



**Project #22-059 (Updated)
Critical Lands Overlay
Land Development Code Amendment**

REPORT SUMMARY...

<i>Project Name:</i>	Critical Lands Overlay
<i>Proponent/Owner:</i>	Community Development Department
<i>Project Address:</i>	Citywide
<i>Request:</i>	Code Amendment
<i>Type of Action:</i>	Legislative
<i>Date of Hearing:</i>	January 12, 2023
<i>Submitted By:</i>	Mike DeSimone, Director

UPDATE FROM 11/17/22 PC HEARING

The Commission held a hearing on the proposed modifications to LDC 17.24 (Critical Lands Overlay) on November 17, 2022 and identified the following items:

Included Definition of Riparian Area (17.24.010.B):

***Riparian Areas.** Lands within 150 feet as measured from the Annual High Water Line (AHWL) of a stream or river draining a basin size greater than one square mile, and the land within 25 feet of centerline of a stream draining an area less than one square mile.*

Changed the Review Process for Reasonable Use Exceptions from Track I to Track II (17.24.120):

A reasonable use exception will be reviewed by the Planning Commission according to the Track II procedures contained in Chapter 17.48.

Made minor grammatical edits that were pointed out by the Commission.

I also added the following applicability statement to the wetland section (17.24.110.A) to clarify when the wetland regulations apply and when they do not:

Applicability. These requirements only apply to formally delineated wetlands determined by the U.S. Army Corp of Engineers to be waters of the United States as regulated under Section 404 of the Clean Water Act. Delineated wetlands that are considered by the U.S. Army Corp of Engineers to not be waters of the United States are not regulated under this Section.

The updated LDC Chapter 17.24 is attached and the original staff report is below.

RECOMMENDATION

Staff recommends that the Planning Commission recommend **approval** to the Municipal Council of the proposed amendments to Chapter 17.24 of the Land Development Code.

REQUEST

This is a proposal to modify the standards and regulations for development activity within or adjacent to Floodplains, Riparian Areas, Geologically Unstable Areas, Wildland Urban Interface

Areas, Lands above 4,850', and Wetlands. The proposed code changes also eliminate Prime Agricultural Lands and Critical Wildlife Habitat from the list of Critical Lands regulated by Logan while adding a Reasonable Use Exception section.

SUMMARY OF CHANGES

Application & Review Process – the proposal is to require more detailed information regarding the presence, type and location of a Critical Land present on a property at the time of application. For example, if a site contains an area that appears to be a wetland as shown on the City's latest wetland inventory maps, the applicant will be required to submit a formal wetland delineation with their application. The purpose of these changes are to require a more comprehensive project design that incorporates the critical lands into the overall design, provides a greater level of site information and detail to decision makers, and explicitly defines those areas that will be evaluated and permitted for loss, fill, removal, etc.

Floodplains – Lands with a potential flood hazard as defined in Logan Municipal Code 15.27 Flood Damage Prevention Ordinance) using FEMA floodplain mapping. It is important to note that Special Flood Hazard area (floodplains) are regulated under Logan Municipal Code 15.27 which has a separate approval process; however, the proposed changes are included in this discussion for your input to the Council. The proposed changes to LMC 15.27 include requiring that a Base Flood Elevation (BFE) delineation be submitted with an application involving a project within a Special Flood Hazard area, increase the lowest floor elevation of new construction currently at one (1) foot above BFE to a minimum of two (2) feet above BFE, require BFE data for all subdivisions regardless of lot numbers or parcel size, and prohibit the construction of critical facilities in Special Flood Hazard areas. Any changes to LMC 15.27 will be included with the amendments to LDC 17.24 as they move through the Municipal Council process.

Riparian Areas - Lands within 150 feet as measured from the Annual High Water Line (AHWL) of a stream or river draining a basin size greater than one square mile, and the land within 25 feet of centerline of a stream draining an area less than one square mile. The proposal divided riparian areas into three (3) distinct zones, each zone less restrictive as one moves away from the water body. These regulations establish a building setback line at 100' from the Annual High Water Line, establishes limitations on the amount of disturbance and vegetation clearing within each zone, provides for routine maintenance and repair, and limits certain types of activities in a riparian zone.

Geologically Unstable Areas - Lands that are geologically unstable due to potential erosion hazards, unstable slopes, steep slopes (slopes in excess of 30 percent), in proximity to Quaternary Faults, susceptible to debris flows, containing soils unsuitable for development, and susceptible to a high water table. Minor updates to this section.

Wildland Urban Interface - The line, area, or zone where structures and other human development meet or intermingle with undeveloped wildland or vegetation fuels (Lands with potential of wildfire as determined by the Logan City Fire Chief). Minor changes to this section.

Lands above 4,850' - Residential building lots located on the eastern bench of Logan City at an elevation at or above 4,850' mean sea level. Minor changes to this section.

Wetlands - Areas that are inundated or saturated by surface 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 as delineated during a formal

wetland delineation and approved by the U.S. Army Corps of Engineers. The proposed changes to this section include requiring a complete wetland delineation be submitted with the development application on a site that appears to have wetlands, establishes a minimum 50' setback from the Ordinary High Water Mark of a delineated wetland and a 20' setback from the Ordinary High Water Mark of an irrigation ditch or canal regulated by the Corp, and have defined uses and activities that are permitted within or adjacent to a wetland area.

The wetlands section does not create a separate permitting process for wetland impacts nor does it prohibit wetland impacts as those are still subject to U.S. Army Corps of Engineers permitting. A landowner or project proponent is still able to obtain wetland permits from the Corp for wetland impacts and any mitigation requirements.

We also removed the two sections dealing with Prime Agricultural Lands and Critical Wildlife Habitat from the City's list of Critical Lands because we lacked any clear guidelines for these areas in the current regulations and there are other governmental entities responsible for regulating and/or protecting these areas.

We also included a Reasonable Use Exception section establishing a process whereby a landowner, believing that these regulations are denying them of all their reasonable economic uses of their property, can request the Director consider a reasonable use exception and allow for limited impacts to a critical lands. It is important to note that expectations of future development plans are not considered a reasonable economic use.

STAFF RECOMMENDATION AND SUMMARY

The goals of the proposed changes to 17.24 are to better protect critical lands, require a more comprehensive project design that incorporates critical lands into overall project design while providing a greater level of site information and detail for decision makers.

GENERAL PLAN

The Land Development Code was prepared and adopted to implement the vision expressed in the General Plan. The proposed amendments continue to implement the vision of the General Plan by further clarifying development standards for projects within or adjacent to critical lands. These proposed amendments are consistent with the General Plan.

PUBLIC COMMENTS

As of the writing of this report, there has not been any public comment. Public comments received prior to the preparation of this report will be included as an attachment. Any other comments will be forwarded to the Planning Commission.

PUBLIC NOTIFICATION

Legal notices were published in the Herald Journal on 10/15/22, posted on the City's website and the Utah Public Meeting website on 10/17/22, and noticed in a quarter page ad on 10/13/22.

AGENCY AND CITY DEPARTMENT COMMENTS

As of the time the staff report was prepared, no comments have been received.

RECOMMENDED FINDINGS FOR APPROVAL

The Planning Commission bases its decisions on the following findings:

1. Utah State Law authorizes local Planning Commission to recommend ordinance changes to the legislative body (Municipal Council).

2. The Code Amendments are done in conformance with the requirements of Title 17.51 of the Logan Municipal Code.
3. The proposed Code Amendments are consistent with the Logan City General Plan.
4. The proposed Code Amendments to the Critical Lands Overlay Zone will further protect important resource areas without impeding the development plans of private landowners.
5. The proposed Code Amendments will further the public health, safety and welfare by providing for the safe, orderly and beneficial development of areas characterized by development hazards and valuable natural conditions.
6. No public comment has been received regarding the proposed amendments.

This staff report is an analysis of the application based on adopted city documents, standard city development practices, and available information. The report is to be used to review and consider the merits of the application prior to and during the course of the Planning Commission meeting. Additional information may be revealed by participants at the Planning Commission meeting which may modify the staff report and become the Certificate of Decision. The Director of Community Development reserves the right to supplement the material in the report with additional information at the Planning Commission meeting.



APPLICATION FOR PROJECT REVIEW

For Staff Only <input checked="" type="checkbox"/> Planning Commission		<input type="checkbox"/> Land Use Appeal Board		<input type="checkbox"/> Administrative Review
Date Received 9/19/22	Received By	Scheduled Meeting Date OCT. 27	Zone	Application Number PC 22-059
Type of Application (Check all that apply):				
<input type="checkbox"/> Design Review	<input type="checkbox"/> Conditional Use	<input type="checkbox"/> Subdivision	<input type="checkbox"/> Administrative Design Review	
<input checked="" type="checkbox"/> Code Amendment	<input type="checkbox"/> Appeal	<input type="checkbox"/> Zone Change	<input type="checkbox"/> Other	
PROJECT NAME				
LAND DEVELOPMENT CODE AMENDMENT 17.24 – Critical Lands Overlay Zone				
PROJECT ADDRESS			COUNTY PLAT TAX ID #	
AUTHORIZED PROJECT REPRESENTATIVE FOR OWNER			PHONE #	
MIKE DESIMONE			435.716.9022	
MAILING ADDRESS		CITY	STATE	ZIP
LOGAN CITY HALL 290 NORTH 100 WEST LOGAN UTAH 84321				
EMAIL ADDRESS				
MIKE.DESIMONE@LOGANUTAH.ORG				
PROPERTY OWNER OF RECORD			PHONE #	
MAILING ADDRESS		CITY	STATE	ZIP
EMAIL ADDRESS				
DESCRIBE THE PROPOSED PROJECT AS IT SHOULD BE NOTICED AND PRESENTED (Include as much detail as possible - attach a separate sheet if needed)			Total Lot Size (acres)	
Amend the Logan City Land Development Code to Chapter 17.24 Critical Lands Overlay Zone. The proposed changes modify standards and regulations for development activity within or adjacent to Floodplains, Riparian Areas, Geologically Unstable Areas, Wildland Urban Interface Areas, Land above 4,850', and Wetlands.			Size of Proposed New Building (square feet)	
			Number of Proposed New Units/Lots	
I certify that the information contained in this application and all supporting plans are correct and accurate. I also certify that I am authorized to sign all further legal documents and permit on behalf of the property owner.			Signature of Property Owner's Authorized Project Representative	
I certify that I am the property owner on record of the subject property and that I consent to the submittal of this project. I understand that all further legal documents and permits will be sent to my authorized agent listed above.			Signature of Property Owner	

CITY COUNCIL: WORKSHOP 11/15/22
HEARING 12/9/22

Chapter 17.24: Critical Lands (CL) Overlay Zone

§17.24.010 Purpose

The purpose of this Chapter is to provide for the safe, orderly and beneficial development of areas characterized by development hazards and valuable natural conditions while limiting the substantial alteration and degradation of such areas and include the following Critical Lands: ~~Critical Lands will be identified on the Official Critical Lands Maps and shall include:~~

- A. ~~Floodplains.~~ Lands with a potential flood hazard as identified by the City Engineer and as defined in Logan Municipal Code 15.27 (Flood Damage Prevention Ordinance).
- B. Riparian Areas. Lands within 150 feet as measured from the Annual High Water Line (AHWL) of a stream or river draining a basin size greater than one square mile, and the land within 25 feet of centerline of a stream draining an area less than one square mile.
- C. Geologically Unstable Areas. ~~(Erosive Areas, Steep Slopes, Severely Constrained Areas).~~ Lands that are geologically unstable due to potential erosion hazards, unstable slopes, steep slopes (slopes in excess of 30 percent), in proximity to Quaternary Faults, susceptible to debris flows, containing soils unsuitable for development, and susceptible to a high water table.
- D. Wildland Urban Interface. ~~Wildfire Threats.~~ The line, area, or zone where structures and other human development meet or intermingle with undeveloped wildland or vegetation fuels. (Lands with potential of wildfire as determined by the Logan City Fire Chief.)
- E. ~~Prime Agricultural lands.~~ Lands defined by the Natural Resource Conservation Service as having the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops and is also available for these uses. It has the soil quality, growing season, and moisture supply needed to produce economically sustained high yields of crops when treated and managed according to acceptable farming methods, including water management. In general, prime farmlands have an adequate and dependable water supply from precipitation or irrigation, a favorable temperature and growing season, acceptable acidity or alkalinity, acceptable salt and sodium content, and few or no rocks. They are permeable to water and air. Prime farmlands are not excessively erodible or saturated with water for a long period of time, and they either do not flood frequently or are protected from flooding.
- F.E. Lands above 4,850'. Residential building lots located on the eastern bench of Logan City at an elevation at or above 4,850' mean sea level.
- G.F. Wetlands. Areas that are inundated or saturated by surface 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 as delineated during a formal wetland delineation and approved by the U.S. Army Corps of Engineers.
- H. ~~Critical Wildlife Habitat.~~

§17.24.020 Review Process: ~~Approval and Permit Required~~

- A. For project sites containing one or more Critical Lands, ~~s within an identified Critical Area,~~ compliance with the development requirements of this Chapter shall be applied during the underlying regulatory and review processes outlined in Chapter 17.39.
- B. Application Process. Any application for project approval which contains Critical Lands as defined in this Chapter shall submit a Critical Lands Analysis performed by qualified professionals licensed in the State of Utah that identifies and addresses the

~~following: Approval Criteria. A permit shall be issued when the Applicant demonstrates:~~

- ~~1. Floodplains. A delineation of the 1% Special Flood Hazard Area (also referred to as the 100 year floodplain) and the 0.2% Special Flood Hazard Area (also referred to as the 500 year floodplain) boundaries as depicted on the latest FIRM maps including Base Flood Elevations (BFE), and a delineation of any previous flood events, including highest known flood elevations, on the site. That the development will not cause damage or hazard to persons or property upon, or adjacent to, the area of development.~~
- ~~2. Riparian Areas. A delineation of the riparian corridor including the annual High Water Mark, top of bank, a description and condition of the existing vegetative cover in the corridor, and any natural or manmade drainages that traverse the riparian corridor. That the development is in compliance with the requirements of this Chapter and all other applicable requirements of the Municipal Code.~~
- ~~3. Geologically Unstable Areas. A geologic engineering report prepared by a Professional Engineer licensed in the State of Utah that complies with the requirements of Section 17.24.070. Additional Geotechnical analysis may be required with the building permit application.~~
- ~~4. Wildland Urban Interface. A Fire Prevention and Control Plan shall be submitted if a project site is in a Wildfire Threat Area as designated by the Logan City Fire Department.~~
- ~~5. Lands Above 4,850. An engineering report prepared by a Professional Engineer analyzing the site's slope characteristics and any anticipated cuts & fills both pre and post construction; and a report and/or plans prepared by a Licensed Architect that complies with the site and building design requirements of this Chapter.~~
- ~~6. Wetlands. A wetland delineation conducted using the 1987 Federal Manual for Identifying and Delineating Jurisdictional Wetlands, as amended.~~
- ~~7. Prime Agricultural Lands. A determination from the NRCS that the site is not considered Prime Agricultural Land.~~
- ~~7. Critical Wildlife Habitat.~~

Riparian Areas.

- ~~C. The Decision Making Body may require project modifications to include any of the following conditions if necessary to mitigate any potential negative impact caused by the development:~~
- ~~1. Require the retention of trees, rocks, ponds, watercourses, highly productive agricultural lands, and other natural features.~~
 - ~~2. Require plan revision or modification to mitigate negative or irreversible effects upon the natural features that the proposed development may cause.~~
 - ~~3. Avoid creating or exacerbating hazardous conditions adverse to the public health, welfare and safety.~~
- ~~D. The Decision Making Body may deny a permit if the proposed development will have a detrimental effect on the lands regulated by this Chapter and appropriate mitigation is unavailable.~~

~~§17.24.030 — Land Classifications~~

~~The following factors shall be used to determine the classifications of various lands and their constraints to building and development:~~

- ~~A. Floodplains. Lands with a potential flood hazard as identified by the City Engineer.~~

- ~~B. Riparian Areas. Lands within 75 feet of the stream centerline for streams draining a basin size greater than 1 square mile, and the land within 25 feet of the stream centerline for streams that drain areas of one square mile or less. It also includes any wetlands or riparian area identified during the Federal 404 Permit Process.~~
- ~~C. Geologically Unstable Areas. Lands that are geologically unstable due to potential erosion hazards, unstable slopes, steep slopes (slopes in excess of 30 percent), and areas susceptible to debris flows. Areas above and below canals on slopes greater than 10% that contain a high slope failure potential are also considered potential erosion hazard areas.~~
- ~~D. Wildfire Lands. Lands with potential of wildfire as determined by the Logan City Fire Chief.~~
- ~~E. Wetlands. Lands defined as wetlands by the U.S. Army Corp of Engineers.~~
- ~~F. Prime Agricultural Land. Lands mapped by the State of Utah as Agricultural land of National or State Importance.~~
- ~~G. Essential Views. Locally significant and important view corridors, view foregrounds, and view backdrops identified on the Essential Views Map.~~
- ~~H. Critical Wildlife Habitat. Lands identified by the State of Utah as critical wildlife habitat.~~

~~§17.24.040 Official Maps~~

~~The City shall adopt official critical lands maps denoting the above identified areas using the most accurate and best data available. Site specific critical lands information, such a formal wetland delineation or floodplain map amendment prepared by individuals with expertise in the critical lands in question may be considered by the City for inclusion in the official critical lands maps.~~

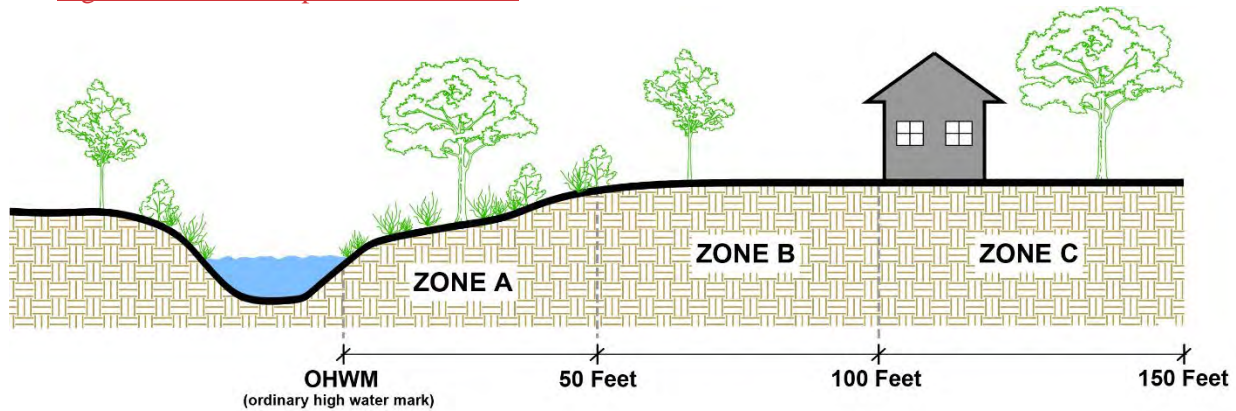
~~§17.24.050 Development Standards for Floodplains~~

~~The City's Policy regarding new development within a designated floodplain is that all new development including, but not limited to, road construction, site preparation, building construction, etc., shall avoid building, constructing, grading, and filling in a delineated special flood hazard zone. All development shall comply with the applicable regulations and standards of the National Flood Insurance Program (NFIP), the most current effective Flood Insurance Study (FIS), and the most current Flood Insurance Rate Maps (FIRM) as administered by the City Engineer, and the City's Flood Damage Prevention Ordinance contained in Logan Municipal Code Chapter 15.27. Development within a designated Floodway is prohibited. All construction, and substantial improvement of any structure, shall have the lowest habitable floor, including basement, elevated to a minimum of 1' above the base flood elevation.~~

~~§17.24.060 Development Standards for Riparian Areas~~

~~All Riparian Areas are divided into three (3) distinct zones, each with their own specific standards and requirements for use and development. All riparian areas shall be clearly delineated on the ground and shown on the preliminary development plans. A proposed Riparian Area Disturbance and Remediation Plan shall be submitted with the preliminary development plans. development within a Riparian Area shall comply with the following standards:~~

Figure 17.24.060: Riparian Area Zones



Riparian Areas

- A. Zone A is the first 50' as measured landward from the Ordinary High Water Mark (OHWM) and is considered a “no disturbance” area subject to the following:
1. No new permanent structures are permitted in this zone.
 2. No more than 10% of the land area within this zone may be disturbed, including grading, clearing, grubbing, tree removal, etc. All disturbed areas shall be revegetated within 60 days of initial disturbance. Erosion control measures shall be implemented.
 3. Trees larger than 12” dbh (diameter of tree at breast height) shall not be removed from this riparian zone unless they are considered a hazard tree, diseased or dead, or are identified in a river or stream restoration program. All trees that are removed shall be replaced with native species trees.
- B. Zone B is the next 50' as measured landward from the Ordinary High Water Mark (OHWM) (50' – 100'). The 100' line, as measured horizontally from the OHWM, is the building setback line for new construction. This 100' line is also the boundary between Zone B and Zone C. Activities in this zone are subject to the following:
1. Structures and site development accessory to a residential dwelling including, but not limited to, decks, patios, landscaping, retaining walls, fences, etc., are permitted in this zone, and shall not encroach into Zone A.
 2. No more than 50% of the land area within this zone may be disturbed, including grading, clearing, grubbing, tree removal, etc. All disturbed areas shall be revegetated within 60 days of initial disturbance. Erosion control measures shall be implemented.
 3. Trees larger than 12” dbh (diameter of tree at breast height) shall not be removed from this riparian zone unless they are considered a hazard tree, diseased or dead, or are identified in a river or stream restoration program. All trees that are removed shall be replaced with native species trees.
- C. Zone C is the area 100' – 150' as measured landward from the Ordinary High Water Mark (OHWM). The 100' line, which is the boundary between Zone B and Zone C, is the building setback line for new construction. Activities in Zone C are subject to the following:
1. Development and uses permitted in the underlying zoning district are allowed in this zone subject to the exceptions listed below.

2. No more than 70% of the land area within this zone may be disturbed, including grading, clearing, grubbing, tree removal, etc. At least 30% of the land area in this zone shall remain undisturbed and in permanent open space. All disturbed areas shall be revegetated within 60 days of initial disturbance. Erosion control measures shall be implemented.

D. General standards and requirements for all Riparian Zones.

1. Routine repair and maintenance of existing structures, roadways, driveways, utility facilities, accessory uses, and other development are authorized subject to the limitations in Chapter 17.52.
2. Stream, wetland, flood control, riparian and upland enhancement or restoration projects approved by Logan City are authorized under this Chapter.
3. Continuous and on-going farming practices, farm uses, and the pasturing of livestock are permitted within a riparian area. All new farming practices, farm uses, cultivation, livestock grazing and building construction shall be setback at least 50' from the Annual High Water Line (AHWL).
4. Existing utilities may be maintained and/or replaced within a riparian area provided any disturbed areas are restored.
5. Additions, alterations, rehabilitation, or replacement of existing structures that do not increase the existing structural footprint in the Riparian Area are permitted provided the disturbed areas are restored using native vegetation.
6. Measures to remove or abate nuisances, or any other violation of State Statute, administrative agency rule, or City ordinance are authorized under this Chapter.
7. Stormwater retention or detention facilities, and on-site sewage disposal systems are prohibited in all riparian zones.
8. Commercial and multi-family parking lots are prohibited in all riparian zones.

~~All structures shall maintain a 25' setback from the top of stream bank within a riparian area with the exception of bridges, docks, viewing platforms, public recreational amenities, or other similar features.~~

~~B. No more than 50% of the land area within the riparian area may be disturbed, including grading, clearing, grubbing, tree removal, etc. All disturbed areas shall be revegetated within 60 days of initial disturbance. Erosion control measures shall be implemented during all construction.~~

~~C. Trees larger than 12" dbh shall not be removed from a riparian area unless they are considered a hazard tree, diseased or dead.~~

~~D. Existing utilities may be maintained and/or replaced within a riparian area provided any disturbed areas are restored.~~

~~E. Additions, alterations, rehabilitation, or replacement of existing structures that do not increase the existing structural footprint in the Riparian Area are permitted provided the disturbed areas are restored using native vegetation.~~

~~F. Stream, wetland, riparian and upland enhancement or restoration projects are authorized under this Chapter.~~

~~G. Continuous and on-going farming practices, farm uses, and the pasturing of livestock are permitted within a riparian area. All new farming practices, farm uses, cultivation, livestock grazing and building construction shall be setback at least 25' from the top the stream bank.~~

~~H. Routine repair and maintenance of existing structures, roadways, driveways, utility facilities, accessory uses and other development are authorized under this Chapter.~~

~~I. Measures to remove or abate nuisances, or any other violation of State statute, administrative agency rule or City ordinance are authorized under this Chapter.~~

§17.24.070 Development Standards for Geologically Unstable Lands

- A. Geologically Unstable areas are extremely sensitive to development, and because surface disturbance such as grading, filling, or vegetation removal has a high potential to threaten life or property, ~~development in these areas should be avoided. alternative development should be considered.~~
- B. Project approval within a geologically unstable area shall only be allowed after an engineering geologic study, completed by a Professional Engineer and approved by the City Engineer and Director, establishes that the site is stable for the proposed use and development. At a minimum, the study shall include:
1. Index map.
 2. Project description to include location, topography, drainage, vegetation, and discussion of previous work and discussion of field exploration methods.
 3. Site geology, based on a surficial survey, to include site geologic maps, description of bedrock and surficial materials, including artificial fill, locations of any faults, folds, etc., and structural data including bedding, jointing and shear zones, soil depth and soil structure.
 4. Discussion of any off-site geologic conditions that may pose a potential hazard to the site, or that may be affected by on-site development.
 5. Suitability of site for proposed development from a geologic standpoint.
 6. Specific recommendations for cut slope stability, seepage and drainage control or other design criteria to mitigate geologic hazards.
 7. If deemed necessary by the engineer or geologist in order to establish whether an area to be affected by the proposed development is stable, additional studies and supportive data shall include cross-sections showing sub-surface structure, graphic logs with subsurface exploration, and results of laboratory test and references.
 8. Signature and registration number of the engineer and/or geologist licensed as professional engineer in the State of Utah.
 9. Additional information or analyses as necessary to evaluate the site.
- C. Prohibited Actions. Notwithstanding any other provision of Logan City Ordinances, it shall be unlawful to clear, "grub," grade, fill, or excavate any land in any manner which presents an unreasonable risk of erosion, flooding, landslide, or any other unsafe condition, and it shall be unlawful to erect any structure which will not be reasonably safe for use as a human habitation due to the following:
1. ~~Proximity to a h~~Historic high groundwater table (water close to the ground surface);
 2. Surface water;
 3. Expansive soils;
 4. Collapsible soils;
 5. Proximity to a potential landslide area;
 6. Proximity to a Quaternary Fault~~secondary fault;~~
 7. Proximity to an alluvial fan;
 8. Proximity to an active landslide; or
 9. ~~Proximity to a primary Wasatch Fault zone; or~~
 - 10.9. Any other unsafe condition, as determined by the City.
- D. All permitted development that removes vegetation or disturbs topsoil and leaves the disturbed soil at a slope of thirty (30) percent or more shall comply with the following standards:

1. Any exposed soil shall be revegetated in a manner to reestablish a vegetative cover within a one year period from issuance of a Certificate of Occupancy. If irrigation is not provided, then the exposed soil must be planted with species that can survive without irrigation.
 2. Vegetative cover, rock, dry or conventional masonry, or other permanent cover must be maintained on areas that have been disturbed.
 3. These restrictions shall not apply to areas of exposed bedrock which exhibit no erosion potential.
- E. Cuts and Fills.
1. All cuts and/or fills involving more than two hundred fifty cubic yards of material must be designed by an engineer to comply with applicable building codes and requirements of this ~~chapter~~ **Chapter**.
 2. If the excavation is not a dedicated street or a public right-of-way, the engineer shall certify that the permitted work was constructed to plans and meets all standards set forth in the approved plans.
 3. Nothing in this section shall abridge the City's right to inspect work in progress or in its completed state, to make appropriate measurements and tests to determine if the cut and fill was made according to plan, and to require alterations prior to final approval.
- F. Any development that is proposed in a Geologically Unstable area shall be identified on a preliminary site plan at the time of application for review and shall be clearly identified on the ~~or final~~ development plan or final plat map prior to final review and approval. ~~plat map at the time the final plan or plat is filed.~~
- G. All structures in a Geologically Unstable area shall have foundations designed by an engineer ~~or architect~~.
- H. All newly created lots, or lots modified by a property boundary line adjustment or plat amendment, shall identify specific building envelope on each lot that contains sufficient buildable area outside any erosive or unstable areas able to accommodate the anticipated uses. The creation of a lot for open space or conversation purposes is exempt from this requirement.

§17.24.080 Development Standards for Lands with Wildfire Threats

- A. Requirements for Subdivisions.
1. A Fire Prevention and Control Plan shall be submitted with any application for approval of a development or preliminary plat which contains Wildfire Threat Areas as designated by the Logan City Fire Department.
 2. The Director shall forward the Fire Prevention and Control Plan to the Fire Chief for review and comment.
 3. The Fire Prevention and Control Plan shall include the following items:
 - a. An analysis of the wildfire hazards on the site, as influenced by existing vegetation and topography;
 - b. A map showing the areas that are to be cleared of dead, dying, or severely diseased vegetation;
 - c. A map of the areas that are to be thinned to reduce the interlocking canopy of trees;
 - d. A tree management plan showing the location of all trees that are to be preserved and removed on each lot. In the case of heavily forested parcels, only trees scheduled for removal shall be shown;
 - e. The areas of primary and secondary fuel breaks that are required to be installed around each structure, as required by this section; and

- f. The location and slope of all roads and driveways serving the project site sufficient for emergency vehicle access and fire suppression activities.
 4. Approval Criteria. In consultation with the Logan City Fire Chief, the decision making body shall approve the Fire Prevention and Control Plan when, in addition to the findings required by this chapter, the additional finding is made that the wildfire hazards present on the property have been reduced to a reasonable degree, balanced with the need to preserve and/or plant a sufficient number of trees and plants for erosion prevention, wildlife habitat, and aesthetics.
 5. The decision making body may require, through the imposition of conditions attached to the approval, the following requirements as deemed appropriate for the development of the property:
 - a. Delineation of areas of heavy vegetation to be thinned and a formal plan for such thinning;
 - b. Clearing of sufficient vegetation to reduce fuel load;
 - c. Removal of all dead and dying trees; or
 - d. Relocation of structures and roads to reduce the risks of wildfire and improve the chances of successful fire suppression.
 6. The Fire Prevention and Control Plan shall be implemented during the installation of the public improvements required of a subdivision and shall be considered part of the subdivider's obligations for land development. If a subdivision is not involved, the Plan shall be implemented prior to the issuance of any building permits. The Fire Chief, or designee, shall inspect and approve the implementation of the Fire Prevention and Control Plan.
 7. In all new residential developments, provisions for the perpetual maintenance of the Fire Prevention and Control Plan shall be included in the covenants, conditions and restrictions for the development.
- B. Requirements for construction of all structures.
1. All new construction and any construction expanding the size of an existing structure shall have a "fuel break" as defined below.
 - a. A "fuel break" is defined as an area which is free of dead or dying vegetation, and has native, fast-burning species sufficiently thinned so that there is no interlocking canopy of this type of vegetation. Where necessary for erosion control or aesthetic purposes, the fuel break may be planted in slow burning species. Fuel breaks do not involve stripping the ground of all native vegetation.
 - b. Primary Fuel Break. A primary fuel break will be installed, maintained and shall extend a minimum of 30 feet in all directions around structures, excluding fences, on the property. The goal within this area is to remove ground cover that will produce flame lengths in excess of one foot. Such a fuel break shall be increased by five feet for each ten percent increase in slope over ten percent.
 - c. Secondary Fuel Break. A secondary fuel break will be installed, maintained and shall extend a minimum of 100 feet beyond the primary fuel break where surrounding landscape is owned and under the control of the property owner. The goal of the secondary fuel break is to reduce fuels so that the overall intensity of any wildfire is reduced through fuels control.
 2. All structures shall be constructed or re-roofed with Class B or better non-wood roofing materials, as determined by the International Building Code. No structure shall be constructed or re-roofed with wooden shingles, shakes, wood-product material or other combustible roofing material, as defined in the building ordinance.

- C. Fuel breaks in areas which are also highly erosive or steep slopes shall be included in the erosion control measures outlined in this Chapter~~17.24.080~~.

~~§17.24.90 — Prime Agricultural Lands~~

- ~~A. Logan's climate, topography and accessibility make it uniquely suited to the production, processing and distribution of agricultural products on a regional and national scale. Prime agricultural lands shall be governed by the following:~~
- ~~1. All lands identified as prime agricultural lands by the Utah Department of Agriculture shall be mapped by the City~~
 - ~~2. Any proposed development within identified prime agricultural lands shall be governed by the uses allowed in the Rural Conservation (RC) zone.~~
 - ~~3. Prime agricultural lands should be preserved through a variety of tools, including, but not limited to:~~
 - ~~a. Limiting development on highly productive agricultural lands;~~
 - ~~b. Utilize land set asides in conjunction with other developments;~~
 - ~~c. Permanent Open Space;~~
 - ~~d. Use of conservation easements;~~
 - ~~e. Purchase and transfer of Development Rights ;~~
 - ~~f. Utilizing development incentives and creative site design to maximize development potential in suitable areas while preserving prime agricultural lands; and~~
 - ~~g. Private land trusts.~~

§17.24.100 Development Standards for Lands above 4,850'.

- A. The purpose of this section is to protect the scenic quality of Logan City by ensuring that future development located above an elevation of 4,850' (elevation datum established by City Engineer) is compatible with existing, developed areas as well as existing ~~land forms~~landforms, including significant ridgelines, hillside areas and viewsheds found on the eastern benches of Logan. The intent of this Chapter is to:
1. Implement hillside development standards to minimize the impact of man-made structures and grading on views of existing landforms, unique geologic features, existing landscape features and open space as seen from public roads, parks, and adjoining residential development;
 2. Protect and preserve views of significant ridgelines;
 3. Minimize cut and fill, earthmoving, grading operations and other man-made effects on the natural terrain to ensure that finished slopes are compatible with existing land character; and
 4. Promote site sensitive design and architecture compatible with hillside terrain and which minimizes any negative visual impacts from public roadways, parks, and adjoining residential areas.
- B. General Requirements for Development above 4,850'.
1. All final grades shall be:
 - a. Consistent with the existing landscape to the greatest extent possible by avoiding uninterrupted slope surfaces that stand out against existing topographic contours;
 - b. Contoured to resemble existing terrain by varying slope increments and by breaking the visual surface of banks and inclines both vertically and horizontally; and
 - c. Constructed to allow for the creation of berms or mounding at the top of slopes, and in other locations, for the screening of structures and to facilitate proper site drainage.

2. Design, height and massing of new development above 4,850' shall:
 - a. Maintain a balance of scale and proportion using design components that are harmonious with natural landforms and landscaping;
 - b. Be low in height, conform with hillside topography by stepping or staggering the mass of the proposed building up or down slope, and avoid flat pad construction and vertical massing;
 - c. Utilize structural elements, building materials and color tones which blend artificial surfaces with surrounding native elements;
 - d. Utilize construction materials, glass, roofing, fencing and other surfaces that are of a non-reflective nature; and
 - e. Utilize a variety of building and structural elements such as articulated walls, cornice detailing, reveals, alcoves, building projections, trellises, landscaping or other features which are appropriate to the scale of the building, and which serve to break up continuous building walls;
3. Roadways, driveways and utility alignments shall be:
 - a. Located to minimize grading by following existing contours;
 - b. Constructed to blend with the existing landscape, through alignment with the natural curving contour of the land, rather than using straight lines and excessive cuts and fills; and
 - c. Concealed from view through preservation and maintenance of existing vegetation or through planned landscaping that is constant with the natural character of the area.
4. Landscape planting and vegetation preservation shall:
 - a. Incorporate trees planted in random groupings or clusters that mimic or maintain natural assemblages rather than in systematic rows;
 - b. Maintain vegetation lines which convey the existing slope of the hillside;
 - c. Preserve native vegetation, including grasses and open space, whenever possible;
 - d. Use native materials to the greatest extent possible and/or non-natives that are compatible with indigenous vegetation and confined to the adjacent vicinity of the proposed structure;
 - e. Include a sufficient irrigation, maintenance and monitoring program designed to provide species requirements as well as protect against sedimentation, soil loss and land sliding; and
 - f. Be landscaped in such a manner that reduces the potential fire hazard while creating a minimum defensible space.
5. Exterior and landscape lighting applications shall be:
 - a. Designed to minimize nighttime disruption and visual glare by shielding lamp sources downward and away from view of designated public roads;
 - b. Controlled by timers and/or motion sensors, to limit the duration of use and reduce prolonged glare; and
 - c. Sized with the minimum wattage necessary to meet desired application.

§17.24.110 Development Standards for Wetlands

The purpose of these standards and requirements are to preserve and enhance wetlands by protecting them from adverse effects and potentially irreversible impacts caused by development activities.

A. Applicability. These requirements only apply to formally delineated wetlands determined by the U.S. Army Corp of Engineers to be waters of the United States as regulated under Section 404 of the Clean Water Act. Delineated wetlands that are

- considered by the U.S. Army Corp of Engineers to not be waters of the United States are not regulated under this Section.
- B. All wetlands shall be clearly delineated and shown on the preliminary development plans. The wetland delineated shall be conducted using the current version of the Federal Manual for Identifying and Delineating Jurisdictional Wetlands and shall be completed by an individual certified by the U.S. Army Corp of Engineers as a wetland specialist and reviewed by the City Engineer and Director.
- C. Prohibited Activities. No person shall disturb, remove, fill, dredge, clear, destroy or alter any areas, including vegetation, within wetlands and their respective Setbacks, except as may be expressly allowed herein.
- D. Setbacks.
1. The setbacks for all development adjacent to a delineated wetland shall extend 50' as measured landward from the delineated wetland Ordinary High Water Mark (OHWM) and shall be shown on the preliminary development plans.
 2. The setback for all development adjacent to an irrigation ditch or canal that meets the U.S. Army Corp of Engineers definition for water of the United States shall extend a minimum of 20' from the Ordinary High Water Mark.
- E. Land Disturbance in the Setback Area. No more than 20% of the land area within this setback area may be disturbed, including grading, clearing, grubbing, tree removal, revegetation, landscaping, etc. All disturbed areas shall be revegetated within 60 days of initial disturbance. Erosion control measures shall be implemented. Mitigation plans involving wetland creation, restoration or enhancement authorized in conjunction with a U.S. Army Corp of Engineers permit approval are exempt from this restriction.
- F. Wetland Disturbance. No activity will be permitted which disturbs, fills, dredges, clears, destroys, or alters any water, soils and vegetation within delineated wetlands as set forth in this Section, unless approved in writing by the U.S. Army Corp of Engineers (Corp Permit). A copy of the USACE permit approval shall be provided to Logan City.
- G. Transfer of Density and Development Rights. The density permitted by the underlying zone within the area of the wetlands and/or wetland setback areas may be relocated elsewhere on the same property provided the overall gross density of the entire site is not exceeded.
- H. General standards and requirements for all Wetlands and Wetland Setback Areas as listed below are also subject to approval by the U.S. Army Corp of Engineers.
1. Routine repair and maintenance of existing structures, roadways, driveways, utility facilities, accessory uses, and other development are authorized subject to the limitations in Chapter 17.52.
 2. Stream, wetland, riparian and upland enhancement or restoration projects approved by Logan City are authorized under this Chapter.
 3. Continuous and on-going farming practices, farm uses, and the pasturing of livestock are permitted within a wetland or wetland setback area. All new farming practices, farm uses, cultivation, livestock grazing and building construction shall be setback at least 50' from the Ordinary High Water Mark of the delineated wetland.
 4. Existing utilities may be maintained and/or replaced within a wetland or wetland setback area provided any disturbed areas are restored.
 5. Additions, alterations, rehabilitation, or replacement of existing structures that do not increase the existing structural footprint in the wetland or wetland setback area are permitted provided the disturbed areas are restored using native vegetation.
 6. Measures to remove or abate nuisances, or any other violation of State Statute, administrative agency rule, or City ordinance are authorized under this Chapter.

7. Stormwater retention or detention facilities are prohibited in all wetlands or wetland setback areas.

§17.24.120 Reasonable Use Exception

If a landowner believes application of the provisions of this Chapter would deny all reasonable economic use of the owner's property, the owner may request a reasonable use exception pursuant to this subsection. A request for a reasonable use exception shall be made to the Director and shall include the basis for the owner's reasonable use exception request and any information which the Director deems relevant to the request. Expectations of future development plans are not considered a reasonable economic use. A reasonable use exception will be reviewed by the Planning Commission according to the Track II procedures contained in Chapter 17.48. A reasonable use exception may be approved if all of the following are met:

- A. The application of the provisions of this Chapter would deny all reasonable economic use of the land.
- B. No other reasonable economic use of the land would have less impact on the specific Critical Land.
- C. The impact to the Critical Land resulting from granting the reasonable economic use request is the minimum necessary to allow for reasonable economic use of the land.
- D. The inability of the applicant to derive reasonable economic use of the land is not the result of actions by the applicant or the applicant's predecessor.
- E. The reasonable economic use exception mitigates the loss of, or damage to, the Critical Land functions to the extent reasonable feasible under the facts of the application.
- F. The reasonable economic use exception only authorizes a permitted or conditional use authorized by the underlying zoning district and conforms to other applicable requirements of this title to the extent reasonably feasible under the facts of the application.
- G. The applicant shall have the burden of providing evidence to support a reasonable economic use exception.