

HAZARDOUS AREAS

Overview

Hazardous areas in the County have not always been given necessary consideration. In the past, subdivisions have been approved where septic systems will not work, where slopes exceed 30%, in flood zones, and on unstable soils. Improperly located and designed developments may result in substantial costs to individuals, the public, and the environment. Development must be carefully controlled or prohibited in the least suitable, most hazardous areas.

Flood zones may coincide with soil types that are not suitable for structural development and where septic tanks often fail. Frequently, such areas are wetlands, which have many other beneficial uses. For these reasons, and because of the constant danger of flood damage, all development in flood zones, identified by FEMA or other recognized agencies with expertise, should be discouraged.



Rock Slide and Bank Erosion

An increasing hazard, as hillside development occurs, is landslide susceptibility. Areas that are prone to slippage should be acknowledged as having as much or more potential for damage as flood zones. The density and type of development allowed on a given slope should depend on geology, slope, and soil characteristics. Land-disturbing activity on excessive or unstable slopes should be prohibited.

Grading activity should be monitored and controlled. Terrain modification is potentially the most disruptive part of the construction process. Unrestricted grading can have long-term or irreversible effects. The County currently regulates grading per the County's Site Disturbance Ordinance and chapter 70 of the International Building Code. More effective guidelines and enforcement are warranted.

Areas deemed hazardous have site-specific soils, and engineering and geologic investigation reports are prepared before any grading, development, or construction is allowed. The report(s) address slope stability, the degree of risk associated with the type of development proposed, hazard mitigation measures, etc.

In terms of the hazards associated with contaminated soils, the USGS, EPA and DEQ have numerous published studies available online. This hazard is thoroughly addressed in the CERCLA, RODs, LMP and other documents.

Areas of the County in the Coeur d'Alene River corridor within the Institutional Controls Program (ICP) Administrative Boundary of the Bunker Hill Superfund Site Operable Unit 3 (CDA Basin) require a special attention plan, and actions on these areas must meet the requirements of Idaho Administrative Code (IDAPA 41.01.01) in addition to other County requirements. In August 2002, under Title 39, Chapter 81, Idaho Code, formation of the BEIPC (Basin Environmental Improvement Project Commission) was completed with a memorandum of agreement between the state of Idaho, the state of Washington, the U.S. government, the Coeur d'Alene Tribe, and Kootenai, Shoshone, and Benewah counties. Federal and state Superfund authorities and this memorandum of agreement commit the County to cooperate and coordinate efforts with EPA, DEQ, and the Coeur d'Alene Tribe. As a result, grading and excavation within the boundaries of the ICP Administrative Boundary require contaminant management permits from the Panhandle Health District (PHD) Kellogg, Idaho office.

Comprehensive erosion control plans should continue to be prepared for new construction sites and reviewed by qualified individuals who are also responsible for frequent inspections of erosion control devices. Where effective erosion control cannot be implemented, land-disturbing activity must be accordingly reduced. The County has enacted a Site Disturbance Ordinance, which mandates criteria for grading, erosion control and storm water management. To be effective, storm water and erosion control ordinances must be accompanied by adequate plan review and enforcement. This is an area requiring review and update as the County's ordinance implementation program is updated.

General

The County's geography includes inherent hazards to community health and safety. Ignoring hazardous areas or conditions can result in substantial cost/damage to individuals, the public, and the environment.

Mass Movement

Landslides are a serious threat to human safety and property. Stable hillsides require a critical balance of vegetation, geology, slope, soil, and precipitation.

Of particular concern in the County are areas that underlie the Columbia River Basalt Group and the Latah Formation. The Latah Formation interbeds consist of weak materials, which can become unstable when accompanied by steep slope conditions or development activities. The United States Geological Service (USGS) and the Idaho Geological Survey at the University of Idaho are currently analyzing and mapping landslide coverage for the County.

Erosion reduces soil productivity, pollutes surface water, reduces stream flow, and damages property. Thirty of the 104 soil types in the County have inherently low support strength and are susceptible to slippage. (Natural Resource Conservation Service (NROS/SOIO). Low support strength soils, together with steep slopes, create a greater hazard of slippage and/or destruction. Construction site erosion and sedimentation control are now required by

Ordinance for building sites within 500 feet of surface water or on slopes steeper than 15%.

Flood Zones

Floodwaters have traditionally been a common hazard in the County. The County has recognized this hazard and has taken steps to reduce exposure to flood hazards through a Flood Damage Prevention Ordinance.

The County also participates in the Federal Emergency Management Agency's National Flood Insurance Program. This program provides federally-backed flood insurance to encourage communities to enact and enforce floodplain regulations. The County's participation in this program qualifies homeowners who want flood insurance to a reduction in premiums.

Heavy Metal Contamination

Much of the Coeur d'Alene River and the surrounding valley, lakes and wetlands are contaminated with heavy metal laden sediments from historic mining activities in the Silver Valley. In September 2002, the US EPA issued a Record of Decision (ROD) that describes the remedies to protect human health and the environment in the Coeur d'Alene Basin ("the Basin"). The prevalence of metal contaminated soils within the floodplain of the Basin is ubiquitous, and complete removals are not the focus of the remedies. The ROD and other technical documents are available at www.basincommission.com.

Since the issuance of the Basin ROD, the EPA and DEQ have been coordinating with Kootenai, Shoshone, and Benewah Counties; the Coeur d'Alene Tribe; and the State of Washington to implement environmental remediation within the Coeur d'Alene Basin. They have done so through the Basin Environmental Improvement Commission (BEIPC). The Panhandle Health District is responsible for administering and implementing the Institutional Controls Program (ICP) to oversee the proper management of soils either in place with protective barriers or through safe handling and disposal of soils contaminated with mine waste. This program has been established

by the Idaho Administrative Code (IDAPA 41.01.01) and has the authority in areas of the County within the ICP Administrative Boundary which generally is the area of the County within the 100-year floodplain of the Coeur d'Alene River and elsewhere where soils contaminated by mine waste exist.

Faults/Earthquakes

Idaho is ranked fifth nationally in terms of seismic safety risk. A map developed by the Idaho Geological Survey, showing areas of relative seismic shaking hazard, puts Kootenai County in a moderate risk category. This designation is largely based on the potential for earthquakes centered elsewhere to cause local damage.

Wildfires

The number one hazard risk facing Kootenai County is wildfire. Outside the urbanized cities and towns, agricultural fields, and pastures lie the coniferous forests that represent the landscape found throughout the County. The vulnerability of the rural areas of the County has been receiving more attention as the County continues to expand beyond its urban core. Per the Healthy Forest Restoration Act (Public Law 108-148) Kootenai County has officially defined the WUI as a zone extending two miles outside places of human habitation, and the network of infrastructure that supports those areas. Property owners in the WUI are encouraged to be proactive and learn how to prepare and protect their homes and businesses from the threat of uncontrolled wildland fire.

GOALS AND POLICIES

The goals and policies in this chapter are intended to articulate the community vision toward the region's hazardous areas and not to be regulatory, but provide specific guidance for the adoption and implementation of development regulations which will ensure conformity with the Plan.

GOAL 1: Plan and limit development in hazardous areas in a way that considers the natural and man-made conditions of those areas and maximizes the health and safety of the

residents while minimizing the risk of damage or loss of property.

Policies and Implementation Strategies

- HA -1 A. Coordinate with agencies to update data on the extent and location of flooding, unstable slopes, and other hazards.
- HA -1 B. Propose development regulations which limit developments in areas where known physical constraints or hazards exist. Such constraints or hazards include, but are not limited to, the following:
 - a. Flood hazards;
 - b. Unstable soil and/or geologic conditions;
 - c. Steep slopes; and
 - d. Wildland-urban interface areas.
- HA -1 C. Develop regulations, which direct development to appropriately fit the topography, soils, geology, hydrology, and other conditions.
- HA -1 D. Encourage property owners to reference the Fire Mitigation Plan specific to goals and actions of the Wildfire Section of the All Hazards Mitigation Plan to reduce wildland fire risk to communities and areas at risk.
- HA -1 E. Develop regulations which require development to be designed to prevent flooding and degradation of water quality by protecting areas such as streams, natural and existing manmade water channels, aquifer recharge areas, and floodplains.
- HA -1 F. Develop regulations which require applicants to control, manage, and mitigate storm water runoff.
- HA -1 G. Develop regulations which control the placement of fill material that emanates from any dredging or earth removing/relocating activities within Institutional Control Program (ICP) areas.
- HA -1 H. Prohibit contaminated materials from being placed within the County, except as designated at a secure Hazardous Materials Repository or comparable facility specified by sampling results.
- HA -1 I. Consider the adoption of International Wildland-Urban Interface (WUI) Code as part of the County's adopted building codes.