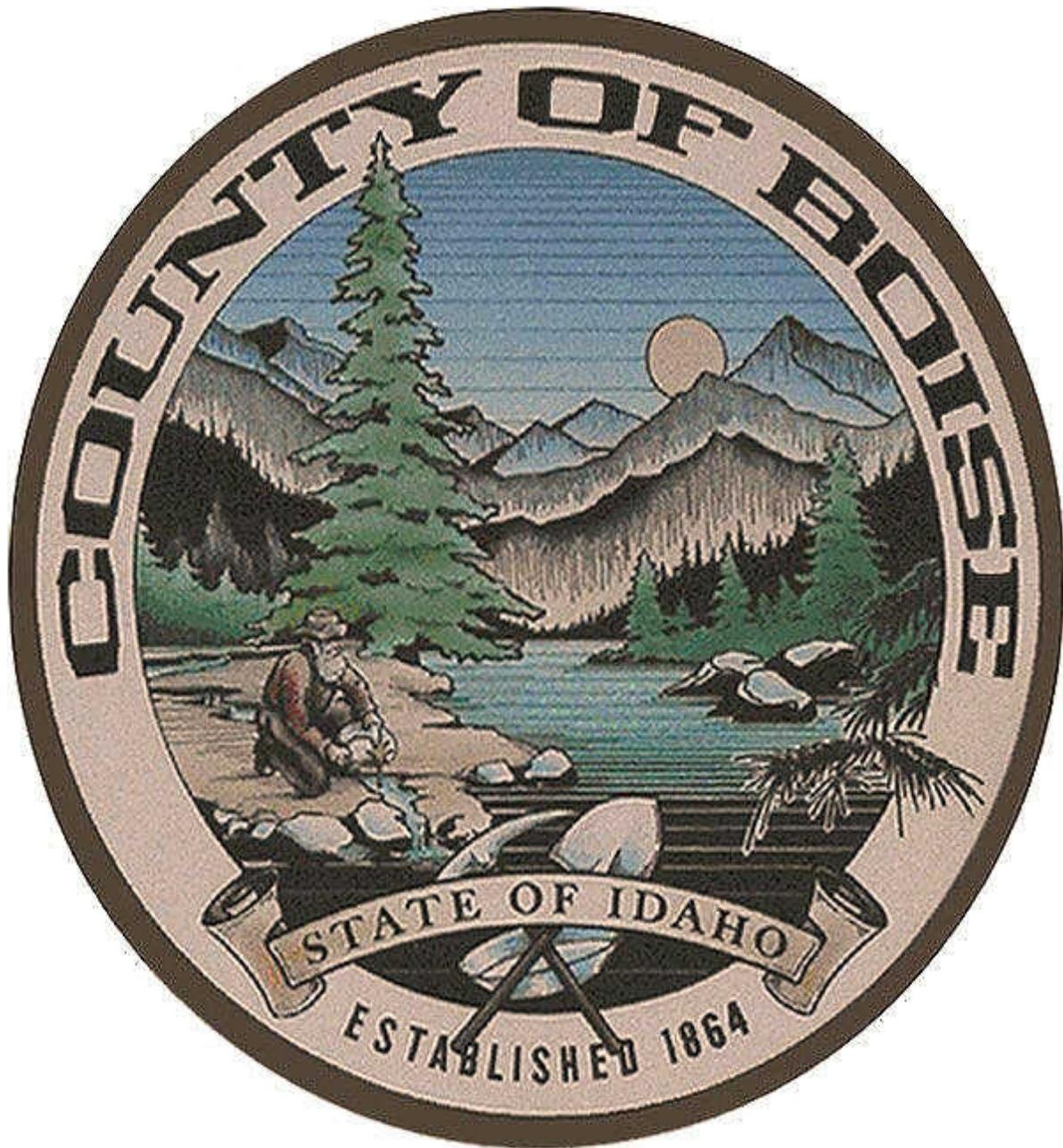


**BOISE COUNTY
FLOOD PLAN ORDINANCE
ORDINANCE 2010-04**

Adopted May 10, 2010



SECTION 1.0 - STATUTORY AUTHORIZATION, FINDINGS OF FACT, PURPOSE, AND OBJECTIVES

1.1 STATUTORY AUTHORIZATION

The Legislature of the State of Idaho has in Idaho Code 46-1022 delegated the responsibility to local governmental units to adopt regulations designed to promote the public health, safety, and general welfare of its citizenry. Therefore, Boise County, Idaho does ordain as follows:

1.2 FINDINGS OF FACT

- 1) Boise County Waters provide valuable recognized natural resource functions and that prudent preservation, protection and management is necessary to assure the public health, safety and welfare.
- 2) The flood hazard areas of Boise County are subject to periodic inundation which results in loss of life and property, health, and safety hazards, disruption of commerce and governmental services, extraordinary public expenditures for flood protection and relief, and impairment of the tax base, all of which adversely affect the public health, safety, and general welfare.
- 3) These flood losses are caused by the cumulative effect of obstructions in areas of special flood hazards which increase flood heights and velocities, and when inadequately anchored, damage uses in other areas. Uses that are inadequately floodproofed, elevated, or otherwise protected from flood damage also contribute to the flood loss.
- 4) Inadequate culverts or bridges combined with obstructions during times of high run-off, in all areas of Boise County, have caused flooding and contributed to losses on individual properties, neighboring properties and County, State and Federal land.
- 5) Implementing this Flood Ordinance allows Boise County and its residents to be eligible for FEMA support and funding.

1.3 STATEMENT OF PURPOSE

It is the purpose of this ordinance to promote the public health, safety, and general welfare; provide ordinance regulation, which assists property owners reduce in the reduction of the annual cost of flood insurance; and minimize public and private losses due to flood conditions in specific areas by provisions designed to:

- 1) Protect human life and health;
- 2) Minimize expenditure of public money and costly flood control projects;
- 3) Minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;
- 4) Minimize prolonged business interruptions;

- 5) 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;
- 6) 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;
- 7) Ensure that potential buyers are notified that property is in an area of special flood hazard;
- 8) Ensure that those who occupy the areas of special flood hazard assume responsibility for their actions;
- 9) Ensure that any new land use change will not have any net adverse impacts on flood plain functions, including consideration of cumulative impact and ensure that appropriate analysis techniques are employed to determine the cumulative effects;
- 10) Ensure that new developments will prepare flood management plans, enforceable by local governments, which include operation and maintenance of any development-related flood management facilities;
- 11) Ensure that no fill program shall adversely affect the riparian and aquatic habitats of the waters of Boise County; and
- 12) Protect continuous riparian corridors and flood plain wetlands that provide flood storage and mitigate peak flows.

1.4 METHODS OF REDUCING FLOOD LOSSES

In order to accomplish its purposes, this ordinance includes methods and provisions for:

- 1) Restricting or prohibiting uses which are dangerous to health, safety, and property due to water or erosion hazards, or which result in damaging increases in erosion or in flood heights or velocities;
- 2) Requiring that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction;
- 3) Controlling the alteration of natural flood plains, stream channels, and natural protective barriers, which help accommodate or channel flood waters;
- 4) Controlling filling, grading, dredging, and other development which may increase flood damage; and
- 5) Preventing or regulating the construction of flood barriers that unnaturally divert floodwaters or may increase flood hazards in other areas.
- 6) Requiring that private road access through Boise County right-of-way approaches have adequate culvert diameter or bridge clearance.

SECTION 2.0 – GENERAL PROVISIONS

2.1 LANDS TO WHICH THIS ORDINANCE APPLIES

This ordinance shall apply to all areas of special flood hazards within the unincorporated area of Boise County.

2.2 BASIS FOR ESTABLISHING THE AREAS OF SPECIAL FLOOD HAZARD

The areas of special flood hazard identified by the Federal Insurance Administration in a scientific and engineering report entitled "The Flood Insurance Study for Boise County " dated April 5, 1988, and any revisions thereto, with an accompanying Flood Insurance Rate Map (FIRM), and any revisions thereto, are hereby adopted by reference and declared to be a part of this ordinance. The Flood Insurance Study and the FIRM are on file at the Boise County Courthouse, Planning and Zoning Office. The best available information for flood hazard area identification as outlined in Section 4.3-2 shall be the basis for regulation until a new FIRM is issued that incorporates data utilized under Section 4.3-2.

2.3 PENALTIES FOR NONCOMPLIANCE

No structure or land shall hereafter be constructed, located, extended, converted, or altered without full compliance with the terms of this ordinance and other applicable regulations. Violations of the provisions of this ordinance by failure to comply with any of its requirements (including violations of conditions and safeguards established in connection with conditions), shall constitute a misdemeanor as defined in Idaho Code §18-111. Nothing herein contained shall prevent the Boise County from taking such other lawful action as is necessary to prevent or remedy any violation.

2.4 ABROGATION AND GREATER RESTRICTIONS

This ordinance is not intended to repeal, abrogate, or impair any existing easements, covenants, or deed restrictions. However, where this ordinance and another ordinance, easement, covenant, or deed restriction conflict or overlap, whichever imposes the more stringent restrictions shall prevail.

2.5 INTERPRETATION

In the interpretation and application of this ordinance, all provisions shall be:

- 1) Considered as minimum requirements;
- 2) Liberally construed in favor of the governing body; and,
- 3) Deemed neither to limit nor repeal any other powers granted under State statutes.

The provisions of this Ordinance shall be in addition to, and shall not be deemed to repeal, abrogate, or impair any other ordinance, regulation, easement, covenant or deed restriction. In the event that the provisions of this Ordinance and any other ordinance, regulation, easement, covenant or deed restriction conflict or overlap, whichever has the more restrictive requirements shall control.

2.6 SEVERABILITY

This ordinance is hereby declared to be severable. Should any portion of this ordinance be declared invalid by a court of competent jurisdiction, the remaining provisions shall continue in full force and effect and shall be read to carry out the purpose(s) of the ordinance before the declaration of partial invalidity.

2.7 REPEAL OF CONFLICTING PROVISION

All provisions of the current ordinance of the County of Boise which conflict with the provisions of this ordinance are hereby repealed to the extent of such conflict. Nothing in this Ordinance shall be inconsistent with Idaho Code 39-4116 or its successor provisions.

2.8 WARNING AND DISCLAIMER OF LIABILITY

The degree of flood protection required by this ordinance is considered reasonable for regulatory purposes and is based on scientific and engineering considerations. Larger floods can and will occur on rare occasions. Flood heights may be increased by man-made or natural causes. This ordinance does not imply that land outside the areas of special flood hazards or uses permitted within such areas will be free from flooding or flood damages. This ordinance shall not create liability on the part of Boise County, any officer or employee thereof, or the Federal Insurance Administration, for any flood damages that result from reliance on this ordinance or any administrative decision lawfully made hereunder.

2.9 EFFECTIVE DATE

This Ordinance shall be effective upon its passage and publication as provided by law.

SECTION 3.0 – DEFINITIONS

Unless specifically defined below, terms 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 it's most reasonable application.

ACCESSORY STRUCTURES: A subordinate structure incidental to the main use or principal building of a property and which is located on the same lot or tract as the main structure but does not include any building containing a dwelling unit as hereinafter defined.

ADMINISTRATOR: Refers to the Planning and Zoning Administrator, or his/her designated representative, responsible for the administration and enforcement of this Ordinance.

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

AREA OF SHALLOW FLOODING: designated as AO, or AH Zone on the Flood Insurance Rate Map (FIRM). AO zones have base flood depths that range from one to three feet above the natural ground; 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; AH indicates ponding, and is shown with standard Flood Protection Elevations.

AREA OF SPECIAL FLOOD HAZARD: is 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 FEMA Flood Insurance Rate Maps (FIRM) maps always includes the letters A or V.

BASE FLOOD: the flood having a 1% chance of being equaled or exceeded in any given year (also referred to as the "100-year flood"). Designated on Flood Insurance Rate Maps by the letters A or V. Where Flood Protection Elevation (BFE) is not available either through the Flood Insurance Study, FIRM, or from another authoritative source (Section 4.3-2), the Administrator shall determine a reasonable base flood elevation. The test of reasonableness is a local judgment and includes use of historical data, high water marks, photographs of past flooding, etc., where available.

BASEMENT: means any area of the building having its floor sub-grade (below ground level) on all sides, except has described and permitted in FEMA Technical Bulletin 11-01.

BOARD: means Boise County Board of County Commissioners.

COMMISSION: means the Planning and Zoning Commission.

CREEK: A small stream, often a shallow or intermittent tributary to a river, including but not limited to: Mores Creek, Grimes Creek, Harris Creek, Rabbit Creek, and Alder Creek.

CRITICAL FACILITY: means a facility 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, and installations which produce, use, or store hazardous materials or hazardous waste, or community and/or public water and waste water supply and treatment facilities.

DEVELOPMENT: means any man-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.

ELEVATION CERTIFICATE: means the official form (FEMA Form 81-31) used to track development provide elevation information necessary to ensure compliance with community floodplain management ordinances, and determine the proper insurance premium rate with Section B completed by Community Officials.

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

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:

- 1) The overflow of inland or tidal waters and/or
- 2) 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 (FIS): 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 protection elevation means an elevation that shall correspond to the elevation of the one percent (1%) chance flood (one hundred (100) year flood) plus any increased flood elevation due to **floodway** encroachment, plus any required freeboard.

Floodproofed: (1) Floodproofing means making a building watertight, substantially impermeable to floodwaters. (2) Floodproofing is described as a combination of adjustments and/or additions of features to buildings that eliminate or reduce the potential for flood damage (see FEMA Tech Bulletin 3-93).

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.

INTERMITTENT STREAMS: means a water channel contains flowing water for only a portion of the year. When not flowing, the water may remain in isolated pools, or surface water may be absent. Intermittent Streams are usually marked on [topographic maps](#) with a line of blue dashes and dots.

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 5.2-1(2), (i.e. Provided there are adequate flood ventilation openings).

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 measures to avoid impacts, minimize impacts, restore impacted areas, and compensate for impacts to a natural resource attributable to a proposed action.

MITIGATION, APPROPRIATE: means mitigation which avoids impacts to, minimizes impacts to, restores, or replaces the functions and values of a natural resource, and is consistent with the scope and degree of those impacts attributable to a proposed action.

MITIGATION, PRACTICAL: means mitigation which is available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purposes.

NEW CONSTRUCTION: means structures for which the "start of construction" commenced on or after the effective date of this ordinance. This includes substantial improvement and means either the first placement of permanent construction of a structure on a site, such as 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.

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.

NO ADVERSE IMPACT: means an approach that ensures the action of any property owner, public or private, does not adversely impact the property and rights of others.

NO-NET-LOSS: means the measure of the success of mitigation that requires avoidance, minimization, restoration, and compensation of all functions and values of a natural resource impacted by a proposed action.

RECREATIONAL VEHICLE: means a vehicle:

- 1) built on a single chassis;
- 2) 400 square feet or less when measured at the largest horizontal projection;
- 3) Designed to be self-propelled or permanently towable by a light duty truck; and
- 4) Designed primarily not for use as a permanent dwelling but as temporary living quarters for recreational, camping, travel, or seasonal use.

Regulatory flood is a flood determined to be representative of large floods known to have occurred in Idaho and which may be expected to occur on a particular stream because of like physical characteristics. The regulatory flood is based upon a statistical analysis of stream flow records available for the watershed or an analysis of rainfall and runoff characteristics in the watershed. In inland areas, the flood frequency of the regulatory flood is once in every one hundred (100) years; this means that in any given year there is a one percent (1%) chance that a regulatory flood may occur or be exceeded.

REPETITIVE LOSS: means flood-related damages sustained by a structure on two separate occasions during a 10-year period for which the cost of repairs at the time of each such flood event, on the average, equals or exceeds 25 percent of the market value of the structure before damage occurred.

RIPARIAN AREA: means all lands within and adjacent to areas of groundwater discharge, or standing and flowing surface waters where the vegetation community is significantly affected by the temporary, seasonal, or permanent presence of water. Examples include springs, seeps, creeks, streams, rivers, ponds, and lakes and their margins.

RIPARIAN COMMUNITY: means all plant and animal species within a given riparian area.

RIPARIAN HABITAT: means an area where a plant or animal lives; the sum total of environmental conditions in the area. It may also refer to the place occupied by an entire community of plants or animals.

RIVER: means the Payette River and Boise River.

STRUCTURE: anything constructed or erected, except fences, which requires permanent location on or below grade, or is attached to something having permanent location on the 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:

- 1) Before the improvement or repair is started; or
- 2) 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 excludes:

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

VARIANCE: means a modification of the bulk and placement requirements of the ordinance as to lot size, lot coverage, width, depth, front yard, side yard, rear yard, setbacks, or other ordinance provision affecting the size or shape of a structure or the placement of the structure upon lots, or the size of lots. A variance shall not be considered a right or special privilege, but

may be granted to an applicant only upon a showing of undue hardship because of characteristics of the site and that the variance is not in conflict with the public interest.

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

WETLANDS: means areas that are inundated or saturated by surface or groundwater 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 saturated swamps, marshes, bogs and similar areas.

WETLAND, RIPARIAN FUNCTIONS & VALUES: means the recognized wetland and riparian functions and values include water quality protection & improvement, habitat for fisheries & wildlife, nutrient retention & removal, channel stability, food chain support, flood storage & desynchronization, groundwater recharge & discharge, active & passive recreation, aesthetics, and cultural resources.

SECTION 4.0 – ADMINISTRATION

4.1 ESTABLISHMENT OF DEVELOPMENT PERMIT

4.1-1 DEVELOPMENT PERMIT REQUIRED

A development permit shall be obtained before construction or development begins within any area of special flood hazard established in Section 2.2. The permit shall be for all structures including manufactured homes, as set forth in the "Definitions," and for all development including fill and other activities, also as set forth in the "Definitions."

4.1-2 APPLICATION FOR DEVELOPMENT PERMIT

Application for a development permit, along with the appropriate fees established by resolution of the Board of County Commissioners, shall be made on forms furnished by the Administrator and may include, but not be limited to, plans in duplicate drawn to scale showing the nature, location, dimensions, and elevations of the area in question; existing or proposed structures, fill, storage of materials, drainage facilities, and the location of the foregoing. Specifically, the following information is required:

- 1) Elevation in relation to mean sea level, of the lowest floor (including basement) of all structures recorded on a current elevation certificate (FF 81-31) with Section B completed by the local official.
- 2) Elevation in relation to mean sea level to which any structure has been floodproofed;
- 3) Certification by a registered professional engineer or architect that the floodproofing methods for any nonresidential structure meet floodproofing criteria in Section 5.2-2;
- 4) Description of the extent to which a watercourse will be altered or relocated as a result of proposed development.

4.2 DESIGNATION OF THE LOCAL ADMINISTRATOR

The Boise County Planning and Zoning Administrator is hereby appointed to administer and implement this ordinance by granting or denying development permit applications in accordance with its provisions.

4.3 DUTIES & RESPONSIBILITIES OF THE LOCAL ADMINISTRATOR

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

4.3-1 PERMIT REVIEW

- 1) Review all development permits to determine that the permit requirements of this ordinance have been satisfied.
- 2) Review all development permits to determine that all necessary permits have been obtained from those Federal, State, or local governmental agencies, to include but not limited to the Idaho Department of Water Quality (IDWR) and the US Corps of Engineers (USACE) from which prior approval is required.
- 3) Review all development permits to determine if the proposed development is located in the floodway. If located in the floodway, assure that the encroachment provisions of Section 5.4(1) are met.
- 4) Review all building permit applications to determine if a Boise County Road & Bridge Department "Application to Use Right-Of-Way Approaches" is required.

4.3-2 USE OF OTHER BASE FLOOD DATA (IN A ZONES)

When Flood Protection Elevation data has not been provided (in A Zones) in accordance with Section 3.2, BASIS FOR ESTABLISHING THE AREAS OF SPECIAL FLOOD HAZARD, the Administrator shall obtain, review, and reasonably utilize any Flood Protection Elevation and floodway data available from a Federal, State or other reliable source, in order to administer Sections 5.2, SPECIFIC STANDARDS, and 5.4 FLOODWAYS.

4.3-3 INFORMATION TO BE OBTAINED AND MAINTAINED

- 1) Where Flood Protection Elevation data is provided through the Flood Insurance Study, FIRM, or required as in Section 4.3-2, obtain and record the actual (as-built) 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. Recorded on a current elevation certificate (FF 81-31) with Section B completed by the local official.
- 2) For all new or substantially improved floodproofed nonresidential structures where Flood Protection Elevation data is provided through the FIS, FIRM, or as required in Section 4.3-2:
 - a) Obtain and record the elevation (in relation to mean sea level) to which the structure was floodproofed;
 - b) Maintain the floodproofing certifications required in Section 4.1-2(3)
- 3) Maintain for public inspection all records pertaining to the provisions of this ordinance.

4.3-4 ALTERATION OF WATERCOURSES

- 1) Notify adjacent communities and the Department of Water Resources 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.

- 3) Notify all affected property owners who have property lying within 600 feet of the boundaries of the proposed alteration or relocation of a watercourse.

4.3-5 INTERPRETATION OF FIRM BOUNDARIES

Make interpretations where needed, as to exact location of the boundaries of the areas of special flood hazards (e.g. Where there appears to be a conflict between a mapped boundary and actual field conditions). The person contesting the location of the boundary shall be given a reasonable opportunity to appeal the interpretation. Such appeals shall be granted consistent with the standards of Section 60.6 of the Rules and Regulations of the National Flood Insurance Program.

4.4 VARIANCE PROCEDURE

4.4-1 Request for Variance

- 1) The Planning and Zoning Commission (Commission), during a public hearing, shall hear and decide requests for variances from the requirements of this ordinance.
- 2) A request for a variance shall be on forms prescribed by the Administrator and be accompanied with the appropriate fee established by resolution.
- 3) Public Agencies and adjacent property owners to the subject property shall be notified at least thirty (30) days prior to the hearing date. Notice of the hearing date and time shall be published in the local newspaper at least fifteen (15) days prior to the hearing.
- 4) The Administrator shall cause to be noticed upon one (1) distinctly visible area on the subject property not less than ten (10) days prior to the hearing date.
- 5) The Commission shall hear and decide variances when it is alleged there is an error in any requirement, decision, or determination made by the Administrator in the enforcement or administration of this ordinance.
- 6) Those aggrieved by the decision of the Commission, or any taxpayer, may appeal such decision to the Board of County Commissioners (Board). A request for an appeal of a Commission decision shall be on forms prescribed by the Administrator and be accompanied with the appropriate fee established by resolution.
- 7) In passing upon such applications, the Commission and/or Board shall consider all technical evaluations, all relevant factors, standards specified in other sections of this ordinance, and:
 - a) The danger that materials may be swept onto other lands to the injury of others;
 - b) The danger to life and property due to flooding or erosion damage;
 - c) The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner;
 - d) The importance of the services provided by the proposed facility to the community;
 - e) The necessity to the facility of a waterfront location, where applicable;
 - f) The availability of alternative locations for the proposed use which are not subject to flooding or erosion damage;

- g) The compatibility of the proposed use with existing and anticipated development;
- h) The relationship of the proposed use to the comprehensive plan and flood plain management program for that area;
- i) The safety of access to the property in times of flood for ordinary and emergency vehicles;
- j) The expected heights, velocity, duration, rate of rise, and sediment transport of the flood waters and the effects of wave action, if applicable, expected at the site; and,
- k) The costs of providing governmental services during and after flood conditions, including maintenance and repair of public utilities and facilities such as sewer, gas, electrical, and water systems, and streets and bridges.

4.4-2 CONDITIONS FOR VARIANCES

- 1) Generally, the only condition under which a variance from the elevation standard may be issued is for new construction and substantial improvements to be erected on a small or irregularly shaped lot contiguous to and surrounded by lots with existing structures constructed below the base flood level. As the lot size increases the technical justification required for issuing the variance increases.
- 2) Variances shall not be issued within a designated floodway if any increase in flood levels during the base flood discharge would result.
- 3) Variances shall only be issued upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief.
- 4) Variances shall only be issued upon:
 - a) A showing of good and sufficient cause;
 - b) A determination that failure to grant the variance would result in exceptional hardship to the applicant;
 - c) A determination that the granting of a variance will not result in increased flood heights, additional threats to public safety, extraordinary public expense, create nuisances, cause fraud on or victimization of the public, or conflict with existing local laws or ordinances.
- 5) Variances as interpreted in the National Flood Insurance Program are based on the general zoning law principle that they pertain to a physical piece of property; they are not personal in nature and do not pertain to the structure, its inhabitants, economic or financial circumstances. They primarily address small lots in densely populated residential neighborhoods. As such, variances from flood elevations should be quite rare.
- 6) Variances may be issued for nonresidential buildings in very limited circumstances to allow a lesser degree of floodproofing than watertight or dry-floodproofing, where it can be determined that such action will have low damage potential, complies with all other variance criteria except 4.4-2(1), and otherwise complies with Sections 5.1-1, 5.1-3, and 5.1-4 of the GENERAL STANDARDS.
- 7) Any applicant to whom a variance is granted shall be given written notice that the permitted structure will be built with its lowest floor below the Flood Protection Elevation and that the cost of flood insurance will be commensurate with the increased risk.

SECTION 5.0 – PROVISIONS FOR FLOOD HAZARD REDUCTION

5.1 GENERAL STANDARDS

IN ALL AREAS OF SPECIAL FLOOD HAZARDS, THE FOLLOWING STANDARDS ARE REQUIRED:

5.1-1 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 shall 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. For more detailed information, refer to guidebook, FEMA-85, "Manufactured Home Installation in Flood Hazard Areas."

5.1-2 AH ZONE DRAINAGE

Adequate drainage paths are required around structures on slopes to guide floodwaters around and away from proposed structures.

5.1-3 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. Locating such equipment below the Flood Protection Elevation may cause annual flood insurance premiums to be increased.

5.1-4 UTILITIES

- 1) All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of flood waters into the systems;
- 2) Water wells shall be located on high ground and not in the floodway;
- 3) New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of flood waters into the systems and discharges from the systems into flood waters;
- 4) Onsite waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding.

5.1-5 SETBACKS

- 1) Setbacks are required in order to manage flood protection, riparian protection, fish and wildlife habitat, and aesthetics.
- 2) Setbacks can be measure either horizontal or vertical. No residential structure, mobile home, or deck or porch shall be located or constructed within an area equal to the width of the stream or 25 feet, whichever is greater, measured from the top of the stream bank, unless certification by a registered professional engineer is provided

demonstrating that such encroachment shall not result in any increase in flood levels during the occurrence of the base flood discharge.

3) Accessory Structure shall be constructed and placed on the building site so as to offer minimum resistance to the flow of floodwaters; shall be anchored to prevent floatation which may result in damage to other structures; service utilities such as electrical and heating equipment shall be elevated or flood-protected.

5.1-6 SUBDIVISION PROPOSALS

- 1) All subdivision proposals shall be consistent with the need to minimize flood damage;
- 2) All subdivision proposals shall have public utilities and facilities, such as sewer, gas, electrical, and water systems located and constructed to minimize or eliminate flood damage;
- 3) All subdivision proposals shall have adequate drainage provided to reduce exposure to flood damage;
- 4) Where Flood Protection 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).

5.1-6 REVIEW OF BUILDING PERMITS

Where Flood Protection Elevation is not available either through the Flood Insurance Study, FIRM, or from another authoritative source (Section 4.3-2), 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 the highest adjacent grade in these zones may result in higher insurance rates.

5.2 SPECIFIC STANDARDS

In all areas of special flood hazards where Flood Protection Elevation data has been provided as set forth in Section 3.2, BASIS FOR ESTABLISHING THE AREAS OF SPECIAL FLOOD HAZARD, or Section 4.3-2, USE OF OTHER BASE FLOOD DATA. Additional standards were clarified in FEMA Technical Bulletin 11-01 to allow crawlspace construction for buildings located in the special flood hazard areas; however, adopting this provision can result in a 20% increase in flood insurance premiums. The following provisions are required:

5.2-1 RESIDENTIAL CONSTRUCTION

- 1) New construction and substantial improvement of any residential structure shall have the lowest floor, including basement as defined in FEMA Technical Bulletin 11-01, elevated two feet or more above the Flood Protection Elevation (BFE).
- 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 either be certified by a registered professional engineer or architect or must meet or exceed the following minimum criteria:

- a) 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.
- b) The bottom of all openings shall be no higher than one foot above grade.
- c) Openings may be equipped with screens, louvers, or other coverings or devices provided that they permit the automatic entry and exit of floodwaters.
- d) NOTE: To comply with the "Lowest Floor" criteria of this ordinance, the unfinished or flood resistant enclosure shall only be used for parking of vehicles, limited storage of maintenance equipment used in connection with the premises, or entry to the elevated area. Foundation vent standards required by the IBC/IRC outside the floodplain do not meet this standard and are often inadvertently permitted. Insurance rates reflect an "all or nothing" standard, meaning, partially ventilated crawlspaces may be subject to an additional loading fee of 20-25% attached to the annual insurance premium.
- e) Below grade, crawlspaces are prohibited at sites where the velocity of floodwaters exceeds five (5) feet per second.
- f) All building utility systems within the crawlspace shall be elevated above Flood Protection Elevation or be designed so that floodwaters cannot enter or accumulate within the system component during flood.
- g) The interior of a crawlspace below the Flood Protection Elevation must not be more than 2 feet below the lowest adjacent exterior grade (LAG) and the height of the below grade crawlspace, measured from the interior grade of the crawlspace to the top of the crawlspace foundation must not exceed 4 feet at any point.
- h) Below grade, crawlspaces constructed in accordance with the requirements listed in this subsection shall not be considered basements. However, applicants who construct buildings that have below grade crawlspaces are hereby advised that such buildings will have higher flood insurance premiums than buildings that have crawlspaces with interior elevations at or above the lowest adjacent grade.

5.2-2 NONRESIDENTIAL CONSTRUCTION

New construction and substantial improvement of any commercial, industrial or other nonresidential structure shall either have the lowest floor, including basement, elevated one foot or more above the Flood Protection Elevation; or, together with attendant utility and sanitary facilities, shall:

- 1) Be floodproofed so that below one foot or more 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 4.3-3(2);

- 4) Nonresidential structures that are elevated, not floodproofed, must meet the same standards for space below the lowest floor as described in 5.2-1(2);

5.2-3 MANUFACTURED HOMES

All manufactured homes in the floodplain to be placed or substantially improved on sites shall be elevated on a **permanent foundation** such that the lowest floor of the manufactured home is elevated one foot or more above the Flood Protection Elevation and be securely anchored to an adequately anchored foundation system to resist flotation, collapse and lateral movement.

5.2-4 RECREATIONAL VEHICLES

Recreational vehicles placed on sites, within the Areas of Special Flood Hazard, are required to either:

- 1) Be on the site for fewer than 180 consecutive days;
- 2) Be fully licensed and ready for highway use, on wheels or jacking system, attached to the site only by quick disconnect type utilities and security devices, and have no permanently attached additions; or
- 3) Meet the requirements of 5.2-3 above and the elevation and anchoring requirements for manufactured homes.

5.3 AE AND A1-30 ZONES WITH FLOOD PROTECTION ELEVATIONS BUT NO FLOODWAYS

In areas with Flood Protection Elevations (but a regulatory floodway has not been designated), no new construction, substantial improvements, or other development (including fill) shall be permitted within Zones A1-30 and AE on the community's FIRM, unless it is demonstrated that the cumulative effect of the proposed development, when combined with all other existing and anticipated development, will not increase the water surface elevation of the base flood more than one foot at any point within the community.

5.4 FLOODWAYS

Located within areas of special flood hazard established in Section 3.2 are areas designated as floodways. Since the floodway is an extremely hazardous area due to the velocity of floodwaters that can carry debris, and increase 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 is provided demonstrating through hydrologic and hydraulic analyses performed in accordance with standard engineering practice that the proposed encroachment would not result in any increase in flood levels during the occurrence of the base flood discharge.
- 2) If Section 5.4(1) is satisfied, all new construction and substantial improvements shall comply with all applicable flood hazard reduction provisions of Section 5.0, PROVISIONS FOR FLOOD HAZARD REDUCTION.

5.7 CRITICAL FACILITY

Construction of new critical facilities shall be, to the greatest extent possible, located outside the limits of the Special Flood Hazard Area (SFHA) (100-year floodplain).

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 above BFE or to the height of the 500-year flood, whichever is higher. Access to and from the critical facility should also be protected to the height utilized above. Floodproofing and sealing measures must be taken to ensure that toxic substances will not be displaced by or released into floodwaters. Access routes elevated to or above the level of the Flood Protection Elevation shall be provided to all critical facilities to the extent possible.

Adopted May 10, 2010 by the Boise County Board of Commissioners