another authoritative source, applications for building permits shall be reviewed to assure that proposed construction will be reasonably safe from flooding. The test of reasonableness is a local judgment and includes use of historical data, high water marks, photographs of past flooding, etc., where available. Failure to elevate at least two feet above grade in these zones may result in higher insurance rates.

12.7-6 Alteration of Watercourses

- (1) Notify adjacent communities and the Department of Ecology prior to any alteration or relocation of a watercourse, and submit evidence of such notification to the Federal Insurance Administration.
- (2) Require that maintenance is provided within the altered or relocated portion of said watercourse so that the flood carrying capacity is not diminished.

12.8 SPECIFIC STANDARDS

In all areas of special flood hazards where base flood elevation data has been determined, the following provisions are required:

12.8-1 Residential Construction

- (1) New construction and substantial improvement of any residential structure shall have the lowest floor, including basement, elevated to not less than one foot above the base flood elevation.
- (2) Fully enclosed areas below the lowest floor that are subject to flooding are prohibited, or shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwaters. Designs for meeting this requirement must be either certified by a registered professional engineer or architect or must meet or exceed the following minimum criteria:
 - (i) A minimum of two openings having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding shall be provided.
 - (ii) The bottom of all openings shall be no higher than one foot above grade.
 - (iii) Openings may be equipped with screens, louvers, or other coverings or devices provided that they permit the automatic entry and exit of floodwaters.

12.8-2 Nonresidential Construction

New construction and substantial improvement of any commercial, industrial or other nonresidential structure shall either have the lowest floor, including basement, elevated to not less than one foot above the base flood elevation; or, together with attendant utility and sanitary facilities, shall:

- (1) Be floodproofed so that below one foot above the base flood level the structure is watertight with walls substantially impermeable to the passage of water;
- (2) Have structural components capable of resisting hydrostatic and hydrodynamic loads and effects of buoyancy;
- (3) Be certified by a registered professional engineer or architect that the design and methods of construction are in accordance with accepted standards of practice for meeting provisions of this subsection based on their development and/or review of the structural design, specifications and plans. Such certifications shall be provided to the official as set forth in Section 12.1.
- (4) Nonresidential structures that are elevated, not floodproofed, must meet the same standards for space below the lowest floor as described in 12.8-1(2);
- (5) Applicants floodproofing nonresidential buildings shall be notified that flood insurance premiums will be based on rates that are one foot below the floodproofed level (e.g. a building constructed to the base flood level will be rated as one foot below.)

12.8-3 MANUFACTURED HOMES

All manufactured homes to be placed or substantially improved within Zones A on the community's FIRM on sites:

- (i) outside of a manufactured home park or subdivision,
- (ii) In a new manufactured home park or subdivision,
- (iii) In an expansion to an existing manufactured home park or subdivision, or
- (iv) In an existing manufactured home park or subdivision on which a manufactured home has incurred "substantial damage" as the result of a flood; be elevated on a permanent foundation such that the lowest floor of the manufactured home is elevated to not less than one foot above the base flood elevation and be securely anchored to an adequately anchored foundation system to resist flotation collapse and lateral movement. Manufactured homes to be placed or substantially improved on sites in an existing manufactured home park or subdivision within Zone A on the community's FIRM that are not subject to the above manufactured home provisions be elevated so that either:

- (i) The lowest floor of the manufactured home is elevated to not less than one foot above the base flood elevation, or
- (ii) The manufactured home chassis is supported by reinforced piers or other foundation elements of at least equivalent strength that are no less than 36 inches in height above grade and be securely anchored to an adequately anchored foundation system to resist floatation, collapse, and lateral movement. At a minimum a "reinforced pier" would have a footing adequate to support the weight of the manufactured home under saturated soil conditions such as occur during a flood. In addition, if stacked concrete blocks are used, vertical steel reinforcing rods should be

placed in the hollows of the blocks and those hollows filled with concrete or high strength mortar. In areas subject to high velocity floodwaters and debris impact, cast-in-place reinforced concrete piers may be appropriate.

12.8-4 Recreational vehicles placed on sites within Zone A on the community's FIRM must either:

- (i) Be on the site for fewer than 180 consecutive days, and
- (ii) Be fully licensed and ready for highway use, on its wheels or jacking system, is attached to the site only by quick disconnect type utilities and security devices, and has no permanently attached additions; or
- (iii) Meet the permitting requirements above and the elevation and anchoring requirements for manufactured homes.

12.9 FLOODWAYS

Located within areas of special flood hazard are areas designated as floodways. Since the floodway is an extremely hazardous area due to the velocity of flood waters which carry debris, potential projectiles, and erosion potential, the following provisions apply:

- (1) Prohibit encroachments, including fill, new construction, substantial improvements, and other development unless certification by a registered professional engineer or architect is provided demonstrating that encroachments shall not result in any increase in flood levels during the occurrence of the base flood discharge.
- (2) Construction or reconstruction of residential structures is prohibited within designated floodways, except for (i) repairs, reconstruction, or improvements to a structure which do not increase the ground floor area; and (ii) repairs, reconstruction or improvements to a structure, the cost of which does not exceed 50 percent of the market value of the structure either (A) before the repair, or reconstruction is started, or (B) if the structure has been damaged, and is being restored, before the damage occurred. Work done on structures to comply with existing health, sanitary, or safety codes which have been identified by the local code enforcement official or to structures identified as historic places shall not be included in the 50 percent.
- (3) If Section 12.9 (1) is satisfied, all new construction and substantial improvements shall comply with all applicable flood hazard reduction provisions.

12.10 CRITICAL FACILITIES

Construction of new critical facilities shall be, to the extent possible, located outside the limits of the Special Flood Hazard Area (SFHA) (100 year flood plain). Construction of new critical facilities shall be permissible within the SFHA if no feasible alternative site is available. Critical facilities constructed within the SFHA shall have the lowest floor elevated three feet or more above the level of the base flood elevation (100-year) at the site. Floodproofing and sealing measures must be taken to ensure that toxic substances will not be displaced by or released into flood waters. Access routes elevated to or above the level of the base flood elevation shall be provided to all critical facilities to the extent possible.



SECTION 13.0
GEOLOGICALLY HAZARDOUS AREAS

13.1 IDENTIFICATION OF GEOLOGICALLY HAZARDOUS AREAS -- CLASSIFICATION

For planning purposes, the general distribution, location and extent of the three classes of Geologically Hazardous Areas are discussed in the Geologic Hazards Evaluation Report for Garfield County prepared by Howard Consultants, Inc. and as defined by the individual classifications. This Report is on file with the Garfield County Engineer's Office. "Geologically hazardous areas" means areas that because of their susceptibility to erosion, sliding, earthquake, or other geological events, are not suited to the siting of commercial, residential, or industrial development consistent with public health or safety concerns

The designated Geologically Hazardous Area Classification is as follows:

CLASS I: Areas which are *Highly Vulnerable* to Geological Hazard; these would specifically include sedimentary interbeds on steep slopes within basalt flows and steep talus slopes or rock slides.

CLASS II: Areas which are *Vulnerable* to Geological Hazard; these would include other site-specific areas with the potential for unstable slopes, erodible soils or seismic hazard.

CLASS III: Areas *not vulnerable* to Geological Hazard; land which is not included in Class I or Class II.

13.2 AREAS OF DEVELOPMENT REVIEW AND MINIMUM HAZARD SETBACK REQUIREMENTS

The following minimum setbacks shall be provided as a means of achieving the goals and objectives of this ordinance and the Washington State Growth Management Act.

Area of Review	Point of Measurement For Setback	Width of Setback
200 feet	From any identified hazard	per geology report

13.3 DESIGNATED GEOLOGICALLY HAZARDOUS AREAS -- APPLICATION FOR DEVELOPMENT

An application for development shall be made as per the process found in Section 6.0 above.

- A. Alterations of geologically hazardous areas or associated buffers may only occur for activities that:
 - 1. Will not increase the threat of the geological hazard to adjacent properties beyond pre-development conditions;
 - 2. Will not adversely impact other critical areas;
 - 3. Are designed so that the hazard to the project is eliminated or mitigated to a level equal to or less than pre-development conditions; and
 - 4. Are certified as safe as designed and under anticipated conditions by a qualified engineer or geologist, licensed in the state of Washington.
- B. Critical facilities shall not be sited within geologically hazardous areas unless there is no other practical alternative.

13.4 DEVELOPMENT -- SITE ANALYSIS -- GENERAL REQUIREMENTS

A site analysis is required in geologically hazardous areas. In order to complete an analysis, the Building Inspector may require any of the following:

- 1. the physical features of the site, including identification of surface and subsurface soil types, vegetation, stream, canyons, alluvial fans, and drainage ways. Topography shall be shown in 5 foot contours unless prior approval is received for contours greater than 5 feet;
- 2. lot and parcel sizes, proposed lot coverage, type of dwelling units, square footage, dimensions, general type of construction and location of all structures, the existing and proposed utility systems including wells, sanitary sewers, electric, gas, and telephone, and other pertinent information requested by the Building Inspector;
- 3. the general location and different circumstances that might be expected to precipitate a geological event;
- 4. the geologic, topographic, and hydrologic factors that might contribute to slope instability and the location of the site susceptible to instability;
- 5. suitable, buildable areas taking into consideration the long term stability and maintenance of access roads and all other permanent infrastructure needs that would be affected by both the underlying geology and soils;
- 6. recommended hazard setbacks to protect the geologic and topographic features;
- 7. relying on existing data, areas with known or potential for seismic hazard;
- 8. the rate and extent of any potential hazards such as erosion, sliding, slumping etc., must be analyzed in light of the potential to impact the public health, safety and welfare;
- 9. the potential impact of residential landscape irrigation, drain-fields, upslope and off-site irrigation activities, storm water generation from upslope properties and proposed impervious surfaces on-site, and the influence of street conveyance on slope stability;
- 10. proposed access, parking, and basic internal vehicle/pedestrian circulation system;
- 11. the proposed system for retention and release (detention) of storm and surface water runoff generated from the site;
- 12. general landscaping plan indicating the type and placement of materials used around all structures, parking areas and other cleared portion of the site;
- 13. the relationship between the proposed development and existing and proposed adjacent areas;
- 14. where development is proposed downslope of lands in, or with the potential for agriculture, analysis of the impact of surface and sub surface movement of waste irrigation water on the

proposed development site shall be provided. The analysis shall include description of the relevant soil, geologic, and hydrologic conditions of the project site and the upslope lands;

15. for public buildings and facilities: identification of minimum design standards where seismic activity has the potential to occur.

13.5 AREAS ADDRESSED IN CRITICAL AREA REPORT

The following areas shall be addressed in a critical area report for geologically hazardous areas:

- A. The project area of the proposed activity; and
- B. All geologically hazardous areas within two hundred (200) feet of the project area or that have potential to be affected by the proposal;
- C. The presence, nature, and location of wetlands, FWHCAs, and/or aquifer recharge zones.

13.6 GEOLOGICAL HAZARDS ASSESSMENT

A. Critical Area Report – Required Information

A critical area report for a geologically hazardous area shall contain an assessment of geological hazards including the following site-and proposal-related information at a minimum:

- 1. Site, land clearing, and construction plans. The report shall include a copy of the site plans for the proposal showing:
 - a. The type and extent of geologic hazard areas, and any other critical areas, and buffers on, adjacent to, within two hundred (200) feet of, or that are likely to impact the proposal;
 - b. Proposed development, including the location of existing and proposed structures, fill, storage of materials, and drainage facilities, with dimensions indicating distances to the floodplain, if available;
 - c. The topography, in two-foot contours, of the project area and all hazard areas addressed in the report; and
 - d. Clearing limits;
- 2. Assessment of geological characteristics. The report shall include an assessment of the geologic characteristics of the soils, sediments, and/or rock of the project area and potentially affected adjacent properties, and a review of the site history regarding landslides, erosion, and prior grading. Soils analysis shall be accomplished in accordance with accepted classification systems in use in the region. The assessment shall include, but not be limited to:
 - a. A description of the surface and subsurface geology, hydrology, soils, and vegetation found in the project area and in all hazard areas addressed in the report;
 - b. A detailed overview of the field investigations, published data and references; data and conclusions from past assessments of the site; and site specific measurements, test. investigations, or studies that support the identification of geologically hazardous areas; and
 - c. A description of the vulnerability of the site to seismic and other geologic events;

3. Analysis of proposal. The report shall contain a hazards analysis including a detailed description of the project, its relationship to the geologic hazard(s), and its potential impact upon the hazard area, the subject property, and affected adjacent properties; and
4. Minimum buffer and building setback. The report shall make a recommendation for the minimum no-disturbance buffer and minimum building setback from any geologic hazard based upon the geo-technical analysis.
5. Incorporation of previous study. Where a valid critical areas report has been prepared within the last five (5) years for a specific site, and where the proposed land use activity and surrounding site conditions are unchanged, said report may be incorporated into the required critical area report. The applicant shall submit a hazards assessment detailing any changed environmental conditions associated with the site.
6. Mitigation of long-term impacts. When hazard mitigation is required, the mitigation plan shall specifically address how the activity maintains or reduces the pre-existing level of risk to the site and adjacent properties on a long-term basis (equal to or exceeding the projected lifespan of the activity or occupation). Proposed mitigation techniques shall be considered to provide long-term hazard reduction only if they do not require regular maintenance or other actions to maintain their function. Mitigation may also be required to avoid any increase in risk above the pre-existing conditions following abandonment of the activity.

B. Critical Area Report - Additional Technical Information Requirements for Specific Hazards.

Critical area reports for geologically hazardous areas must meet the requirements of this Section. Critical area reports for two or more types of critical areas must meet the report requirements for each relevant type of critical area.

1. Erosion and landslide hazard areas. In addition to the basic critical area report requirements, the technical information for an erosion hazard or landslide hazard area shall include the following information at a minimum:
2. Site plan. The critical area report shall include a copy of the site plan for the proposal showing:
 - a. The height of slope, slope gradient, and cross-section of the project area;
 - b. The location of springs, seeps, or other surface expressions of ground water on or within two hundred (200) feet of the project area or that have potential to be affected by the proposal; and
 - c. The location and description of surface water runoff features;
3. Hazards analysis. The hazards analysis component of the critical areas report shall specifically include:
 - a. A description of the extent and type of vegetative cover;
 - b. A description of subsurface conditions based on data from site-specific explorations;
 - c. Descriptions of surface and ground water conditions, public and private sewage disposal systems, fills and excavations, and all structural improvements;

- d. An estimate of slope stability and the effect construction and placement of structures will have on the slope over the estimated life of the structure;
 - e. An estimate of the bluff retreat rate that recognizes and reflects potential catastrophic events such as seismic activity or a one hundred-year storm event;
 - f. Consideration of the run-out hazard of landslide debris and/or the impacts of landslide run-out on down slope properties.
 - g. A study of slope stability including an analysis of proposed cuts, fills, and other site grading;
 - h. Recommendations for building siting limitations; and
 - i. An analysis of proposed surface and subsurface drainage, and the vulnerability of the site to erosion;
4. Geo-technical engineering report. The technical information for a project within a landslide hazard area shall include a geo-technical engineering report prepared by a licensed engineer or geologist licensed by the State that presents engineering recommendations for the following:
- a. Parameters for design of site improvements including appropriate foundations and retaining structures. These should include allowable load and resistance capacities for bearing and lateral loads, installation considerations and estimates of settlement performance;
 - b. Recommendations for drainage and sub-drainage improvements;
 - c. Earthwork recommendations including clearing and site preparation criteria, fill placement and compaction criteria, temporary and permanent slope inclinations and protection, and temporary excavation support, if necessary; and
 - d. Mitigation of adverse site conditions including slope stabilization measures and seismically unstable soils, if appropriate;
5. Erosion and sediment control plan. For any development proposal on a site containing an erosion hazard area, an erosion and sediment control plan shall be required.
6. Drainage plan. The drainage plan should consider on-site septic system disposal volumes where the additional volume will affect the erosion or landslide hazard area;
7. Mitigation plans. Hazard and environmental mitigation plans for erosion and landslide hazard areas shall include the location and methods of drainage, surface water management, locations and methods of erosion control, a vegetation management and/or replanting plan, and/or other means for maintaining long-term soil stability; and
8. Monitoring surface waters. If the Administrator determines that there is a significant risk of damage to downstream receiving waters due to potential erosion from the site, based on the size of the project, the proximity to the receiving waters, or the sensitivity of the receiving waters, the technical information shall include a plan to monitor the surface water discharge from the site. The monitoring plan shall include a recommended schedule for submitting monitoring reports to the Town.

- C. Seismic hazard areas. In addition to the basic report requirements, a critical area report for a seismic hazard area shall also meet the following requirements:
1. The site map shall show all known and mapped faults within two hundred (200) feet of the project area or that have potential to be affected by the proposal.
 2. The hazards analysis shall include a complete discussion of the potential impacts of seismic activity on the site (for example, forces generated and fault displacement).
 3. A geo-technical engineering report shall evaluate the physical properties of the subsurface soils, especially the thickness of unconsolidated deposits and their liquefaction potential. If it is determined that the site is subject to liquefaction, mitigation measures appropriate to the scale of the development shall be recommended and implemented.
- D. Volcanic hazard areas.
In addition to the basic report requirements, a critical area report for a volcanic hazard area shall also meet the following requirements:
1. Site plan. The site plan shall show all areas within two hundred (200) feet of the project area that have potential to be affected by pyroclastic flows, lahars, or mud and debris flows derived from volcanic events;
 2. Hazards analysis. The hazards analysis shall include a complete discussion of the potential impacts of volcanic activity on the site (for example, inundation by mud flows resulting from volcanic activity);
 3. Emergency management plan. The emergency management plan shall include plans for emergency building exit routes, site evacuation routes, emergency training, notification of local emergency management officials, and an emergency warning system.
- E. Other Geologically Hazardous Areas.
In addition to the basic requirements, the Administrator may require additional technical information to be submitted when determined to be necessary to the review the proposed activity and the subject hazard. Additional technical information that may be required, includes, but is not limited to:
1. Site plan. The site plan shall show all hazard areas located within two hundred (200) feet of the project area or that have potential to be affected by the proposal; and
 2. Hazards analysis. The hazards analysis shall include a complete discussion of the potential impacts of the hazard on the project area and of the proposal on the hazard.

13.7 DEVELOPMENT -- PLANS REQUIRED

1. A site development and grading plan which meets the requirements of Section 13.7 and of this section shall be developed and submitted to the Planning Director in order to :
 - a. assure long term structural integrity of all development;
 - b. protect the public health, safety, and welfare by minimizing the potential for public expenditures for post-project geologic, soils, and hydrology hazards remediation;
 - c. avoid documented seismic and landslide hazard areas as locations for building construction, roads or utility systems where mitigation is not feasible;

- post
- d. eliminate as completely as practicable, any public or private exposure to landslide hazard or to abnormal maintenance or repair costs through the application of construction slope stabilization and appropriately upgraded road construction specification where appropriate;
 - e. minimize storm water runoff and soil erosion impacts;
 - f. control dust during all construction phases;
 - g. achieve maximum feasible retention, in their natural condition, or existing topographic features such as drainage swales, streams, slopes, structurally important ridge lines and rock outcroppings.
3. In areas of steep slopes and natural drainages, when construction will extend into the rainy season and potentially cause eroded sediments to move off-site, the storm and surface water runoff retention and detention system must be completed before other phases of site development are begun so that it can serve as a sediment trap during the remainder of the construction.

13.8 DEVELOPMENT STANDARDS

The following development standards apply to all land uses within protected Geologically Hazardous Areas:

1. Development approvals shall ensure that all best engineering practices are employed to minimize potential hazard and to assure long term structural integrity of all development.



SECTION 14.0
FISH AND WILDLIFE CONSERVATION AREAS

14.1 IDENTIFICATION OF FISH AND WILDLIFE CONSERVATION AREAS -- CLASSIFICATION AND MAPS

For planning purposes, the general distribution, location and extent of the Fish and Wildlife Habitat Conservation Areas are as mapped by the State of Washington Department of Fish and Wildlife and are on file with the Garfield County Engineer's Office.

The designated Fish and Wildlife Conservation Area Classification is as follows:

CLASS I: Areas which include fish and wildlife habitat conservation areas as listed in 14.5 below.

Garfield County and the applicant must include the "best available science" to protect the functions and values of critical areas and must give special consideration to conservation or protection measures necessary to preserve or enhance anadromous fisheries. RCW [36.70A.172](#)(1). The rules in WAC [365-195-900](#) through [365-195-925](#) are intended to assist the county and the applicant in identifying and including the best available science in the review of any development proposal.

14.2 AREA OF PROJECT REVIEW AND MINIMUM BUFFER REQUIREMENTS

The following area of project review and minimum buffers shall be provided as a means of achieving the goals and objectives of this ordinance.

Area of Review	Point of Measurement For Buffer	Width of Buffer
500 feet	From the "edge area"	Determined by the Building Inspector based upon Washington Department of Wildlife and Fisheries recommendations after consultation with the applicant and state agencies.

14.4 DESIGNATED FISH AND WILDLIFE CONSERVATION AREAS -- APPLICATION FOR DEVELOPMENT

An application for development shall be made as per the process found in Section 6.0 above.

14.5 SITE ANALYSIS -- GENERAL REQUIREMENTS

1. Where a regulated development or activity is proposed on or adjacent to a designated Priority Habitat or species, the parcel shall be surveyed to determine if the following are associated with the site:
 - a. areas with which Priority Species (as determined by the Washington Department of Fish and Wildlife) have a primary association. Priority species are wildlife species of concern due to their population status and their sensitivity to habitat alteration.
 - b. Priority Habitats as identified by the SDFW. Priority habitats are areas with one or more of the following attributes: comparatively high wildlife density, high wildlife density, high wildlife species richness, significant wildlife species richness, significant wildlife breeding habitat, significant wildlife seasonal ranges, significant movement corridors for wildlife, limited availability, and/or high vulnerability.
 - c. species and habitats designated by the county to be of local importance.
 - d. naturally occurring ponds under twenty acres and their submerged aquatic beds that provide fish or wildlife habitat.
 - e. waters of the state.
 - f. lakes, ponds, streams and rivers planted with game fish...
 - g. state natural area preserves and natural resource conservation areas.
2. A site analysis shall be performed if the resources identified in subsection 1 are found to be associated with the parcel. The following shall be identified:
 - a. the nature and extent of the species primary association with the habitat area;
 - b. the relative density and species richness, breeding, habitat, seasonal range dynamics and movement corridors;
 - c. the relative tolerance of species to human activities;
 - d. the influence of the project, individually and cumulatively, on the wildlife and associated habitats;
 - e. mitigative measures for any project element that could potentially threaten baseline population and reproduction rates over the long term;
 - f. information about the presence of regional species and any migratory patterns;

14.6 REPORT REQUIREMENTS – HABITAT CONSERVATION AREAS

Critical Area Report. Critical area reports for habitat conservation areas must meet the requirements of this Section. Critical area reports for two or more types of critical areas must meet the report requirements for each relevant type of critical area.

- A. Preparation by a Qualified Professional. A critical areas report for a habitat conservation area shall be prepared by a qualified professional who is a biologist with experience preparing reports for the relevant type of habitat.
- B. Areas Addressed in Critical Area Report. The following areas shall be addressed in a critical area report for habitat conservation areas:
 1. The project area of the proposed activity;
 2. All habitat conservation areas and their associated buffers within three hundred (300) feet of the project area; and
 3. All shoreline areas, floodplains, *wetlands*, *streams*, other critical areas, and related buffers within three hundred (300) feet of the project area.
- C. Habitat Assessment. A habitat assessment is an investigation of the project area to evaluate the potential presence or absence of designated critical fish or wildlife species or

habitat. A critical area report for a habitat conservation area shall contain an assessment of habitats including the following site- and proposal-related information at a minimum:

1. Detailed description of vegetation on and adjacent to the project area and its associated buffer;
2. Identification of any species of local importance, priority species, or endangered, threatened, sensitive, or candidate species that have a primary association with habitat on or adjacent to the project area, and assessment of potential project impacts to the use of the site by the species;
3. A discussion of any federal, state, or local special management recommendations, including Washington Department of Fish and Wildlife habitat management recommendations, that have been developed for species or habitats located on or adjacent to the project area;
4. A detailed discussion of the direct and indirect potential impacts on habitat by the project, including potential impacts to water quality;
5. A discussion of measures, including avoidance, minimization, and mitigation, proposed to preserve existing habitats and restore any habitat that was degraded prior to the current proposed land use activity;
6. A discussion of ongoing management practices that will protect habitat after the project site has been developed, including proposed monitoring and maintenance programs.

D. **Additional Information May Be Required.** When appropriate due to the type of habitat or species present or the project area conditions, the Administrator may also require the habitat management plan to include:

1. An evaluation by an independent qualified professional hired by the Town and paid for by the applicant regarding the applicant's analysis and the effectiveness of any proposed mitigating measures or programs, to include any recommendations as appropriate;
2. A request for consultation with the Washington Department of Fish and Wildlife or the local Native American Indian Tribe or other appropriate agency; and
3. Detailed surface and subsurface hydrologic features both on and adjacent to the site.

14.7 DEVELOPMENT STANDARDS

The following development standards apply to all land uses within protected Fish and Wildlife Conservation Area.

1. The WDFW recommends the following buffer widths for streams:

DNR Stream Type	Non-Typed Streams	Buffer Width
Type 1 and 2	Shorelines of the State, Shorelines of Statewide Significance	250 feet
Type 3 (5-20 ft. wide)	Other perennial or fish-bearing streams (5-20 ft. wide)	200 feet

Type 3 (less than 5 ft.)	Other perennial or fish-bearing streams (less than 5 feet wide)	150 feet
Type 4 and 5	Other intermittent streams and washes	150 feet

It may not be possible to provide all riparian areas with these buffer widths, but the County should consider buffer widths that adequately reflect the needs of riparian resources. Part of this should be provisions to increase stream buffer widths, depending upon the habitat value and the nature of the proposed land use.

2. The County may consider requiring a Habitat Management Plan which would include recommendations from WDFW on mitigation measures.

15.1 VIOLATION -- PENALTY

Any person, firm, corporation or association who violates any provisions of this ordinance relating to development of any lot, tract, or parcel of land, shall be guilty of a misdemeanor punishable by a \$250.00 fine and/or a thirty (30) day jail sentence and each type of development on each separate lot, tract or parcel of land in violation of any provision of this ordinance shall be deemed a separate and distinct offense.

15.2 SEVERABILITY

If any provision of the ordinance shall be declared unconstitutional or invalid by any court of competent jurisdiction, it shall be conclusively presumed that this ordinance would have been enacted without the provision so held unconstitutional or invalid and the remainder of this ordinance shall not be affected as a result of said part being held unconstitutional or invalid.

15.3 REPEALER

In the case of a conflict between any section, clause or phrase of this ordinance and a section, clause or phrase of any other previously adopted resolution, ordinance, or regulation, this ordinance shall take precedence.