CITY OF NAPAVINE PLANNING COMMISSION MEETING
Monday– July 6, 2026 – 6:00 PM

Deborah Graham,
Position 1

Amy Hollinger
Position 2

Arnold Haberstroh,
Position 3

Christian Loose
Position 4

Kacey Torgerson
Position 5

Katie Williams
CD Specialist

Laura Ayers
PW Executive Assistant

I. PLEDGE OF ALLEGIANCE

II. INVOCATION

III. CALL TO ORDER

IV. ROLL CALL

V. APPROVAL OF AGENDA – As Presented

VI. APPROVAL OF MINUTES

1) **Planning Commission Meeting Minutes– June 15, 2026**

VII. CITIZEN COMMENT

VIII. OLD BUSINESS

1) **Review of Critical Areas Ordinance**

IX. GOOD OF THE ORDER

X. ADJOURNMENT

Planning Commission Meeting is held in person and via Teleconference.
Teleconference Information
Dial-in number (US): (720) 740-9753
Access code: 8460198
To join the online meeting:
https://join.freeconferencecall.com/rdenham8

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City Website
www.cityofnapavine.com

NAPAVINE PLANNING COMMISSION MINUTES
June 15, 2026 6:00 P.M.
Napavine City Hall, 407 Birch Ave SW, Napavine, WA

PLEDGE OF ALLEGIANCE:

INVOCATION: Invocation was led by **Commissioner Haberstroh**.

CALL TO ORDER:
Commissioner Graham opened the Planning Commission meeting to order at 6:00 PM.

ROLL CALL:
Planning Commission present: Commissioner Graham, Commissioner Torgerson, Commissioner Haberstroh, Commissioner Hollinger.
Commissioner Torgerson motioned to excuse Commissioner Loose, seconded by Commissioner Hollinger.

APPROVAL OF AGENDA – As presented:
Commissioner Torgerson motioned to approve the agenda as presented, seconded by Commissioner Hollinger. Vote on motion 3 ayes, 0 nay.

APPROVAL OF MINUTES:
Commissioner Torgerson motioned to approve regular meeting minutes from June 1st, 2026, seconded by Commissioner Haberstroh. Vote on motion 3 ayes and 0 nay.

OLD BUSINESS:
1) **Review of Critical Areas Ordinance**

Allison Baker and Paul Dennis with Jackson Civil reviewed Critical Areas Chapter 14. Commissioner Haberstroh motioned to table until next meeting, seconded by Commissioner Torgerson. Vote on Motion 3 ayes, 0 Nay.

GOOD OF THE ORDER: Commissioner Haberstroh mentioned the property on Forest Napavine Road stating it needs to be cleaned up. Commissioner Graham announced the next Planning Commission Meeting date will be July 6th.

ADJOURNMENT 7:27 PM
Commissioner Haberstroh motioned to adjourn, seconded by **Commissioner Hollinger. Vote 3 ayes, 0 nay.**

These minutes are not verbatim. If so desired, a recording of this meeting is available online at *https://fccdl.in/3bEAfx7Tha* .

Respectfully submitted,

Katie Williams, Community Development Specialist Planning Commission Chairperson

Title 14
CRITICAL AREAS[1]

Chapter 14.10 NAPAVINE CRITICAL AREAS ORDINANCE (NMC)

Article I. General Provisions

14.10.010 Authority and title.

This chapter is established pursuant to RCW 36.70A.060. Chapter 14.10 is known as the Napavine Critical Areas Ordinance.

(Ord. No. 651, § 1, 10-10-23)

14.10.020 Purpose and Intent.

The purpose of this chapter is to implement the open space policies of the Napavine Comprehensive Plan and the elements of the Washington State Growth Management Act. This chapter defines, designates, and classifies critical areas as wetlands, critical aquifer recharge areas, fish and wildlife habitat conservation areas, frequently flooded areas, and geologically hazardous areas, per WAC 365-196-830.

Critical areas are valuable and potentially fragile natural resources that, in their natural state, provide many valuable social and ecological functions. The attendant buffers of critical areas are essential to the maintenance and protection of the functions and values of critical areas. The loss of social and ecological functions provided by critical areas, especially wetlands, riparian zones, and fish and wildlife habitat results in a detriment to public safety and welfare.

Critical areas help to relieve the burdens on the people of Napavine which urban development can create including congestion, noise and odors, air pollution, and water quality degradation.

Critical areas serve several important urban design functions. They provide: (1) open space corridors separating and defining developed areas within the city; (2) views and edges which enhance property values and quality of life in developed neighborhoods; (3) educational opportunities for the citizens of Napavine and (4) accessible areas for residents to stroll, hike, and enjoy Napavine's valuable natural features.

Conservation of critical areas has associated natural resource benefits, including improved air and water quality, maintenance of fish and wildlife habitat, decreased

[1]Editor's note(s)—Ord. No. 651, § 1, adopted Oct. 10, 2023, repealed the former Title 14, Ch. 14.10, § 14.10.010, and enacted a new Title 14 as set out herein. The former Title 14 pertained to miscellaneous provisions and derived from Ord. No. 594, §§ 1, 2, adopted March 26, 2019.

erosion and sedimentation to streams, absorption of pollutants and preservation of priority, threatened, or endangered plant and animal species.

The intent of this ordinance is for the City of Napavine (or administrator) to achieve no net loss of wetlands, floodplains, fish and wildlife habitat areas, and riparian zones and to avoid significant adverse impacts to geologically hazardous areas and aquifer recharge/wellhead protection areas.

The city's preferred strategy to achieve no net loss is to avoid adverse impacts to critical areas and buffers. However, the city recognizes that there are situations and circumstances where avoidance is not practicable whereupon the intent of this chapter is to minimize and mitigate the environmental impacts of development within and adjacent to critical areas and buffers through the application of mitigation sequencing described in WAC-197-11-768.

This chapter is based upon two equally important principles: the protection of individual property rights, and the protection of critical areas consistent with state law throughout the urban area. State and Federal agencies have jurisdiction of the resources themselves, while buffers outlined in this chapter are regulated exclusively by the local authority and jurisdiction. This chapter attempts to promote a balance between private use of critical areas and the maintenance of the natural appearance and functional values inherent in critical areas.

Development limitations on critical areas reduce the need to require additional studies to ensure compliance with the State Environmental Policy Act (SEPA) process as well as other state and federal environmental regulations.

(Ord. No. 651, § 1, 10-10-23)

14.10.030 Definitions.

For the purpose of this chapter, the definitions set forth in this chapter shall apply. Unless specifically defined in this chapter, words or phrases used in this chapter shall be interpreted so as to give them the meaning they have in common usage and to give this title its most reasonable application.

"Administrator" means the community development director or his or her designee.

"Aesthetics" means a characteristic of development or the environment, relating to physical beauty.

"Agricultural uses" (Reserved).

"Alter" means to adjust, modify, or rework a structure or parcel of land.

"Alteration" means any human-induced change in an existing condition of a critical area or its buffer. Alterations include, but are not limited to, grading, filling, channelizing, dredging, clearing of vegetation, construction, compaction, excavation, or any other activity that changes the character of the critical area or its buffer.

"Anadromous" means fish that migrate up rivers and streams from the ocean to breed in fresh water.

"Aquifer" means a saturated permeable geologic unit that can transfer substantial quantities of water under ordinary hydraulic gradients.

"Aquifer recharge area" means the area in which rainwater and other surface waters percolate downward through surface soil and underlying geologic formations that are permeable enough to allow significant additions of water to an underlying aquifer.

"Area of shallow flooding" means areas designated AO or AH Zone on the flood insurance rate map (FIRM). The base flood depths range from one to three feet, a clearly defined channel does not exist, the path of flooding is unpredictable and indeterminate, and velocity flow may be evident. AO is characterized as sheet flow and AH indicated ponding.

"Area of special flood hazard" means the land in the flood plain subject to a one percent chance or greater of flooding in any given year, as shown on flood insurance rate maps (FIRM), or except as otherwise determined by the Federal Emergency Management Agency (FEMA).

"Base flood" means a flood having a one percent chance of being equaled or exceeded in any given year. Also referred to as the "100-year" flood.

"Basement" means any floor level below the first story in a building, except that a floor level in a building having only one floor level shall be classified as a basement unless such floor level qualifies as a first story as defined herein.

"Best available information" means data other than official flood insurance rate map data from federal, state, or other sources, provided this data has either been generated using technically defensible methods or is based on reasonable historical analysis and experience.

"Best available science" means current scientific information used in the process of designating, protecting, or restoring critical areas; that is, scientific information derived from a valid scientific process as defined by WAC 365-195-900 through 365-195-925.

"Best Management Practices (BMPs)," means conservation practices or systems of practices and management measures that:

(a) Control soil loss and reduce water quality degradation caused by high concentrations of nutrients, animal waste, toxics, or sediment;

(b) Minimize adverse impacts to surface water and ground water flow and circulation patterns and to the chemical, physical, and biological characteristics of wetlands;

(c) Protect trees, vegetation, and soils designated to be retained during and following site construction and use native plant species appropriate to the site for re-vegetation of disturbed areas; and

(d) Provide standards for proper use of chemical herbicides within critical areas.

"Buffer" or "buffer area" means vegetated areas adjacent to wetlands or other aquatic resources that can reduce impacts from adjacent land uses through various physical, chemical, and/or biological processes.

"Channel migration zone" means the area along a river or stream within which the channel can reasonably be expected to migrate over time as a result of normally occurring processes. It encompasses an area of current and historic lateral stream channel movement that is subject to erosion, bank destabilization, rapid stream incision, and/or channel shifting, as well as adjacent areas that are susceptible to channel erosion.

"City" means a Class 4 municipality governed by the mayor and Napavine city council, or the city designee.

"The Clean Water Act (CWA)" means the federal law that establishes the basic structure for regulating discharges of pollutants into the waters of the United States and regulating quality standards for surface waters. Under the CWA, the federal Environmental Protection Agency has implemented pollution control programs such as setting wastewater standards for industry. The EPA has also developed national water quality criteria recommendations for pollutants in surface waters.

"Clearing" means the act of removing existing vegetations, structures or other items from a site prior to undertaking land improvements.

"Coastal high hazard area" means the area subject to high velocity water, including but not limited to, storm surge or tsunamis. This area is designated on a flood insurance rate map (FIRM) as Zone V1—30, VE or V.

"Compensatory mitigation" means the restoration (re-establishment or rehabilitation), establishment (creation), enhancement, and/or in certain circumstances preservation of wetlands for the purposes of offsetting unavoidable adverse impacts that remain after all appropriate and practicable avoidance and minimization has been achieved.

"Conservation covenant" means a recorded instrument entered in pursuant to a condition of approving a triggering application.

"Start of construction" means the date the building permit was issued, provided the actual start of construction, placement of a manufactured home on a foundation, or other permanent construction beyond the stage of excavation, was within one hundred eighty days of the permit date. The actual start means either the first placement of permanent construction of structure on a site, such as the pouring of slab or footings, the installation of piles, the construction of columns, or any work beyond the stage of excavation, or the placement of a manufactured home on a foundation.

"Permanent construction" does not include:

a. Land preparation, such as clearing, grading and filling;

b. Installation of streets and/or walkways;

c. Excavation for a basement, footings, piers, or foundation, or the erection of temporary forms; and

d. Construction of accessory buildings, such as garages or sheds not occupied as dwelling units or not part of the main structure.

”Council” means the council of the City of Napavine.

”Cowardin Classification” means the first commonly used classification system for wetlands. It was first developed in 1979 by the U.S. Fish and Wildlife Service and updated in 2013 (Federal Geographic Data Committee, 2013). The Cowardin system classifies wetlands based on water flow, substrate types, vegetation types, and dominant plant species.

“Critical aquifer recharge areas” means areas with a critical recharging effect on aquifers used for potable water, including areas where an aquifer that is a source of drinking water is vulnerable to contamination that would affect the potability of the water, or is susceptible to reduced recharge (WAC 365-190-030(3)).

”Critical areas” means any of the following areas or ecosystems: wetlands, critical aquifer recharge areas, streams, fish and wildlife habitat conservation areas, frequently flooded areas, and geologically hazardous areas as defined by the Growth Management Act (RCW 36.70A.170).

”Critical area functions” means the physical, chemical, and biological processes or attributes of a critical area.

”Critical area values” means the critical area processes or attributes that are valuable or beneficial to society.

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

”Critical habitat” means a specific geographic area that contains features essential to the conservation of an endangered or threatened species and may require special management and protection. Critical habitat may also include areas that are not currently occupied by the species but are needed for its recovery. (USFWS)

”Creation” means the manipulation of the physical, chemical, or biological characteristics present to develop a wetland that did not previously exist at an upland site. Creation results in a gain in wetland area and functions. A typical action is the excavation of upland soils to elevations that will produce a wetland hydroperiod and hydric soils, and support the growth of hydrophytic plant species.

”Cumulative impacts” means the combined, incremental effects of human activity on critical area functions and values. Cumulative impacts result when the effects of an action are added to or interact with the effects of other actions at a particular place over time.

”Dangerous wastes” means those wastes designated in WAC 173-303-070 through 173-303-120 as dangerous or extremely hazardous or mixed waste. As used in Chapter 173-303 WAC, the words ”dangerous waste” will refer to the full universe of wastes regulated by that chapter, and will be used interchangeably with ”hazardous waste.”

”Design storm” means a prescribed hyetograph and total precipitation amount (for a specific duration recurrence frequency) used to estimate runoff for a hypothetical

storm of interest or concern for the purposes of analyzing existing drainage, designing new drainage facilities, or assessing other impacts of a proposed project on the flow of surface water. (A hyetograph is a graph of percentages of total precipitation for a series of time steps representing the total time during which the precipitation occurs).

"Detention facility" means an above- or below-ground facility, such as a pond or tank, that temporarily stores storm water runoff and subsequently releases it at a slower rate than it is collected by the drainage facility system. There is little or no infiltration of stored storm water.

"Development" means any manmade 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 located within the area of special flood hazard.

"Development rights" means a legal claim to convert a tract of land to a specific purpose by construction, installation, or alteration of a building or other structure.

"Domestic animal" means an animal normally kept incidental to a single-family dwelling. Included are dogs and cats; excluded are wild or exotic animals, horses and cows, chickens, goats, or other similar animals.

"Drainage" means the removal of surface water or groundwater from land by drains, grading, or other means. Drainage includes the control of runoff to minimize erosion and sedimentation during and after development and includes the means necessary for water supply preservation, prevention, or alleviation of flooding.

"Drainage basin elevation" means a geographic and hydrologic subunit of a watershed.

"Elevation" means:

(1) The vertical distance above or below a fixed reference level or,

(2) A flat scale drawing of the front, rear, or side of a building or structure.

"Emergencies" means those activities necessary to prevent an immediate threat to public health, safety, or welfare, or that pose an immediate risk of damage to private property and that require remedial or preventive action in a timeframe too short to allow for compliance with the requirements of the critical areas regulations.

"Emergent wetland" means a wetland with at least thirty percent of the surface area covered by erect, rooted, herbaceous vegetation as the uppermost vegetative strata.

"Endangered species" means fish and wildlife species native to Washington that are seriously threatened with extinction throughout all or a significant part of their ranges within the state.

"Energy-efficient structure" means a structure designed and built to comply with the annual thermal performance standards established by the Northwest Power Planning Council as the Model Conservation Standards.

"Enhancement" means the manipulation of the physical, chemical, or biological characteristics of a wetland to heighten, intensify, or improve specific function(s). Enhancement results in the gain of selected function(s), but may also lead to a decline in other function(s). Enhancement does not result in a gain in wetland area.

"Environment" means the physical, social, and economic conditions that exist within the area which will be affected by a proposed project.

"Potential environmentally sensitive lands" means lands shown on the city zoning map as an overlay to demonstrate areas which may contain wetlands, steep slopes, or other similar environmentally critical features which may limit or prevent construction.

"Erosion" means the detachment and movement of soil or rock fragments by water, wind, and/or gravity.

"Erosion control" means on-site and off-site control measures that are needed to control conveyance and/or deposition of earth, turbidity, or pollutants after development, construction, or restoration.

"Erosion hazard areas" means those areas identified by the United States Department of Agriculture Soil Conservation Service as having severe or moderate rill and inter-rill erosion hazard and areas subject to sever of moderate stream bank erosion.

"Exotic" means any species of plants or animals that are not native to the watershed.

"Fill" means earth or any other approved substance or material.

"Fish and wildlife conservation areas" means areas that serve a critical role in sustaining needed habitats and species for the functional integrity of the ecosystem, and which, if altered, may reduce the likelihood that the species will persist over the long term. These areas may include, but are not limited to, rare or vulnerable ecological systems, communities, and habitat or habitat elements including seasonal ranges, breeding habitat, winter range, and movement corridors; and areas with high relative population density or species richness. "Fish and wildlife conservation areas" do not include such artificial features or constructs as irrigation delivery systems, irrigation infrastructure, irrigation canals, or drainage ditches that lie within the boundaries of, and are maintained by, a port district or an irrigation district or company. The definition of fish and wildlife conservation areas is pursuant to WAC 365-190-030(6) and any future changes to the WAC, and includes all lands within the following categories:

1. Areas with which endangered, threatened, and sensitive species have a primary association including areas with which "priority species" as defined by the Washington Department of Wildlife have a primary association.
2. "Priority habitats" as identified by the Washington Department of Fish and Wildlife. Priority habitats are areas with one or more of the following attributes pertaining to state species listed as endangered or threatened: comparatively high wildlife density, high wildlife species richness, significant wildlife species richness, significant wildlife breeding habitat, significant wildlife seasonal

ranges, significant movement corridors for wildlife, limited availability, and/or high vulnerability.

3. Naturally occurring ponds under twenty acres and their submerged aquatic beds that provide fish or wildlife habitat. These do not include ponds deliberately designed and created from dry sites such as canals, detention facilities, wastewater treatment facilities, farm ponds, temporary construction pond of less than three years' duration, and landscape amenities. However, naturally occurring ponds shall include those artificial ponds intentionally created with the approval of a regulatory authority from dry areas to mitigate adverse impact upon other ponds.
4. Lakes, ponds, streams, and rivers planted with game fish as defined by RCW 77.08.020, including fish planted under auspices of federal, state local, or tribal programs, or which support priority fish species as identified by the Washington Department of Fish and Wildlife.
5. Habitats and species of local importance, as designated in this chapter.
6. Waters of the state as defined in Title 222 WAC.
7. State natural area preserves and natural resource conservation areas.

"Flood" or "flooding" means a general or temporary condition of partial or complete inundation of normal dry land areas from the overflow of inland water and/or the unusual and rapid accumulation of runoff of surface waters from any source.

"Flood insurance rate map (FIRM)" means the official map on which the federal insurance administration has delineated both the areas of special flood hazards and the risk premium zones applicable to the community.

"Flood insurance study" means the official report provided by the federal insurance administration that includes flood profiles, the flood boundary-floodway map, and the water surface elevation of the base flood.

"Flood protection elevation" means one foot above the base flood elevation.

"Flooded frequently" means a flooding class in which flooding is likely to occur often under normal weather conditions (more than fifty percent chance of flooding in any year of more than fifty times in one hundred years).

"Floodway" means the area that has been established in effective federal emergency management agency flood insurance rate maps or floodway maps. The floodway does not include lands that can reasonably be expected to be protected from flood waters by flood control devices maintained by or maintained under license from the federal government, the state, or a political subdivision of the state that can reasonably be expected to be protected from flood waters by flood control devices maintained by or maintained under license from the federal government, the state, or a political subdivision of the state.

"Designated floodway" means the regulatory floodway that has been delineated on the FIRM of the flood boundary-floodway map (FBFM) or a community's flood insurance study and is included in the community's flood damage prevention ordinance.

"Floodway fringe" means the land between the boundary of the floodway and the limits of the 100-year floodplain. In those special flood hazard areas where the floodway boundary is not delineated upon flood insurance study maps, the floodway fringe area shall be determined by the use of other base flood data.

"Floodplain", synonymous with "100-year floodplain", means that a land area is susceptible to inundation with a one percent chance of being equaled or exceeded in any given year. The limit of this area shall be based upon flood ordinance regulation maps.

"Floor (lowest)" 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 title.

"Function(s) and value(s)" means the services provided by critical areas to society, including, but not limited to, improving and maintaining water quality, providing fish and wildlife habitat, supporting terrestrial and aquatic food chains, reducing flooding and erosive flows, wave attenuation, historical or archaeological importance, educational opportunities, and recreation.

"Groundwater" means the portion of water contained in interconnected pores or fractures in a saturated zone or stratum located beneath the surface of the earth or below a surface water body.

"Groundwater management" means the management and coordination of groundwater regulations, strategies, policies, and technical information for the protection and use of groundwater resources.

"Habitat" means the environment occupied by individuals of a particular species, population, or community.

"Local habitat area" means an area that contains sufficient food, water or cover for native terrestrial or aquatic species that the City of Napavine has identified in this chapter as being significant local concern.

"Landslide hazard areas" means areas potentially subject to landslides based on a combination of geologic, topographic, and hydro geologic factors. They include areas susceptible because of any combination of bedrock, soil, slope (gradient), slope aspect, structure, hydrology, or other factors.

"Habitat management plan" means a plan prepared for a regulated wildlife habitat critical area and intended to provide for the site- specific protection of endangered, threatened, and sensitive species and their habitats. The plans are to be based on the unique characteristics of the species, as well as surrounding land uses in relation to the proposed activity and landowner goals.

"Priority habitat" is a habitat type with unique or significant value to many species. An area identified and mapped as priority habitat has one or more of the following

attributes: comparatively high fish and wildlife density, comparatively high fish and wildlife species diversity, important fish and wildlife breeding habitat, important fish and wildlife seasonal ranges, limited availability, high vulnerability to habitat alteration, or unique or dependent species. The Washington State Department of Fish and Wildlife maintains a list of maps and priority species that occur within the state and Napavine.

"Riparian habitat area" is defined as areas adjacent to aquatic systems with flowing water (e.g., rivers, perennial or intermittent streams, seeps, springs) that contain elements of both aquatic and terrestrial ecosystems which mutually influence each other.

"Geologically hazardous areas" means areas that, because of their susceptibility to erosion, sliding, earthquake, or other geological events, are not suited to the siting of commercial, residential, or industrial development consistent with public health or safety concerns.

"Hazardous substances" means any liquid, solid, gas or sludge including material, substance, product, commodity, or waste, regardless of quantity, which exhibits any of the physical, chemical, or biological properties described in WAC 173-303-090 or 173-303-100.

"Hazardous tree" means any tree that is a threat to life, property, or public safety. ~~susceptible to immediate fall due to its condition (damaged, diseased, or dead) or other factors and which because of its location is at risk of damaging permanent physical improvements to property or causing personal injury.~~

"Hazardous waste" means all dangerous and extremely hazardous waste as defined in RCW 70A.300.010 except for moderate-risk waste. RCW 70A.300.010 is adopted by reference for the purposes of this definition.

"Hazardous waste treatment" means the physical, chemical, or biological processing of dangerous waste to make wastes non-dangerous or less dangerous, safer for transport, amenable for energy or material resource recovery, amenable for storage, or reduced in volume.

"Hazardous waste storage" means the holding of dangerous waste for a temporary period as regulated by State Dangerous Waste Regulations, Chapter 173-303 WAC. For purposes of this title, Chapter 173-303 WAC as existing and hereafter amended is adopted by reference.

"Headwaters" means springs, lakes, ponds, or wetlands providing significant sources of water to a stream.

"Hydric soil" means soil that is saturated, flooded, or ponded long enough during the growing season to develop anaerobic conditions in the upper part. The presence of a hydric soil shall be determined following the methods described in the Washington State Wetland Identification and Delineation Manual (RCW 90.58.380).

"Hydrophytic vegetation" means macro phytic plant life growing in water or on a substrate that is at least periodically deficient in oxygen as a result of excessive water

content. The presence of hydrophytic vegetation shall be determined following the methods described in the wetlands delineation manual.

"Impervious surface" means a hard surface that either prevents or retards the entry of water into the soil mantle as under natural conditions prior to development or that causes water to run off the surface in greater quantities or at an increased rate of flow compared to natural conditions prior to development. Common impervious surfaces may include, but are not limited to, roof tops, walkways, patios, driveways, parking lots or storage areas, concrete or asphalt paving, gravel roads, packed earthen materials, and oiled macadam or other surfaces which similarly impede the natural infiltration of storm water. Impervious surfaces do not include surface created through proven low impact development techniques.

"Improvement" means any building, structure, place, work of art, or other object constituting a physical betterment of real property, or any part of such betterment.

"Infiltration" means the downward entry of water into the immediate surface of soil.

"Intermittent stream" means surface streams with no measurable flow during thirty consecutive days in a normal water year.

"JARPA" means Joint Aquatics Resource Permit Application.

"Land clearing" means the exposure of earth by the removal of vegetative cover of any kind.

"Land disturbing activity" means any activity that results in a change in the existing soil cover (both vegetative and non-vegetative) and/or the existing soil topography. Land disturbing activities include, but are not limited to, demolition, construction, clearing, grading, filling, and excavation.

"Limited Uses" - means those activities and developments that have a moderate potential for impacts to critical areas and buffers, including but not limited to: minor grading and site preparation outside critical areas; installation of fencing that does not impede wildlife movement or alter hydrology; small-scale accessory structures; and vegetation management beyond routine maintenance.

"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 connected to the required utilities. For floodplain management purposes the term "manufactured home" also includes park trailers, travel trailers, and other similar vehicles placed on a site for greater than one hundred eighty consecutive days. For insurance purposes the term "manufactured home" does not include park trailers, travel trailers, and other similar vehicles.

"Minimizing impacts to wetlands or buffers" means:

1. Using appropriate and best available technology or best available science;
2. Taking affirmative steps to avoid or reduce impacts;
3. Sensitive site design and siting of facilities and construction staging areas away from regulated wetlands and their buffers;

4. Providing protective measures such as siltation curtains, hay bales and other siltation prevention measures, scheduling the regulated activity to avoid interference with wildlife and fisheries rearing, resting, nesting, or spawning activities;

5. Not jeopardizing the continued existence of endangered, threatened, rare, sensitive, or monitor species as listed by the federal government or the state of Washington.

"Mitigation" means actions taken to replace, compensate for, or enhance critical area functions impacted by a land use development permitted under this chapter.

"Mitigation sequence" means the order of action that the approving agency shall require so as to avoid or compensate for impacts to critical areas resulting from the proposed project activity. The type(s) of mitigation required shall be considered and implemented where feasible, as determined by the Administrator, in the following sequential order of preference. As defined in WAC 197-11-768, mitigation means:

- Avoiding the impact altogether by not taking a certain action or parts of an action;
- Minimizing impacts by limiting the degree or magnitude of the action and its implementation by using appropriate technology or by taking affirmative steps to avoid or reduce impacts;
- Rectifying the impact to wetlands, critical aquifer recharge areas, and habitat conservation areas by repairing, rehabilitating, or restoring the affected environment;
- Reducing or eliminating the impact or hazard over time by preservation and maintenance operations during the life of the action;
- Compensating for the impact by replacing, enhancing, or providing substitute resources or environments; and/or
- Monitoring the impact and taking remedial action when necessary.

"Monitoring" means evaluating the impacts on the biological, hydrological, and geological elements of development proposals, and assessing the performance of required mitigation measures through the collection and analysis of data by various methods for the purpose of understanding and documenting changes in natural ecosystems and features. Monitoring includes gathering baseline data.

"National Wetland Inventory (NWI)" means a publicly available resource provided by the U.S. Fish and Wildlife Service that provides detailed information and maps showing the abundance, characteristics, and distribution of U.S. wetlands.

"Native vegetation" means plant species that occur naturally in a particular region or environment and were present before European colonization.

"New construction" means structures for which the "start of construction" commenced on or after the effective date of this title.

"Non-federally regulated wetland" means a wetland that is not jurisdictional under federal regulations. Sometimes referred to as "isolated wetlands," these wetlands remain regulated under state and local laws and rules, whether or not they are protected by federal law.

"Normal water year" means a twelve-month period (October 1 through September 30) with average precipitation based upon data from the past fifty years.

"Obligate," "facultative wet," and "facultative" mean groupings of plants according to their frequency of occurrence in wetlands. Obligate wetland plants almost always occur in wetlands under natural conditions. Facultative wet plants usually occur in wetlands. Facultative plants are equally likely to occur in wetlands or non-wetlands. Such groupings are more fully defined in the wetland's delineation manual.

"Off-site compensatory mitigation" means the replacement of critical areas away from the site on which a critical area has been impacted.

"On-site compensatory mitigation" means the replacement of critical areas at or adjacent to the site on which a critical area has been impacted.

"Open space" means an area that is intended to provide light and air, and is designed for environmental, scenic or recreational purposes. Open space may include, but is not limited to: lawns, decorative planting, walkways, active and passive recreation areas, golf courses, playgrounds, fountains, swimming pools, wooded areas, water courses, driveways, and other surfaces designed or intended for vehicular travel, but shall not include any required off-street parking areas.

"Common open space" means an area within or related to a development, not in individually owned lots or dedicated for public use, but that is designed and intended for the common use and enjoyment of the residents of the development.

"Open water" when not specifically defined by the rating criteria, means a proportion of open water to vegetative cover equal to twenty-five percent to seventy-five percent of the total wetland area during a majority of the normal water year.

"Ordinary high-water mark (OHWM)" under the Shoreline Management Act, means that mark which is found by examining the bed and banks of water bodies and ascertaining where the presence and action of waters are so common and usual, and so long continued in all ordinary years, that the soil has a character distinct from that of the abutting upland in respect to vegetation.

"Peer review" means the assessment of the work produced by a qualified professional by one or more additional professionals qualified in the same area of expertise, consistent with the requirements of this chapter. A qualified professional for the purposes of peer review shall be a neutral third party independent from the city and the applicant.

In the event that the administrator requires "peer review" of a report submitted by an applicant, the peer review process shall be accomplished in one of two manners:

1. The applicant may elect to use a Washington State agency, responsible for the oversight of the critical are in question, e.g., department of ecology,

department of fish and wildlife, etc. The applicant shall request in writing that the city suspend processing of the underlying land use application until the qualified state agency releases its final peer review report on the applicant's report in question. The administrator shall accept the peer review report produced by the state agency.

2. In the event that the applicant does not elect to rely upon state agency review, the administrator shall select the qualified professional and the applicant shall reimburse the city for the services and expenses of the peer review person(s). The administrator shall not issue land use approval until it has been fully reimbursed for said fees and services. The peer review process shall take place within the timelines established for the land use application in question. The administrator may elect to accept the peer reviewed report or the applicant's report.

"Permit" means any license, certificate, approval, or other entitlement for user granted by any public agency.

"Person" means an individual, partnership, corporation, association, organization, cooperative, public or municipal corporation, or any agency of the state or local governmental unit however designated.

"Preservation (protection/maintenance)" means removing a threat to, or preventing the decline of wetland conditions by an action in or near a wetland. This includes the purchase of land or easements, repairing water control structures or fences, or structural protection such as repairing a barrier island. Preservation does not result in a gain of wetland acres, may result in a gain in functions, and will be used only in exceptional circumstances.

"Project areas" means all areas, including those within fifty feet of the area, proposed to be disturbed, altered, or used by the proposed activity or the construction of any proposed structures. When the action binds the land, such as a subdivision, short subdivision, binding site plan, planned unit development, or rezone, the project area shall include the entire parcel, at a minimum.

"Protection" means action to avoid or mitigate impacts to in order to preserve the structure, values, and function of the natural environment.

"Qualified professional" means a person with a minimum of two years of work experience and professional degrees and/or training pertaining to the critical area in question, with experience in performing delineations, analyzing critical area functions and values, analyzing critical area impacts, and recommending critical area mitigation and restoration. The administrator may require professionals to demonstrate the basis for qualifications and shall make final determination as to qualifications.

1. Aquifer recharge. A qualified professional for critical aquifer recharge areas means a Washington State licensed hydro geologist, geologist, or a professional engineer, with specific education and demonstrated professional competence related to groundwater hazards.

2. Habitat conservation. A qualified professional for habitat conservation areas must have a degree in wildlife biology, ecology, fisheries, or closely related field and demonstrated professional experience related to the subject species/habitat type.

3. Geologic hazards. A qualified professional for geologically hazardous areas must be a professional geologist, a professional engineering geologist or a professional engineer, with specific education and demonstrated professional competence related to geologic hazards.

4. Wetlands. A qualified professional generally means a person with at least two years of full-time professional experience and comprehensive training in wetland issues, including experience performing wetland delineations using state and federal manuals, assessing wetland function and values, analyzing wetland impacts, preparing wetland reports, developing and implementing mitigation plans, and recommending and designing wetland mitigation projects.

"Rainy season" means the season which extends from November 1 through April 30 of the following year.

"Re-establishment" means the manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural/historic functions (and environmental processes) to a former wetland. Re-establishment results in rebuilding a former wetland and results in a gain in wetland area and functions.

"Rehabilitation" means the manipulation of the physical, chemical, or biological characteristics of a site with the goal of repairing natural/historic functions (and environmental processes) to a degraded wetland. Rehabilitation results in a gain in wetland function, but does not result in a gain in wetland acres.

"Repair" or "maintenance" means an activity that restores the character, scope, size, and design of a serviceable area, structure, or land use to its previously authorized and undamaged condition. Activities that change the character, size, or scope of a project beyond the original design and drain, dredge, fill, flood, or otherwise alter critical areas are not included in this definition.

"Regulated activities" means land clearing, grading, placement of fill or waste material, removal of protected native vegetation, construction and other habitat-altering activities.

"Restoration" means measures have been taken to restore an altered or damaged natural feature, including: (a) active steps taken to restore damaged wetlands, streams, protected habitat, or their buffers to the functioning condition that existed prior to an unauthorized alteration; and (b) actions performed to re-establish structural and functional characteristics of a critical area that have been lost by alteration, past management activities, or catastrophic events.

"Revised Code of Washington (RCW)" means a compilation of all permanent Washington state laws currently in force.

"Shoreline Management Act (SMA)" means the law that requires all counties, towns, and cities with shorelines to develop and implement shoreline master programs (Chapter 90.58 RCW).

"Unstable slope" means sloping areas of land which have in the past exhibited, are currently exhibiting, or will likely in the future exhibit movement of earth.

"SEPA" means State Environmental Policy Act, Title 43.21C RCW and Chapter 197-11 WAC.

"Soil removal" means the removal of any kind of soil or earth matter, including top soil, sand, gravel, clay, rock or similar materials or combination thereof, except common household gardening.

"Solar access" means the availability of direct sunlight to solar energy systems.

"Species:"

"Listed species" means state listed species including native fish and 014), threatened (WAC 220-200-100) or sensitive (WAC 220-200-100); and includes threatened and endangered species under the Federal Endangered Species Act, 50 C.F.R.17.11 and 50 C.F.R.17.12.

"Priority species" means animal species listed by the Washington State Department of Fish and Wildlife, Priority Habitat and Species Program, that are of concern due to their low population and/or their sensitivity to habitat manipulation.

"Threatened species" means fish and wildlife which are native to the state of Washington and likely to become endangered in the foreseeable future throughout a significant portion of its range within the state without cooperative management or the removal of threats. Threatened species are legally designated in WAC 220-200-100.

"Sensitive species" means fish and wildlife species native to Washington that are vulnerable or declining, and are likely to become endangered or threatened in a significant portion of their ranges within the state, without cooperative management or the removal of the threats.

"Storm water" means that portion of precipitation that does not naturally percolate into the ground or evaporate, but flows via overland flow, interflow, channels, or pipes into a defined surface water channel or constructed infiltration facility.

"Storm water management facilities" means biofiltration swales, filter strips, bubbler diffusers, detention ponds, retention ponds, wet ponds, and similar facilities designed and intended to control and treat storm waters, but do not include ditches designed and intended primarily for conveyance.

"Streams" means an area where open surface water produces a defined channel or bed, not including irrigation ditches, canals, storm or surface water runoff devices, or other entirely artificial watercourses, unless they are used by salmonids, or are used to convey a watercourse that was naturally occurring prior to construction, A channel or bed need not contain water year-round, provided there is evidence of at least intermittent flow during years of normal rainfall.

"Substantial damage" means damage of any origin sustained by a structure whereby the costs of restoring the structure to its before damaged condition would equal or exceed fifty 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 fifty 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 purpose 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.

"Surface water" means waters that flow over the land surface and frequently interact with groundwater.

"Swale" means a shallow drainage conveyance with relatively gentle side slopes, generally with flow depths less than one foot.

"System function and values" is a technical term used to identify the role of a critical area in a given area as opposed to its mere physical presence and size; used most often when comparing alternatives for mitigation purposes.

"Toe of slope" means a point or line on the upper surface of a slope where it changes to horizontal or meets the original surface. The outermost inclined surface at the base of a hill; part of a foot slope.

"Topography" means the drawing on a map line that accurately represents particular and consistent elevation levels on the land area depicted on said drawing; also, the actual physical surface's relief characteristics.

"Triggering application" means an application for one of the permits or approvals listed in this chapter.

"Unavoidable impacts" means adverse impacts that remain after all appropriate and practicable avoidance and minimization has been achieved.

"Use" means the purpose for which a property is occupied and utilized, that may include a variety of activities related to the use. Uses may be categorized according to a variety of systems, in a number of manners that emphasize shared characteristics. Land use is typically classified in terms of agricultural, residential, commercial, industrial and open space. Uses may be characterized in terms of high, moderate, and low intensity based on characteristics that impact other uses or activities.

"High intensity use(s)" means generally urban uses which, by their nature, have the potential for substantial effect on critical areas. High intensity uses, where applicable, are defined separately in regulations for individual critical areas.

"Low intensity use(s)" means uses, which by their nature, generally have a low level of adverse effect on critical areas. Low intensity uses, where applicable, are defined separately in regulations for individual critical areas.

"Moderate intensity use(s)" means uses, which by their nature, generally have a moderate level of adverse effect on critical areas. Moderate intensity uses, where applicable, are defined separately in regulations for individual critical areas.

"Water-dependent" means a use or a portion of a use that requires direct contact with the water and cannot exist at a non-water location due to the intrinsic nature of its operations.

"Washington Administrative Code (WAC)" means administrative rules implementing state laws.

"Watershed" means a geographic region within which water drains into a particular river, stream, or body of water as identified and numbered by the State of Washington Water Resource Inventory Areas (WRIAs) as defined in Chapter 173-500 WAC.

"Wellhead protection area" means the area (surface and subsurface) managed to protect ground water based public water supplies.

"Wetland(s)" means areas that are inundated or saturated by surface water or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas. Wetlands do not include those artificial wetlands intentionally created from non-wetland sites, including, but not limited to, irrigation and drainage ditches, grass- lines swales, canals, detention facilities, wastewater treatment facilities, farm ponds, landscape amenities, or those wetlands created after July 1, 1990, that were unintentionally created as a result of the construction of a road, street, or highway. Wetlands may include those artificial wetlands intentionally created from non-wetland areas created to mitigate conversion of wetlands. (RCW 36.70A030 [21]).

"Wetland classes and subclasses" means descriptive classes of the wetlands taxonomic classification system of the United States Fish and Wildlife Service (Cowardin, et al. 1978).

"Wetland delineation manual" means the Washington State Wetland Identification and Delineation Manual (Publication #96-94) dated March 1997 and supplement, and as subsequently amended.

"Emergent wetland" means a wetland with at least thirty percent to the surface area covered by erect, rooted, herbaceous vegetation as the uppermost vegetative strata.

"Forested wetland" means wetland with at least thirty percent of the surface area covered by a canopy of woody obligate, facultative wet, or facultative plants greater than twenty feet in height.

"Wetland functions" refer to the physical, biological, chemical, and geologic interactions among different components of the environment that occur within a

wetland. Wetlands perform many valuable functions which can be grouped into three categories: functions that improve water quality, functions that change the water regime in a watershed such as flood storage, and functions that provide habitat for plants and animals.

"Wetland values" means wetland processes, characteristics, or attributes that are considered to benefit society.

"Wetland mitigation bank" means a site or suite of sites where resources are restored, created, enhanced, and/or preserved, for the purpose of providing compensatory mitigation for impacts. In general, a mitigation bank sells compensatory mitigation credits to permittees whose obligation to provide compensatory mitigation is then transferred to the mitigation bank sponsor. The operation and use of a mitigation bank are governed by a mitigation banking instrument.

"Scrub-shrub wetland" means a wetland with at least thirty percent of its surface area covered by woody vegetation less than twenty feet in height as the uppermost strata.

"Wetlands with special characteristics for western Washington" means bogs, estuarine wetlands, forested wetlands, interdunal wetlands, wetlands in coastal lagoons, and wetlands of high conservation value. Detailed information about these individual wetland types is found in the Washington State Wetland Rating System for Western Washington: 2014 Update.

(Ord. No. 651, § 1, 10-10-23)

14.10.040 Applicability and critical areas map.

A. Applicability. The provisions of this chapter apply to lands within the Napavine corporate limits and urban growth area that are either designated as critical areas and their buffers on the city's official critical areas maps or are critical areas and buffers which are identified as part of a project specific application and land use review.

   1. Properties containing critical areas are subject to this title.

   2. Buffers are protected and impacts to buffers are regulated to help improve the functional values of critical areas.

   3. When the requirements of this chapter are more stringent than those of other Napavine codes and regulations, the requirements of this chapter shall apply.

   4. Where a site contains two or more critical areas, the site shall meet the minimum standards and requirements for each identified critical area as set forth in this title.

B. Development Permit Required. The City of Napavine shall not grant any permit, license, or other development approval to alter the condition of any land, water, or vegetation, or to construct or to alter any structure or improvement, nor shall any person alter the condition of any land, water, or vegetation, or construct or alter

any structure or improvement for any development proposal within a critical area or its buffer regulated by this chapter, except in compliance with the provisions of this chapter shall be considered a violation and subject to enforcement procedures.

C. State and Federal Agency Review. Compliance with the provisions of this chapter does not necessarily constitute compliance with other federal, state, and local regulations and permit requirements that may be required (for example, Shoreline Permits, Hydraulic Project Approval (HPA) permits, Clean Water Act Section 404 permit(s) and 401 certification, Ecology Administrative Orders, or NPDES permits). Regulated activities are subject to review and comment as required through the SEPA and/or JARPA review process. The applicant is responsible for complying with these requirements, apart from the process established in this chapter.

D. Critical Areas. Critical areas include:

1. Wetlands;
2. Aquifer recharge areas;
3. Wellhead protection areas;
4. Fish and wildlife habitat conservation areas;
5. Frequently flooded areas;
6. Geologically hazardous areas; and
7. Slopes with gradient of thirty percent or greater.

E. Map Location. The general location of critical areas is depicted on the adopted Napavine critical areas map. The critical areas map is an indicator of probable regulated areas. The precise limits of critical areas and their attendant buffers on a particular parcel of land shall be determined by the applicant prior to approval of a development action on the subject property. Development shall avoid critical areas, and where avoidance is not practical, as determined by the administrator, development shall minimize adverse impacts to critical areas and buffers, consistent with the provisions of this chapter. To determine whether avoidance is practical, the administrator shall consider issues such as: the substantial evidence presented by the applicant demonstrating the avoidance measures the applicant considered; the quality of the critical resource and buffer functions and values to be impacted, avoidance of impacts to higher quality resources and buffers is preferred; the nature and extent of mitigation and enhancement measures proposed to compensate for the proposed impact; whether the impacts proposed are necessary to implement the city's capital facilities plan; and other factors determined relevant by the administrator. The administrator may also consider the financial implications of avoidance but shall not give private gain greater weight than resource management founded upon best available science. The community development department shall keep on permanent file and maintain the critical areas map. The critical areas map shall be updated as reliable data from the sources in Section 14.10.040.F become available. Where the critical areas map conflicts with

the field conditions or authoritative data sources, field conditions and authoritative data shall control.

F. Authoritative Data Sources for Critical Area Identification

In addition to the data maps, the City may use the following current data products as part of critical area and fish and wildlife habitat conservation area (FWHCA) identification. These sources may be consulted by applicants and the City during the review of development applications, and the data maps shall be updated as new data from these sources becomes available:

1. **WDFW Priority Habitats and Species (PHS) Maps** — Washington Department of Fish and Wildlife Priority Habitats and Species maps, identifying habitats and species of greatest conservation need.
2. **SalmonScape Anadromous Fish Distribution Data** - Washington Department of Fish and Wildlife SalmonScape database depicting the distribution of anadromous fish species.
3. **WDFW Site Potential Tree Height (SPTH200) Mapping** - Used for riparian management zone (RMZ) delineation in accordance with applicable state guidance.
4. **Washington Habitat Connectivity Action Plan (WAHCAP)** - Corridor and connectivity mapping identifying areas important to landscape-scale wildlife movement.
5. **Washington Natural Heritage Program Data** - Rare plant and rare ecosystem occurrence data maintained by the Washington Department of Natural Resources.
6. **NMFS Critical Habitat Maps** - National Marine Fisheries Service designated critical habitat for ESA-listed species, including eulachon (*Thaleichthys pacificus*).

F. Use of Existing Procedures and Laws. The following laws and procedures shall be used to implement this chapter:

1. Napavine Critical Areas Ordinance (NCAO).
2. The State Environmental Policy Act (SEPA), Chapter 43.21C RCW.
3. The Shoreline Management Act (SMA), Chapter 90.58 RCW.

G. Administration. When the administration determines a proposed development or activity is within, abutting, or is likely to adversely affect a critical area or buffer pursuant to the provisions of this chapter, the administrator shall:

1. Determine the likely presence of a critical area;
2. Determine the appropriate use as provided in this chapter and require project plans to incorporate appropriate setbacks or buffers to avoid critical areas and meet specific performance standards;

3. Determine appropriate development or mitigation measures or require the applicant to prepare a critical area assessment report;

4. Review and evaluate the proposal, the critical area report, and relative information and:

    a. Determine whether the development proposal conforms to the purposes and performance standards of the NCAO,

    b. Assess the potential impacts to the critical area and determine if they can be avoided or minimized,

    c. Determine whether mitigation proposed by the applicant is sufficient to protect the functions and values of the critical area, achieving no net loss of ecological function, and public health, safety, and welfare concerns consistent with the goals, purposes, objectives, and requirements of the NCAO; and

    d. Impose any required conditions to assure compliance with this chapter, including mitigation measures, implementation and monitoring.

H. Critical Area Report (CAR)—Authority and Use. When the administrator determines a proposed development is within, abutting, or is likely to adversely affect a critical are or buffer pursuant to the provisions of this chapter, the administrator shall have the authority to require a critical area report (CAR). A qualified professional shall prepare the report that includes a reasonable level of technical study and analysis to protect the public health, safety and welfare as well as critical area protection. The intent of these provisions is to require a reasonable level of technical study and analysis sufficient to protect critical areas. The analysis shall be commensurate with the value or sensitivity of a particular critical area and relative to the scale and potential impacts of the proposed activity.

I. The Planning Advisor shall have the discretion to determine whether the proposed activity may adversely impact protected critical areas and/or their buffers and shall assign the appropriate level of review, exempt, review required, or critical areas report. The decision of the Planning Advisor may be appealed to the Planning Commission.

(Ord. No. 651, § 1, 10-10-23)

14.10.050 Uses.

A. Approval Required. Unless the requirements of this chapter are met, Napavine shall not grant any approval or permission to alter the condition of any land, water, or vegetation, or to construct or alter any structure or improvement regulated through the following: Building permit, commercial or residential, franchise right-of-way construction permit, site development permit, right-of-way permit, shoreline permits, or any subsequently adopted permit or required approval not expressly exempted by this chapter.

B. Other Law. Compliance with these regulations does not remove an applicant's obligation to comply with applicable provisions of any other federal, state, or local law or regulation.

C. Allowed Uses. The administrator may allow the following uses on critical areas and within buffer areas subject to the development standards of NMC 14.10.160 and appropriate mitigation standards as described in NMC 14.10.110:

1. Low impact recreational uses. The following uses are necessary for the understanding and enjoyment of critical areas.

   a. Outdoor recreational or educational activities which do not significantly affect the functions and values of the critical area and buffers (including wildlife management or viewing structures, outdoor scientific or interpretive facilities, and pervious trails for non-motorized use, and other similar uses) and meet the following criteria:

      i. Trails in wetland buffers must be constructed of natural materials (such as compacted native soil or gravel) and shall not exceed five feet in width. Impervious and pervious manufactured surface materials are not permitted for trails within critical areas or their buffers.

      ii. The trail or facility is located in the outer fifty percent of a wetland or riparian buffer unless a location closer to the critical area is required for interpretive purposes.

      iii. The trail or facility is constructed and maintained in manner that minimizes disturbance of the wetland or buffer. Trails or facilities within wetlands shall be placed on an elevated structure as an alternative to fill.

   b. Harvesting wild crops which do not significantly affect the function of the wetland or regulated buffer (does not include tilling of soil or alteration of wetland area).

2. Utilities. Below or above ground utilities, facilities and improvements, where necessary to serve development consistent with the Napavine comprehensive plan and development code, including: streets, roads, highways, sidewalks, street and road lighting systems, traffic signals, domestic water systems, storm and sanitary sewer systems, open space, and parks and recreational facilities, where there is no other reasonable alternative, based on topographic and environmental conditions as determined by the administrator.

3. Removal of diseased or dangerous trees, as determined by the administrator or the removal of invasive or nuisance plants.

4. Specific Uses Allowed in Wetlands.

   a. Enhanced Replacement. Replacing or enhancing a wetland such that the enhanced wetland is of higher quality and meets the criteria for a higher category.

b. Wetland Banking. Construction, enhancement or restoration of wetlands to use as mitigation for future wetland development impacts in the same watershed is permitted if:

i. A critical area permit shall be obtained prior to any mitigation banking. Federal and state wetland regulations, if applicable, shall supersede city requirements.

ii. All impacts to wetlands and wetland buffers shall be mitigated and monitored consistent with NMC 14.10.___

D. Limited Uses. Limited uses, as described in this section, shall avoid critical areas, to the greatest extent reasonable and practicable. Limited uses may be allowed within critical area buffers subject to the mitigation measures and implementation of a monitoring plan as described in this chapter. Applications for development within critical areas or buffers shall demonstrate that all reasonable efforts have been examined with the intent to avoid and minimize impacts to critical areas and buffers. All limited uses shall be consistent with the provisions of this chapter and shall be subject to SEPA review.

1. Development Subject to Site Plan Review. Any new building or structure affecting critical areas or buffers shall be subject to site plan review, unless otherwise exempted in this chapter.

2. Storm Water Facilities. Storm water facilities may be allowed in buffers in wetlands with low habitat function (less that twenty points on the habitat section of the rating system form); provided, the facilities shall be built on the outer fifty percent of the buffer and not degrade the existing buffer function and are designed to blend with the natural landscape. Unless determined otherwise by the administrator.

E. Critical Areas Report Required Regardless of Lot Status. Notwithstanding the pre-existing status of the lot or any notation on a recorded plat, any construction within or adjacent to a critical area or its buffer shall require submission of a Critical Areas Report (CAR) prepared by a qualified professional prior to project approval. The pre-existing or legal lot of record status of a parcel does not exempt the applicant from the CAR requirement under this chapter.

F. Riparian Restoration and Enhancement. Riparian restoration and enhancement projects are encouraged and shall be subject to a streamlined review process. The City shall establish incentives for voluntary riparian restoration, which may include expedited permit review, reduced permit fees, technical assistance, or reduced buffer requirements. Restoration projects shall be designed by a qualified professional and shall prioritize the use of native plant species, improvement of fish and wildlife habitat functions, and long-term maintenance commitments. Projects shall be consistent with the mitigation sequencing requirements of this chapter and applicable state guidance, including Washington Department of Fish and Wildlife recommendations.

G. Use intensity. The intensity of the land use proposed has a direct relationship to the potential severity of impacts to critical areas and buffers. Generally, most land uses allowed in an urban zoning district are high impact uses.

(Ord. No. 651, § 1, 10-10-23)

14.10.060 Variances.

A. An applicant who seeks to vary from requirements of this chapter may seek a variance pursuant to this section. The city council shall review a request to vary from requirements of this chapter through a review process. The administrator may elect to seek guidance from and may rely upon state agency expertise at the applicant's expense.

B. Approval Criteria. An application to vary from the requirements of this chapter shall demonstrate compliance with all the following criteria:

1. There are special circumstances applicable to the subject property or to the intended use such as shape, topography, location or surroundings that do not apply generally to other properties;
2. The variance is necessary for the preservation and enjoyment of substantial property right or use possessed by other similarly situated property, but which because of special circumstances is denied to the property in question;
3. Granting the variance will not be materially detrimental to the public welfare or injurious to the property of improvement;
4. Granting the variance will not violate, abrogate, or ignore the goals, objectives, or policies of the Napavine comprehensive plan;
5. In addition to the approval criteria above, an application to vary from the buffer requirements of fish and wildlife habitat conservation area or wetland buffer shall demonstrate that the requested buffer width modification preserves adequate vegetation to: maintain proper water temperature; minimize sedimentation; and provide food and cover for critical fish and wildlife species;
6. When grating a variance, the administrator may attach specific conditions to the variance that will serve to meet the goals, objectives, and policies of this chapter, including the preparation and implementation of a mitigation and monitoring plan consistent with NMC 14.10____.

(Ord. No. 651, § 1, 10-10-23)

14.10.070 Exemptions.

A. Exempt Activities in Critical Areas. The following developments, activities, and associated uses shall be exempt from provisions of this chapter, provided that they are otherwise consistent with the provisions of other local, state, and federal laws and requirements, and a written request for exemption has been filed with and approved by the administrator.

1. The administrator shall have the authority to negotiate memoranda of agreements with utility service providers or public agencies, and said agreements shall specify best management practices to be used in situations of emergency and usual and customary repair, which if rigorously adhered to, may exempt said emergency or repair activity, including routine operation and maintenance from further review under this chapter. Memorandum of agreements shall be authorized by the Napavine City Council only after notice and completion of a public hearing on the full terms and merits of the agreement. Emergencies. Emergency activities are those activities necessary to prevent an immediate threat to public health, safety, or welfare, or that pose an immediate risk of damage to private property and that require remedial or preventative action in a time frame too short to allow for compliance with the requirements of this chapter. Emergency actions that create an impact to a critical area or its buffer shall use reasonable methods to address the emergency; in addition, they must have the least possible adverse impact to the critical area or its buffer. The person or agency undertaking such action shall notify the city within one working day following commencement of the emergency activity. Following the emergency appropriate mitigation shall be implemented and permanent activities, installations or impacts are subject to review and compliance with the applicable standards.

    a. Authorization. Notwithstanding the provisions of this chapter, the administrator may issue a temporary emergency permit prospectively or, in the case of imminent threats to public health, safety or welfare, retroactively, where the anticipated threat or loss may occur before a permit can be issued or modified under the procedures otherwise required by the act and other applicable laws.

    b. Prior to issuing an emergency permit, the administrator shall issue a finding that extraordinary circumstances exist and that the potential threat to public health, safety or welfare from the emergency situation is clearly significant and substantial.

    c. Conditions. Any emergency permit granted shall incorporate, to the greatest extent practicable and feasible but not inconsistent with the emergency situation, the standards and criteria required for non-emergency activities under this act and shall:

        i. Be limited in duration to the time required to complete the authorized emergency activity, not to exceed ninety days; and

        ii. Require, within ninety-day period, the restoration of any wetland altered as a result of the activity, except that if more than the ninety days from issuance of the emergency permit is required to complete restoration, the emergency permit may be extended to complete this restoration.

        iii. The person or agency undertaking emergency actions consult with the administrator and applicable state or federal agencies within

thirty days after the notice of emergency to identify and thereafter implement suitable mitigation requirements.

d. Notice. Notice of issuance of an emergency permit shall be published in a newspaper having general circulation in the City of Napavine no later than ten days after issuance of such permit.

e. Termination. The emergency permit may be terminated at any time without process upon a determination by the administrator that the action is no longer necessary to protect human health or the environment.

2. Repair. Repair or replacement of existing structures, infrastructure improvements, utilities, public or private road, dikes, levees or drainage systems, including operation and maintenance of existing facilities, that do not require construction permits, if the activity does not further alter or increase the impact to, or encroach further within, the critical area or buffer and there is no increased risk to life or property as a result of the proposed maintenance or repair. This exemption does not relieve the applicant of the obligation to submit a Critical Areas Report if the activity is within or adjacent to a critical area or its buffer, unless a qualified professional confirms in writing that no known critical area or buffer exists onsite or on adjacent properties.

3. Forest practices. Forest practices regulated and conducted in accordance with the provisions of Chapter 76.09 RCW and forest practices regulations, Title 222 WAC, and those that are exempt from Napavine's jurisdiction, provided that forest practice conversions are not exempt - All Class IV conversions are subject to the rules of the Napavine CAO.

4. Right-of-way. Activities within the improved public right-of-way or recorded easement. Replacement, modification, installation, or construction of utility facilities, lines, pipes, mains, equipment, or appurtenances, when such facilities are located within the improved portion of the public right-of-way or recorded easement.

5. Chemical applications. The application of herbicides, pesticides, organic or mineral-derived fertilizers, or other hazardous substances, if necessary, provided that their use shall be restricted in accordance with Department of Fish and Wildlife Management Recommendations and the regulations of the Department of Agriculture and the U.S. Environmental Protection Agency and the State Department of Ecology which regulates the use of herbicides to control nuisance weeds and algae in lakes and streams.

6. Minor site investigative work. Work necessary for land use submittals, such as surveys, soil logs, percolation tests, and other related activities, where such activities do not require construction of new roads or significant amounts of excavation. In every case, impacts to the critical area shall be minimized and disturbed areas shall be immediately restored. This exemption does not relieve the applicant of the obligation to submit a Critical Areas Report if the activity is within or adjacent to a critical area or its buffer, unless a qualified

professional confirms in writing that no known critical area or buffer exists onsite or on adjacent properties.

7. Boundary markers. Construction or modification of boundary markers or fences.

8. Modifications. Construction and modifications to existing structures that does not increase the footprint of the structure. This exemption does not relieve the applicant of the obligation to submit a Critical Areas Report if the activity is within or adjacent to a critical area or its buffer, unless a qualified professional confirms in writing that no known critical area or buffer exists onsite or on adjacent properties.

9. The removal of the following vegetation with hand labor and light equipment, and vegetation removal that is a hazard to electrical power lines with handheld and walk beside equipment such as mowers and weed eaters in compliance with the provisions contained in the ANSI A300 (Part 1) guidelines, including, but not limited to:

    a. Invasive non-native weeds;

    b. English Ivy (Hedera helix);

    c. Himalayan blackberry (Rubus discolor, R. procerus); and

    d. Evergreen blackberry (Rubus laciniatus).

10. Emergency or hazard tree removal conducted so that habitat impacts are minimized.

a. The method of hazardous tree removal shall be considered so as not to adversely affect ecosystem functions to the extent practicable. The creation of snags is encouraged rather than complete tree removal. Avoidance and minimization of damage to adjacent trees and vegetation within critical areas should be prioritized and evaluation by a qualified arborist shall occur prior to any of the aforementioned actions. 11. Public improvement projects located within existing impervious surface areas.

12. Public agency and utility exemption.

13. Area Threshold. Any exempt activity that disturbs more than five hundred (500) square feet of land within or adjacent to a mapped critical area or its buffer shall require, prior to commencement of the activity, a written letter from a qualified professional confirming either: (a) that no critical area or buffer regulated under this chapter is present onsite or on adjacent properties.; or (b) identifying the critical area or buffer present and confirming that the proposed exempt activity will not alter, encroach upon, or degrade the critical area or its buffer. The administrator's determination that an activity qualifies for an exemption under this section is not a finding that no critical area is present on or near the site, and does not relieve the applicant of the substantive obligation to avoid and minimize impacts to any critical area or buffer.

B. Exemption Request and Review Process. The proponent of the activity shall submit a completed exemption request form to the building official that describes the activity and states the exemption listed in this section that applies. The administrator shall review the exemption request to verify that it complies with this chapter and approve or deny the exemption. If the exemption is approved, it shall be placed on file with the department and the requesting party notified. If the exemption is denied, the proponent may continue in the review process and shall be subject to the requirements of this chapter.

C. Minimize Impacts. Exempt activities shall minimize impacts to critical areas. All exempted activities shall use reasonable methods to avoid potential adverse impacts to critical areas. To be exempt from this chapter does not give permission to degrade a critical area or buffer or ignore risk from natural hazards. Any incidental damage to, or alteration of, a critical area or buffer that is not a necessary outcome of the exempted activity shall be restored, rehabilitated, or replaced at the responsible party's expense. No exemption under this section shall relieve an applicant of the obligation to submit a Critical Areas Report where the proposed activity is within or adjacent to a critical area or its buffer, unless it has been determined by a qualified professional in writing that no known critical area or buffer is present onsite or on adjacent properties. The administrator's determination that an activity qualifies for an exemption is not a finding that no critical area is present and confers no immunity from the substantive standards of this chapter. Where a qualified professional's written confirmation is required under this section, that confirmation shall be retained on file with the department and shall be made available for public inspection.

(Ord. No. 651, § 1, 10-10-23)

14.10.080 Reasonable use exception.

A. **Purpose and Intent.**

This section establishes a process by which an applicant may seek relief from the standards of this chapter upon a demonstration that strict application of those standards would deny all reasonable economic use of the property. A reasonable use exception is not a categorical entitlement and shall not be granted without a site-specific showing that the approval criteria in Section 14.10.080.D are satisfied. The administrator shall apply the standards of this chapter to the maximum extent practicable to avoid and minimize adverse impacts on the functions and values of critical areas and buffers. Mitigation of impacts consistent with this chapter is required for all approved exceptions.

B. **Application Requirements.**

1. **Critical Areas Report Required.** All reasonable use exception applications shall include a Critical Areas Report (CAR) prepared by a qualified professional, regardless of the pre-existing status of the lot or any notation on a recorded plat. Field verification of the presence, type, and extent of critical areas on or adjacent

to the subject parcel is required and shall not be substituted by reference to plat maps, prior surveys, or the absence of critical area notation on a recorded plat.

2. **No-Net-Loss Demonstration Required.** All reasonable use exception applications shall include a demonstration that the proposed development will result in no net loss of critical area functions and values, consistent with the mitigation sequencing requirements of this chapter. Where avoidance is not possible, a Habitat Management Plan (HMP) shall be submitted alongside the CAR.

3. **Application Contents.** A reasonable use exception application shall include:

   a. A description of all critical areas on or adjacent to the site, based on field verification by a qualified professional;

   b. A description of the proposed development, including a scaled site plan;

   c. An analysis of the impact the proposed development would have on the critical area(s) and associated buffers;

   d. An analysis of whether any other reasonable use with less impact on the critical area(s) and associated buffer(s) is feasible;

   e. A demonstration that the proposal is designed to have the least practicable impact on the critical area(s);

   f. An analysis of modifications needed to the standards of this chapter to accommodate the proposed development;

   g. A description of any modifications needed to required setbacks, building height, and buffer widths; and

   h. Such other information as the administrator determines is reasonably necessary to evaluate the request.

C. Types of Development That May Qualify.

The following types of development may be considered for a reasonable use exception, subject to the application requirements of Section 14.10.080.3 and the approval criteria of Section 14.10.080.D. Inclusion in this list does not create a presumption of approval or relieve an applicant of the obligation to demonstrate that all approval criteria are met on a site-specific basis:

1. **Single-family residence.** Placement or modification of one single-family residence and normal accessory structures on a buildable legal lot of record, where no other building configuration with less impact on critical areas is feasible. The administrator shall employ reasonable discretion in limiting the proposed location, size, and footprint of structures and the removal of native vegetation.

2. **Home or accessory structure expansion.** Expansion of a home or accessory structure, not to exceed fifty percent of the existing building footprint, where the expansion cannot be sited outside the critical area or buffer.

3. **Replacement dwelling.** Replacement of a dwelling with another dwelling and normal accessory structures, consistent with NMC __ ____ and _____.

4. **Fire hazard vegetation clearing.** Vegetation clearing recommended by the fire marshal, or consistent with written fire marshal or fire chief guidelines, where such clearing would occur within or adjacent to a critical area or its buffer. Fire hazard clearing within or adjacent to a critical area shall require, at minimum, a CAR and an HMP prior to any clearing activity. The HMP shall identify measures to minimize habitat impacts, retain the maximum feasible native vegetation cover, and provide for restoration of disturbed areas following clearing. Clearing shall be limited to the minimum area necessary to achieve the identified fire hazard reduction objective.

D. **Approval Criteria.**

The administrator shall approve a reasonable use exception only when all of the following criteria are demonstrated by the applicant on a site-specific basis:

1. Strict application of the standards of this chapter would deny the applicant all reasonable economic use of the property;
2. There is no other feasible use of the property, and no alternative configuration of the proposed development, that would have less impact on the critical area(s) and associated buffer(s);
3. The proposed development does not pose a threat to public health, safety, or welfare on or off site;
4. Any alteration of the critical area(s) is the minimum necessary to allow for reasonable use of the property;
5. The proposed development will not result in a "take" of a threatened or endangered species under state or federal law;
6. The inability of the applicant to derive reasonable use of the property is not the result of actions by the applicant in subdividing the property or adjusting a boundary line after the effective date of this chapter; and
7. The proposal mitigates impacts on the critical area(s) to the maximum extent possible, consistent with the no-net-loss standard, while still allowing reasonable use of the site. The applicant shall prepare and implement a mitigation and monitoring plan consistent with NMC _____.

E. **General and Administrative Requirements.**

The administrator shall prepare and maintain application forms necessary to implement this section. Preliminary review of a proposed reasonable use exception shall be conducted in accordance with NMC _____ Applications shall be reviewed for completeness in accordance with city submittal standards checklists.

14.10.090 Best Available Science.

Critical area reports and decisions to alter critical areas shall rely on the Best Available Science to protect the functions and values of critical areas and must give special consideration to conservation or protection measures necessary to preserve or enhance anadromous fish and their habitat. Best Available Science is scientific information applicable to the critical area prepared by local, state or federal natural resource agencies, a qualified scientific professional or team of qualified scientific professionals that is consistent with criteria established in WAC 365-195-900 through WAC 365-195-925.

(Ord. No. 651, § 1, 10-10-23)

14.10.100 Critical Area Report Standards and Requirements.

A. Preparation by Qualified Professional. Any required Critical Areas Report shall be prepared by a qualified professional as defined herein.

B. General Critical Areas Report Contents. At a minimum, the Critical Areas Report shall contain the following:

1. The name and contact information of the applicant, a description of the proposal, and identification of the permit requested;

2. A copy of the site plan for the development proposal including:

    a. A map to scale depicting critical areas, buffers, the development proposal, and any areas to be cleared; and

    b. Proposed stormwater management and sediment control plan for the development including a description of any impacts to drainage alterations; and

    c. The dates, names, and qualifications of the persons preparing the report and documentation of any fieldwork performed on the site;

3. Identification and scientific characterization of all critical areas and buffers. The scientific characterization shall include a detailed assessment of the functional characteristics of the critical areas;

4. An assessment of the probable impacts to critical areas and buffers and risk of injury or property damage including permanent, temporary, temporal, and indirect impacts resulting from development of the site and the operations of the proposed development;

5. Plans for adequate mitigation, as needed, to offset any impacts, in accordance with this chapter. The applicant is required to demonstrate that all reasonable efforts have been made to avoid and minimize impacts to critical areas, in the following sequential order of preference:

    a. Avoiding the impact altogether by not taking a certain action or parts of an action;

b. Minimizing impacts by limiting the degree or magnitude of the action and its implementation, by using appropriate technology, or by taking affirmative steps to avoid or reduce impacts;

c. Rectifying the impact by repairing, rehabilitating, or restoring the affected environment;

d. Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action;

e. Compensating for the impact by replacing, enhancing, or providing substitute resources or environments; and/or

f. Monitoring the impact and taking appropriate corrective measures.

6. Any additional information required for the specific critical areas and buffers as specified in NMC _____ Fish and Wildlife Habitat Conservation Area, NMC _____ Frequently Flooded Areas, NMC _____ Geologic Hazard Areas, and NMC _____ Wetlands.

7. The applicant may consult with the Planning Advisor prior to or during preparation of the Critical Areas Report to obtain city approval of modifications to the required contents of the report where, in the judgment of a qualified professional, more or less information is required to adequately address the potential impacts to any critical areas or buffers and the required mitigation. The Planning Advisor may also initiate a modification to the required report contents by requiring either additional or less information, when determined to be necessary to the review of the proposed activity in accordance with this chapter.

C. Mitigation Plan Requirements.

Approval. Administrator approval of a mitigation plan is prerequisite for approval of any development activity on critical areas.

When mitigation is required, the applicant shall submit a mitigation plan as part of the Critical Areas Report. The mitigation plan shall include:

1. Detailed Construction Plans.

2. The mitigation plan shall include descriptions of the mitigation proposed, such as:

a. The proposed construction sequence, timing, and duration;

b. Grading and excavation details;

c. Erosion and sediment control features;

d. A planting plan specifying plant species, quantities, locations, size, spacing, and density; and

e. Measures to protect and maintain plants until established.

C. The mitigation plan shall include a program for monitoring construction of the mitigation project and for assessing a completed project. A protocol shall be included outlining the schedule for site monitoring, and how the monitoring data will be evaluated to determine if the performance standards are being met. A monitoring

report shall be submitted as needed to document milestones, successes, problems, and contingency actions of the mitigation project. The mitigation project shall be monitored for a period necessary to establish that performance standards have been met, but not for a period less than five (5) years. For forested and scrub-shrub communities ten (10) years or more of monitoring are needed. When the applicant believes that the conditions of the monitoring plan are met, the applicant shall contact the City and request that the City verify and certify so in writing. The City shall conduct an on-site assessment as part of the verification process. The applicant shall provide reasonable access to the property as necessary for verification and certification. These written descriptions shall be accompanied by detailed site diagrams, scaled cross sectional drawings, topographic maps showing slope percentage and final grade elevations, and any other drawings appropriate to show construction techniques or anticipated final outcome.

D. **Mitigation Hierarchy and Compensation Ratios.**

1. **Mitigation Hierarchy.** Mitigation activities shall be selected and sequenced in order of preference based on the degree of ecological uplift provided. In descending order of preference, mitigation activities are:

   a. Reestablishment — restoring a wetland or fish and wildlife habitat conservation area (FWHCA) to a pre-disturbance condition, providing the greatest functional and areal gain;

   b. Rehabilitation — improving the condition of an existing degraded wetland or FWHCA;

   c. Creation — establishing a wetland or FWHCA in a location where one did not previously exist;

   d. Enhancement — improving specific functions of an existing wetland or FWHCA, recognizing that other functions may be reduced; and

   e. Preservation — protecting an existing high-quality wetland or FWHCA through legal mechanisms such as conservation easements. The applicant shall demonstrate that higher-preference mitigation activities were considered before selecting lower-preference activities, and shall provide written justification when a lower-preference activity is proposed.

2. **Compensation Ratios.** Mitigation ratios shall reflect the relative ecological uplift of the proposed mitigation activity and the functional quality of the impacted area. Higher ratios shall be required for mitigation activities that provide lesser ecological uplift (e.g., enhancement or preservation) and for impacts to high-functioning FWHCAs. The mitigation plan shall specify the compensation ratio applied and provide justification based on the mitigation activity type, the ecological functions of the impacted area, and any applicable guidance from the Washington Department of Fish and Wildlife.

3. **Preservation Limitation.** Preservation alone shall not be accepted as sufficient mitigation for impacts to high-functioning FWHCAs, as defined in NMC ____. Preservation may be used only as a supplemental component of a mitigation

package that includes reestablishment, rehabilitation, creation, or enhancement.

14.10.___ Selective timber harvesting on critical lands.

A. Applicability. Consistent with RCW 76.09.240, the administrator extends its planning and zoning jurisdiction over forest practices in critical areas to the extent that:

1. Commercial forestry activity occurs on lands identified as critical areas on the city's adopted critical areas maps;
2. An application submitted under RCW 76.09.060 indicates that the lands will be converted to a use other than commercial timber productions;
3. The subject lands were platted after January 1, 1960; and
4. Consistent with the adopted Napavine comprehensive plan, the City of Napavine presumes that any application for commercial timber harvest within the Napavine urban growth boundary that is subject to Chapter 76.09 RCW et seq. is for the purpose of converting forested lands into urban lands.

B. Standards. Selective commercial timber harvesting may be permitted on critical areas subject to the following standards:

1. Written Plan Required. Trees to be removed shall be identified in a plan drawn to scale and shall be clearly marked prior to their removal. An applicant shall present a written plan explaining in detail the location of trees to be removed and the method of removal, administrator for review and approval.
2. Prior to approval of a harvesting permit, the applicant shall prepare and sign an agreement with the city stating that no development application shall be filed on the subject property, other than a single-family residence, for six years following completion of timber harvesting operations. The agreement shall run with the land. The city council shall review the agreement and upon approval, the applicant shall record the agreement with Lewis County and provide the city with a copy of the recorded instrument.
3. Selective tree removal on critical lands shall not result in loss of more than fifty percent of existing tree canopy covering critical areas.
4. The applicant shall demonstrate that the methods used for tree harvesting and removal are the least disruptive practicable.
5. Operations shall be limited to the dry season, that is, from May 1 through October 30.
6. Applicants for selective timber harvesting shall prepare an erosion control plan for review and approval by administrator and if the plan is approved shall comply with the plan during harvesting activity and shall maintain required erosion control mechanisms for a period of one hundred eighty days after completion of the timber removal project.

C. Conditions. The administrator may recommend conditions of approval necessary to minimize adverse impacts on natural resource values, including water quality and

wildlife habitat to the extent that such conditions are consistent with the Napavine comprehensive plan.

(Ord. No. 651, § 1, 10-10-23)

14.10.___ Bonds to insure mitigation, maintenance and monitoring.

A. When mitigation required pursuant to a development proposal is not completed prior to the final permit approval, such as final plat approval or final building inspection, the administrator shall require the applicant to post a performance bond or other security in a form and amount deemed acceptable by the administrator. If the development proposal is subject to mitigation, the applicant shall post a performance bond and a mitigation bond or other security on a form and amount deemed acceptable by the administrator to ensure mitigation is fully functional.

B. The bond shall be in the amount of one hundred twenty-five percent of the estimated cost of the uncompleted actions or the estimated cost of restoring the functions and values of the critical areas that are at risk, whichever is greater and the cost of maintenance and monitoring for a ten-year period.

C. The bond shall be in the form of an assignment of savings account, an irrevocable letter of credit guaranteed by an acceptable financial institution with terms and conditions acceptable to the city attorney or other method acceptable to the planning administrator.

D. Bonds or other security authorized by this section shall remain in effect until the administrator determines, in writing, that the standards bonded for have been met. Mitigation bonds or other security shall be held by the city for a minimum of ten years to ensure that the required mitigation has been fully implemented and demonstrated to function and may be held for longer periods when necessary.

E. Depletion, failure or collection of bond funds shall not discharge the obligation of an applicant or violator to complete required mitigation, maintenance, monitoring of restoration.

F. Public development proposals shall be relieved from having to comply with the bonding requirements of this section if public funds have previously been committed for mitigation, maintenance, monitoring or restoration.

G. Any failure to satisfy critical area requirements established by law or condition including, but not limited to, the failure to provide a monitoring report within thirty days after it is due or comply with other provisions of an approved mitigation plan shall constitute a default and the administrator may demand payment of any financial guarantees of require other action authorized by the city code or any other law.

H. Any funds recovered pursuant to this section shall be used to complete the required mitigation, maintenance or monitoring.

(Ord. No. 651, § 1, 10-10-23)

Article II. Development Standards

14.10.___ Development standards.

A. Authorization Required. Within critical areas, the administrator shall prohibit soil excavation, grading, removal of native vegetation species, draining, intentional burning, planting of invasive or nuisance vegetation, placement of structures and new construction on critical areas unless otherwise authorized in this chapter.

   1. These development standards apply to uses on all critical areas and within buffers unless otherwise exempted in this title.

(Ord. No. 651, § 1, 10-10-23)

Article III. Critical Areas

14.10. ___ Critical Aquifer Recharge Areas.

A. Critical Aquifer Recharge Areas. This section provides standards for the "Critical Aquifer Recharge Area" type of critical area and is applied pursuant to the general critical area regulations and processes in NMC Chapter 14.10.___

   1. Applicability. Due to the exceptional susceptibility and/or vulnerability of ground waters underlying aquifer recharge areas to contamination and the importance of such ground waters as sources of public water supply, it is the intent of this chapter to safeguard ground water resources by mitigating or precluding future discharges of contaminants from new land use activities. The provisions of this chapter shall apply to regulated activities specified herein within those portions of the Napavine UGA.

   2. Designation. Lands within the Napavine UGA meeting the classification criteria for aquifer recharge areas are hereby officially designated, pursuant to the mandate of RCW 36.70A.060 and 36.70A.170 as critical aquifer recharge areas (CARAs).

      a. Critical aquifer recharge areas are categorized as follows:

         i. Category I – Category I critical aquifer recharge areas are those areas that are within a mapped 10-year time-of-travel area for a Group A public water system. If the 10-year time-of travel is not available, the location of the Category I area shall be determined based on the largest mapped time-of-travel area available.

         ii. Category II – Category II critical aquifer recharge areas are those areas with highly permeable soils that provide rapid recharge with limited groundwater protection.

iii. Category III – Category III aquifers are locations with aquifers present, but which have a surface soil material that encourages runoff, slows water entry into the ground, or provides some filtration of water.

b. The approximate location and extent of critical aquifer recharge areas are shown on the adopted critical areas maps (see the Napavine Comprehensive Plan). These maps are to be used as a guide for the city, project applicants, and/or property owners and may be continuously updated as new critical areas are identified. They are meant to be used as a reference and do not provide a final, site-specific critical area designation.

3. Aquifer Recharge Areas—Rating System Determinations. In cases of disputed soil series, or series boundary and resulting aquifer recharge category, the administrator shall use all available information including reports by the United States Geological Survey and technical assessments submitted in accordance with this chapter to make the final determination. This may include consultation with USDA Natural Resource Conservation Service, the Washington Department of Natural Resources Division of Geology and Earth Resources or a soil scientist certified by the American Registry of Certified Professionals in agronomy, crops and soils. In areas that have been disturbed or the surface soil removed as in gravel pits, the administrator shall determine the most appropriate category with geological and hydrological information.

4. Demonstration of No Adverse Impact. The applicant shall demonstrate, through the land use approval process, that the proposed activity will not have any adverse impacts on ground water in critical aquifer recharge areas, based on the Safe Drinking Water Act and the Wellhead Protection Area Program, pursuant to Public Water Supplies, Chapter 246-290 WAC; Water Quality Standards for Ground Waters of the State of Washington, Chapter 173-200 WAC; and Dangerous Waste Regulations, Chapter 173-303 WAC. By this reference, Chapters 173-200, 173-303, and 246-290 WAC, as written and hereafter updated will be part of this chapter.

5. Mitigation Conditions. The administrator may impose any reasonable condition necessary to ensure that the specific use or activity will not significantly degrade ground water quality. Such conditions may include, but are not limited to the following:

   a. A written management plan for wastewater, hazardous products and hazardous waste, petroleum products and petroleum waste and other materials judged by the administrator to be detrimental to ground water quality, that when implemented using best management practices, will prevent ground water contamination;

   b. Upgrading available on-site spill response equipment;

   c. Employee spill response training;

   d. Emergency service coordination measures; and

   e. Ground water monitoring; and

f. The use of site design or other approaches that limit the amount of impervious surfaces on the project site.

6. Critical Area Report Requirements for Critical Aquifer Recharge Areas.

Critical area reports for critical aquifer recharge areas must include the following information unless the administrator determines that any portion of the requirements are unnecessary given the scope of the proposed development activity.

a. A site plan that shows:

i. Existing physical features of the site including buildings, fences, and other structures, roads, parking lots, utilities, water bodies, etc.

ii. A detailed description of the proposed development including features such as the location of utilities, parking and access, the limits of grading and vegetation removal, and the location of any existing and proposed buildings.

iii. An identification of critical areas and buffers within 300 feet of the site, and an estimate of the existing approximate acreages for each. Assessment of off-site critical areas shall be based on available information and shall not require access to off-site properties.

b. The following additional information:

i. Available information regarding geologic and hydrogeologic characteristics of the site, including the surface location of all critical aquifer recharge areas on-site and immediately adjacent to the site, the permeability of the unsaturated zone, and the presence of any confining layers.

ii. Ground water depth, flow direction and gradient based on available information.

iii. Currently available data on wells and springs within 1,300 feet of the project area.

iv. Existing and available historic water quality data for the area to be affected by the proposed activity.

v. The effects of the proposed project on ground water quality and quantity, including:

A. Potential effects to stream flow, wetlands and/or other resources, and ecosystem processes.

B. A predictive evaluation of ground water withdrawal effects on nearby wells and surface water features.

C. A predictive evaluation of the transport of contaminants to ground waters in the event of a spill based on existing confining layers, the availability of centralized wastewater treatment, the nature of the

chemicals and/or processes utilized in the proposed activity, and other features.

vi. Proposed best management practices to preserve ground water quality and quantity, including how the proposal best meets any local, state, or federal guidance or standards.

vii. A spill plan that identifies equipment and/or structures that could fail and result in an impact to groundwater. Spill plans should include emergency response provisions as well as items that address regular inspection, and the repair and/or replacement of structures and equipment that could fail.

14.10.190 Fish and Wildlife Habitat Conservation Areas

Fish and Wildlife Habitat Conservation Areas. This section provides standards for the "Fish and Wildlife Habitat Conservation Area" type of critical area and is applied pursuant to the general critical area regulations and processes in NMC Chapter 14.10.

A. Purpose and Intent. Fish and Wildlife Habitat Conservation Areas (FWHCAs) are areas that serve a critical role in sustaining needed habitats and species for the long-term maintenance of wildlife, wildlife habitat, and biodiversity within the city of Napavine and the surrounding Newaukum River watershed. FWHCAs provide ecological functions for fish and wildlife including breeding, rearing, feeding, migration, and shelter, and are designated pursuant to RCW 36.70A.060 and WAC 365-190-130.

   The Newaukum River, which flows through and adjacent to Napavine, supports state-planted game fish populations and provides habitat connectivity to downstream anadromous fish runs. Riparian corridors, wetlands, and upland habitat areas within the city contribute to the health of this watershed and to the regional habitat network of the Chehalis Basin.

   Riparian fish and wildlife habitat conservation areas perform five key ecological functions that are essential to the health of aquatic and terrestrial ecosystems and that this chapter is specifically designed to protect:

   1. Shade provision — riparian vegetation regulates stream water temperatures by intercepting solar radiation, maintaining the cool water conditions necessary for salmonid and other coldwater fish survival;
   2. Root strength and bank stability — root systems of riparian trees and shrubs bind streambank soils, resist erosive forces, and prevent channel widening and sedimentation;
   3. Nutrient and organic matter input — riparian vegetation contributes leaf litter, insects, and other organic material that form the base of aquatic food webs;
   4. Large wood recruitment — riparian trees contribute large woody debris to stream channels, creating habitat complexity, pool formation, and spawning gravel sorting essential to fish life history; and
   5. Pollution control — riparian buffers intercept and filter sediment, nutrients, pesticides, and other pollutants from upland runoff before they enter the stream channel.

No development shall be approved under this chapter that would result in a net loss of any of these five functions individually. Mitigation designed to compensate for impacts to one function shall not be deemed sufficient to offset impacts to a different function.

The purpose of this section is to:

1. Designate and protect fish and wildlife habitat conservation areas from incompatible land uses and development activities;
2. Preserve the functions and values of FWHCAs including water quality, habitat connectivity, bank stability, temperature regulation, and support for priority species;
3. Achieve no net loss of FWHCA functions and values within the city; and
4. Implement the requirements of the Washington State Growth Management Act (RCW 36.70A) and the Department of Commerce critical areas guidance for fish and wildlife habitat conservation areas.

This section provides standards for the Fish and Wildlife Habitat Conservation Area type of critical area and is applied pursuant to the general critical area regulations and processes in NMC Chapter 14.10.

B. Applicability.

This section applies to all development proposals and land use activities that are located within, adjacent to, or likely to affect a designated fish and wildlife habitat conservation area or its required buffer. Subject activities include but are not limited to:

1. New development and redevelopment, expansion, or alteration of structures or impervious surfaces;
2. Land clearing, grading, filling, excavation, or vegetation removal within or adjacent to a FWHCA or buffer;
3. Installation of utilities, roads, trails, drainage facilities or other infrastructure;
4. Subdivision and short subdivision of land;
5. Changes in land use that would increase impervious surface coverage or reduce native vegetation; and
6. Any other activity for which a permit, approval, or environmental review is required under city, state, or federal law when that activity may affect a FWHCA.
7. Activities expressly exempted under NMC 14.10 general critical area provisions are not subject to this section.
8. Type S waters constituting shorelines of the state are not critical areas under this chapter and are regulated exclusively under the City's Shoreline Master Program pursuant to RCW 36.70A.480 and RCW 90.58.610.

C. Fish and Wildlife Habitat Conservation Area Categories and Designations.

Fish and wildlife habitat conservation areas are designated as set forth in this chapter using the WDFW Priority Habitat Species List adopted by reference as amended, per NMC _____ and Department of Natural Resources jurisdictional waters

within Napavine. The city's critical areas maps serve as a general reference; field conditions and current agency data govern designation.

1. Riparian Areas and Streams. Streams shall be classified using the Water Typing System (WAC 222-16-030 or WAC 222-16-031, whichever is in effect on the date of application) as set forth in Table 14.10.____ below. Erosion gullies or rills, man-made streams, streams less than six inches wide, and streams without a defined bed and/or bank are not included.

Table 14.10.____	
Classifications WAC 365-190-130	Description
(1) Areas with which state designated endangered, threatened, or sensitive species have a primary association. Example: Newaukum River.	Areas which, if significantly altered, may reduce the likelihood that the species will reproduce over the long term. Habitats associated with these species are protected and considered by the Washington Department of Fish and Wildlife as Priority Habitats and Species, (WDFW PHS on the Web Application). Species and habitats identified or mapped within 300 feet of a project site are designated as jurisdictional critical areas.
(2) Species and habitats of local importance.	Habitat: Unique or significant habitats which regionally rare wildlife species depend upon and that have high wildlife concentrations, including but not limited to: Caves, Talus slopes, Snag rich areas (outside forest practices), Oregon White Oak Woodlands, Freshwater Wetlands. Species: Wildlife species which require protective measures for their continued existence due to their population status or sensitivity to habitat alterations or are highly valued by the local citizens. Species meeting the above criteria but not depending upon a habitat of local importance (as listed above) to meet criteria habitat needs are those

	documented, verified, and mapped in the City of Napavine (WDFW PHS on the Web Application).
(3) Reserved.	
(4) Naturally occurring ponds under twenty acres and their submerged aquatic beds that provide fish or wildlife habitat.	Naturally occurring ponds with a surface area of less than twenty acres but greater than one acre. Naturally occurring ponds do not include ponds deliberately created from dry sites such as canals, detention facilities, wastewater treatment facilities, farm ponds, temporary construction ponds (of less than three years' duration), and landscape amenities. However, naturally occurring ponds may include those artificial ponds intentionally created from dry areas in order to mitigate conversion of ponds, if permitted by a regulatory authority.
(5) Waters of the state.	Defined in WAC 222-16-030 (Department of Natural Resources Forest Practices Application Mapping Tool): (a) Type S water: Shorelines of the stateunder Chapter 90.58 RCW. Regulated soley under the SMA/SMP, not this CAO. (b) Type F water: Non Type S natural water that are fish bearing. (c) Type Np water:Perennial natural waters within defined channels that are non-fish habitat streams. (d) Type Ns water: seasonal, non-fish habitat streamsnot downstream from Type Np water and physically connected to Type S, F, or N waters.
(6) Lakes, ponds, streams, and rivers planted with game fish by a governmental agency or tribal entity.	The Newaukum River is planted with game fish by governmental agencies (in a program associated with Newaukum High School students).
(7) State natural area preserves and natural resource conservation areas.	Currently, there are no natural resource conservation areas within the City of Napavine.
(8) Unintentionally created ponds.	Ponds with a surface area of less than 20 acres, but greater than one acre. This designation does not include ponds in

	which existing and ongoing operations are occurring for mining or other permitted activity.

D. Delineation Methodology.

1. General. FWHCA boundaries shall be established in the field using methodology appropriate for the habitat or species type. The City's critical areas maps (Exhibit A) and current WDFW PHS on the Web Application shall be the initial reference. Where site conditions differ from mapped data, field-verified conditions and current agency information control.

2. Priority Habitats and Species (Categories 1 and 2). Presence, location, and extent shall be determined by: (i) review of the current WDFW PHS List (adopted by reference as amended); (ii) review of WDFW PHS on the Web Application for mapped occurrences within 300 feet of the project site; (iii) field surveys by a qualified professional using appropriate methodologies for the target species or habitat type; and (iv) coordination with WDFW as appropriate.

3. Naturally Occurring and Unintentionally Created Ponds (Categories 4 and 8). Boundaries shall be delineated at the ordinary high-water mark. A qualified professional shall confirm pond origin and whether surface area exceeds the one-acre minimum threshold using field measurement and survey.

4. Waters of the State (Category 5). Stream and water type classifications shall be determined by a qualified professional per WAC 222-16-030 or WAC 222-16-031 (whichever is in effect on the date of application), using the DNR Forest Practices Application Mapping Tool as a reference. Type S waters are not critical areas under this chapter (see §AB.2.c). Portions of Hamilton and Greenleaf Creeks upstream of the 20 cfs mean annual flow point are not SMA streams and shall be classified under this CAO as Type F or Type N waters per WAC 222-16-030. Stream type shall be field-verified where mapping is inconclusive.

5. Game Fish Waters (Category 6). Presence of governmental or tribal game fish planting shall be determined by review of applicable stocking records from WDFW or the relevant tribal authority.

E. Buffer and Protection Standards.

1. Riparian buffer widths. Riparian buffers are established for habitats to protect the functions and values of streams and their riparian corridors, including shade provision, root strength, bank stability, nutrient and organic matter input, large wood recruitment, and pollution control. Unless otherwise allowed in this chapter, all structures and activities shall be located outside of the riparian buffer area. Base buffer widths in Table 21.10.070-8 are established based on best available science consistent with WDFW Volume 1 Best Available Science guidance for riparian buffer widths under the GMA/CAO framework and reflect the permanent impact profile of development as distinct from temporary timber harvest impacts. upon the Washington Department of Natural Resources (DNR) Water Typing System and further classification based upon fish presence (Fish bearing v. Non-fish Bearing) for Type F streams. Buffer areas shall be sufficiently wide to achieve the full range of riparian and aquatic ecosystem functions, which include but are not limited to protection of instream fish habitat through control of temperature and sedimentation in streams; preservation of fish and wildlife habitat; and connection of riparian wildlife habitat to other habitats.

2.. Stream Types. Water types are defined and mapped based on WAC 222-16-030 or 222-16-031, whichever is in effect on the date of application. Type S waters include shorelines of the state and have flows averaging twenty or more cubic feet per second, regulated exclusively under the SMP, not this CAO; Type F waters are those that are non-Type S but still provide fish habitat; Type Np waters are perennial non-fish habitat streams; and Type Ns waters are seasonal non-fish habitat streams. Erosion gullies or rills, and streams which are man-made, or streams less than six inches wide or not having a defined bed and/or bank are not included.

43 Habitat Buffers. Habitat conservation areas and buffers are assigned to the lands and regulated by this section according to Table 14.10.____, Development activities are restricted within riparian buffer areas as indicated in Table 14.10. 14.10.____.

4. Riparian Management Zone (Buffer).

   a. Functionally Isolated Buffer Areas. Areas which are functionally separated from a stream and do not protect the stream from adverse impacts due to pre-existing roads, structures or vertical separation shall be excluded from buffers otherwise required by this chapter.

   b. Buffers Generally. Regulated activities proposed along rivers and streams shall provide for habitat protection.

      i. The riparian ecosystem buffer is generally an area of no building consisting of undisturbed natural vegetation. The buffer shall be required along all streams as classified by the DNR water typing classification system (WAC 222-16-030). The buffer shall extend landward from the ordinary high-water mark of the water body.

      ii. The buffer of a river or stream shall not extend landward beyond an existing substantial improvement such as an improved road, dike, levee,

or a permanent structure which reduces the impact proposed activities would have on the river or stream.

c. Marking of the Buffer Area. The edge of the buffer area shall be clearly staked, flagged and fenced prior to and through completion of the construction. The buffer boundary markers shall be clearly visible, durable and permanently affixed to the ground.

d. Fencing from Farm Animals. Permanent fencing shall be required from the buffer when farm animals are introduced on a site.

e. Riparian base buffers are enumerated below in Table 14.10.___:

Table 14.10.____ Riparian Management Zone (Buffer)	
Riparian Areas Type	Base Buffer Width
Type S (fish bearing)	See SMP
Type F (fish bearing)	200 feet
Type F, non-anadromous fish bearing stream	150 feet
Type Np streams (perennial non fish bearing)	75 feet
Type Ns stream (seasonal non fish bearing)	50 feet

4. Riparian Buffer. Development or clearing activity may occur in the riparian buffer, provided that mitigation results in no net loss of riparian habitat functions on the site, and further, that functionally significant habitat, defined as habitat that cannot be replaced or restored within twenty years, such as mature trees,shall be preserved unless the clearing or development activity cannot feasibly be located on the site outside of the riparian buffer.

5. Isolated Riparian Habitat Areas. When impervious surfaces from previous development (roads, permanent buildings, etc.) or flood control structures, such as levees, completely functionally isolate the riparian area from the watercourse, the riparian buffer shall extend from the ordinary high-water mark to the impervious surfaces, or toe of the flood control structure. If the watercourse is not completely physically isolated, but is completely functionally isolated, the Director may adjust the RHA to reflect site conditions and best available science.

6. Buffer Width Averaging. The community development director or designee may allow buffer width averaging in accordance with an approved critical area report on a case-by-case basis. Buffer width averaging shall not be used in combination with buffer width reduction or a minor exception on the same buffer segment to reduce the minimum buffer width below that specified in this chapter. Averaging of buffer widths may only be allowed where a qualified ecologist or biologist demonstrates that:

   a. Such averaging will not reduce functions or functional performance; and

   b. The fish and wildlife habitat conservation area varies in sensitivity due to existing physical characteristics or the character of the buffer varies in slope,

soils, or vegetation, and the wetland would benefit from a wider buffer in places and would not be adversely impacted by a narrower buffer in other places; and

c. The total area contained in the buffer area after averaging is no less than that which would be contained within the standard buffer; and

d. The buffer width is reduced by no more than fifty percent of the standard width and at no point to less than twenty-five feet.

e. Any buffer area widened to offset a reduction through averaging shall be permanently protected in perpetuity through a deed restriction, conservation easement, or other legally binding mechanism recorded with Lewis County prior to permit issuance.

7. Buffer Width Reduction. The community development director or designee may authorize the reduction of required buffer widths to a lesser width provided that an applicant demonstrates compliance with the following:

   a. Written evidence prepared by a qualified ecologist or biologist addressing the proposed buffer width reduction and demonstrating how the reduced buffer will enhance the functions and values of the fish and wildlife habitat conservation area.

   b. The buffer width is reduced by no more than fifty percent of the standard width and at no point to less than twenty-five feet.

   c. The remaining buffer area shall be planted with a mixture of native vegetation pursuant to an approved landscape plan prepared by a qualified ecologist or biologist certifying that the plantings to be used in the remaining buffer area will compliment and support the functions and values of the fish and wildlife habitat conservation area.

   d. The remaining buffer area shall be managed by the applicant or applicant's successor in interest for a minimum of three years following the administrator's final acceptance of any portion or phase of the project. A detailed management plan prepared by a qualified ecologist or biologist shall be submitted for review and approval prior to the administrator's authorization of any on-site construction, unless otherwise authorized by the community development director or designee. The detailed management plan shall address among other things the replanting of dead or dying plant material, the contents and submittal to the city of annual monitoring report prepared by a qualified ecologist or biologist with the cost of this report to be borne entirely by the applicant or applicant's successor in interest and methods to address any identified problems with the buffer's support of the functional value of the fish and wildlife habitat conservation area.

   e. Buffer width reduction shall not be used in combination with buffer width averaging on the same buffer segment.

f. Where multiple resources exist on a property or site, the community development director or designee may authorize the use of buffer width averaging and buffer width reduction on different resources on the property or site provided that any required scientific analysis or reporting addresses and supports the separate use.

8. Buffer Maintenance. Except as otherwise specified or allowed in accordance with this chapter, buffers for fish and wildlife habitat conservation areas shall be maintained according to the approved critical area permit.

9. Buffer Uses. The following uses may be permitted within a buffer for a fish and wildlife habitat conservation area in accordance with the review procedures of this chapter; provided, they are not prohibited by any other applicable law or regulation and they are conducted in a manner so as to minimize impacts to the buffer and the fish and wildlife conservation area:

   a. Activities allowed under the same terms and conditions as in the associated fish and wildlife habitat conservation areas.

   b. Enhancement and restoration activities aimed at protecting the soil, water, vegetation, or wildlife.

   c. Passive recreation facilities including trails and wildlife viewing structures, provided that the trails and structures are constructed with a surface that does not interfere with hydrology. Trails and paths will be five feet or narrower and constructed using natural, wood-based, or vegetated pervious surfacing.

   d. Stormwater management facilities limited to detention facilities, constructed wetlands, stormwater dispersion swales, may be constructed in accordance with an approved critical area report. 10. Development shall be located and designed to avoid the need for future shoreline armoring, streambank stabilization, bank protection, or channel hardening measures. Development proposals that would foreseeably require such measures due to channel migration, erosion, avulsion, wind or wave action, or climate-driven hydrologic changes shall be prohibited unless no feasible alternative exists and impacts are fully mitigated consistent with no net loss of ecological functions.

F. Critical Areas Report Requirements. A critical area report (CAR) is required where specifically indicated and when an activity is proposed within a fish and wildlife conservation area or buffer that is not specifically exempt or permitted with review. A CAR should be consistent with the following standards:

1. The CAR must be completed by a qualified professional who shall use scientifically valid and professionally recognized and accepted methods and studies or best available science in the analysis of critical area data and field reconnaissance and reference the source of science used. The CAR shall evaluate the proposal and all probable impacts to critical areas in accordance with the provisions of this chapter.

2. Minimum CAR contents. At a minimum the report shall contain the following:

a. The name and contact information of the applicant, the names and address of the qualified professional who prepared the report, a description of the proposal and identification of the permit requested;

b. A copy of the site plan for the development proposal showing;

c. Identified critical areas, buffers and development proposal with dimensions;

d. Limits of any areas to be cleared;

e. A description of the proposed storm water management plan for the development and consideration of impacts to drainage alterations;

f. General location and types of vegetation;

g. The dates, names, and qualifications of the persons preparing the report and documentation of any fieldwork performed on the site;

h. Identification and characterization of all critical areas, wetlands, water bodies and buffers adjacent to the proposed project area;

i. A statement specifying the accuracy of the report and all assumptions made and relied upon;

j. A description of reasonable efforts made to apply mitigation sequencing pursuant to mitigation sequencing, NMC 14.10.____, to avoid, minimize, and mitigate impacts to critical areas;

k. Plans for adequate mitigation as needed to offset any impacts in accordance with mitigation plan requirements, NMC 14.10.____, including but not limited to:

   i. The impacts of any proposed development within or adjacent to a critical area of buffer on the critical area;

   ii. The impacts of any proposed alteration of a critical area or buffer on the development proposal, other properties and the environment;

   iii. A discussion of the performance standards applicable to the critical area and proposed activity;

   iv. Financial guarantees to ensure compliance; and

   v. Any additional information required for the critical area as specified in the corresponding chapter.

l. An evaluation of whether the proposed development, redevelopment, vegetation removal, grading, or associated infrastructure would necessitate streambank stabilization, shoreline armoring, bank protection, or channel hardening measures at the time of development or in the future due to erosion, channel migration, avulsion, wind or wave action, or climate-driven hydrologic changes. The analysis shall consider reasonably foreseeable future conditions and avoidance of impacts to riparian and aquatic habitat functions.

3. Unless otherwise provided, a CAR may be supplemented by or composed in whole or in part of any reports of studies required by other laws and regulations or previously prepared, by a qualified professional for and applicable to the development proposal site as approved by the administrator.
4. The administrator may waive specific requirements of the critical area reports where less information is required to adequately address the impacts to the critical area or where existing information is on file with the city that addresses the impacts.
5. The administrator may require additional information that is necessary to determine compliance with the standards of this chapter.
6. A qualified professional shall be a person who has the education, training, experience and/or certification that meets the specific requirements to evaluate fish and wildlife habitat.
7. Best Available Science. Habitat reports and decisions to alter habitat areas shall rely on the Best Available Science to protect the functions and values of critical habitat areas and must give special consideration to conservation or protection measures necessary to preserve or enhance anadromous fish and their habitat.
8. Mitigation.
    a. Approval. Administrator approval of a mitigation plan is a prerequisite for approval of any development activities within a designated habitat area or habitat buffer.
    b. Application. The applicant shall submit a written application describing the extent and nature of the proposed development activity on critical areas and buffers. The application shall include boundary locations of all critical areas and associated buffers.
        i. The application for development shall include a critical areas report that clearly identifies boundary locations of all critical areas and associated buffers and a mitigation plan prepared in compliance with this section.
        ii. The administrator may require the applicant to prepare special reports evaluating potential adverse impacts upon critical areas and potential mitigation measures as part of the land use application process. These reports may include but are not limited to the following: Storm Water Management Plan, Hydrology, Geology, Soils Report, Grading and Erosion Control Plan, Native Vegetation Report, Fish and Wildlife Assessment and Impact Report, Water Quality Report, Wetlands Delineation and other reports determined necessary by the administrator.
    c. The administrator may consult with state and federal resource management agencies and in order to protect wildlife habitat or natural resource values, shall attach such conditions as may be necessary to effectively mitigate identified adverse impacts of the proposed development activity.

d. The administrator may request third party "peer review" of an application by qualified professionals and may incorporate recommendations from such third-party reports in findings approving or denying the application.

e. All reports proposing mitigation (not including the purchase of mitigation bank credits) shall include provisions for annual monitoring and performance standards for a period of three years minimum, five years being standard, and ten years when the replacement of forested habitat is required or as approved by the administrator for projects with minimal impacts. For example, temporary impacts to herbaceous cover that require reseeding grasses.

f. The administrator may require replacement mitigation to be established and functional concurrent with project construction.

9. No Net Loss.

   a. Mitigation efforts, when allowed, shall ensure that development activity does not yield a net loss of the area or function, including fish and wildlife habitat values of the critical area. The Administrator's preferred approach to mitigating impacts is mitigation sequencing. (See section NMC 14.10.___) No net loss shall be measured by:

      i. Avoidance or mitigation of adverse impacts to fish and wildlife; or

      ii. Avoidance or mitigation of net loss of habitat functions necessary to sustain fish life; or

      iii. Avoidance or mitigation of loss of area by habitat type.

      Where the proposed development would impact riparian habitat, no-net-loss shall be evaluated on a function-by-function basis with respect to the five key riparian functions identified in Section 14.10.190.B, and mitigation shall specifically address each impaired function.

   b. Mitigation to achieve no-net-loss should benefit those organisms being impacted.

   c. Where development results in a loss of habitat area, the mitigation plan shall demonstrate that habitat area is replaced at an equal or greater functional value(s).

      i. Wherever possible replacement or enhancement shall occur on-site.

      ii. However, where the applicant can demonstrate that off-site mitigation will provide greater functional values, the administrator may approve such off-site mitigation.

10. Standard Requirements. All applications requiring review under this section shall have the following minimum conditions applied:

    a. Marking Buffer During Construction. The location of the outer extent of the habitat buffer or if no buffer is required the habitat area shall be marked in the field and such markings shall be maintained throughout the duration of the permit.

b. Permanent Marking of Buffer Area. A permanent and perpetual physical demarcation along the upland boundary of the habitat buffer area shall be installed and thereafter maintained. Such demarcation may consist of logs, a tree or hedgerow, wood or wood like fencing, or other prominent physical marking approved by the Administrator. In addition, signs measuring (minimum size 1 foot × 1 foot and posted 3.5 feet above grade) shall be posted at an interval of one per lot or every one hundred feet, whichever is less, and perpetually maintained at locations along the outer perimeter of the habitat buffer approved by the administrator worded substantially as follows:

"Protected Habitat Area
Do Not Disturb
Contact The City of Napavine
Regarding Uses, Restrictions,
and Opportunities for Stewardship."

14.10.200 Frequently Flooded Areas

A. Frequently Flooded Areas. This section provides standards for the "Frequently Flooded Areas" type of critical area and is applied pursuant to the general critical area regulations and processes in NMC Chapter 14.10.

1. 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 Napavine, Washington" with accompanying FIRM and any revisions thereto are hereby adopted by reference and declared to be a part of this chapter. The flood insurance study is on file at the office of the city clerk/treasurer. The best available science shall be the basis for regulation until a new FIRM is issued which incorporates the data used to inform this chapter.
2. Compliance. No structure or land shall hereafter be constructed, located, extended, converted or altered without full compliance with the terms of this chapter and other applicable regulations.
3. Abrogation and Greater Restrictions. Where this chapter and another code, ordinance, easement, covenant or deed restriction conflict or overlap that which imposes the more stringent restriction shall prevail.
4. Interpretation. In the interpretation and application of this section all provisions shall be:
    a. Considered as minimum requirements;
    b. Liberally construed in favor of the governing body; and
    c. Deemed neither to limit nor repeal any other powers granted under state statutes.

5. Interpretation of FIRM Boundaries. The local administrator, the governing body or its agent or employee may interpret and apply, when necessary, the exact location of the boundaries of the areas of special flood hazards where there appears to be a conflict between a mapped boundary and actual field conditions. Any aggrieved person may contest the location of the boundary and shall be given a reasonable opportunity to appeal the interpretation to the local administrator and then the governing body. Such appeal shall be granted consistent with the standards of Section 1910.6 of the Rules and Regulations of the National Flood Insurance Program located at 24 CFR 1909 et seq.
6. Warning and Disclaimer of Liability. The degree of flood protection required by this chapter is considered reasonable for regulatory purposes and is based upon scientific and engineering considerations. Larger floods can and will occur on rare occasions. Flood heights may be increased by manmade or natural causes. This chapter 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 chapter shall not create liability on the part of the City of Napavine, any officer or employee thereof, or the Federal Emergency Management agency or Federal Insurance Administration for any flood damages that result from reliance on this chapter or any administrative decision lawfully made hereunder.
7. Floodplain (FP) Combining District. A floodplain (FP) combining district is established and shall be applied to all 100-year floodplains identified on the flood insurance study maps, which have been adopted by reference. The land use and siting provisions of these areas shall be in addition to other zoning provisions applied. Two distinct areas are recognized within the FP district: the "floodway" area and the "floodway fringe" area.
8. Regulatory Area. The areas for state and local floodplain management regulations shall be those areas subject to a base (100-year) flood (except as noted for siting of critical facilities). Base floodplains are designated as special flood hazard areas on the most recent maps provided by the Federal Emergency Management Agency for the National Flood Insurance Program. Best available information shall be used if these maps are not available or sufficient.
9. Relationship to Other Requirements. Land uses in the floodplain combining district shall be subject to all relevant local, state or federal regulations including those of the underlying zoning district. Where applicable permit requirements under the Shoreline Management Act (Chapter 90.58 RCW), or the State Flood Control Zone Act (Chapter 86.16 RCW) may be substituted for permits required under this chapter provided that the standards of this chapter are applied.
10. Criteria for Land Management and Use. The standards and definitions contained in 44 CFR Parts 59 and 60 for the National Flood Insurance Program are adopted by reference as the minimum state standards.
11. Uses Permitted in the Floodplain (FP) Combining District. Park, recreational, agricultural, and other similar open space uses are allowed in the underlying

zoning district and not involving structures, fill or storage of equipment are permitted outright in the FP district.

12. Uses Prohibited in the Floodway. Structures for human habitation and other structures or works posing a high flood damage potential are prohibited in the floodway, except for the replacement of structures or works, single-family residences in accordance with WAC 508-60-040 and travel trailers subject to the provisions set forth in this chapter. Any use other than those permitted outright in a floodway shall be subject to the terms of a floodplain.
13. Uses Allowed Under a Floodplain Permit. All other uses permitted in the zoning district with which the FP district has been combined are allowed in the floodway fringe areas subject to the terms of a floodplain permit.
14. A floodplain permit shall be obtained before construction or development begins within any area of special flood hazard. The permit shall be required for all structures including manufactured homes and other development. Permit application forms shall be furnished by the administrator. The application shall include, but not limited to, plans in duplicate drawn to scale showing the nature, location, dimensions and elevations of the area in question, and existing or proposed structures, fill, storage of materials, and drainage facilities. Specifically, the following information is required:
    a. Elevation in relation to mean sea level of the lowest floor (including basement) of all structures;
    b. Elevation in relation to mean sea level to which any structure has been flood proofed;
    c. Certification by a registered professional engineer or architect that the flood proofing methods for any nonresidential structure meet the flood proofing requirements; and
    d. Description of the extent to which any watercourse will be altered or relocated as a result of proposed development.
15. Designation of the Local Administrator. The administrator is authorized to administer and implement this title by granting or denying floodplain permit applications in accordance with its provisions.
16. Duties and Responsibilities of the Local Administrator. Duties of the local administrator, if applicable shall include, but not limited to:
    a. Development Review.
        i. Review all proposed developments to determine whether or not a floodplain permit is required.
        ii. Review all proposed developments with respect to the flood insurance study maps and zoning district boundaries. Make interpretations where needed as to the exact location of special flood hazard area boundaries.
    b. Permit Review.

i. Review all proposed development permits to determine that the permit requirements of this title have been satisfied.

ii. Review all proposed development permits to determine that all necessary permits have been obtained from those federal, state or local governmental agencies from which prior approval is required.

iii. Review all proposed development permits to determine if the proposed development is located in the floodway. If located in the floodway assure that the encroachment provisions are met.

c. Use of Other Base Flood Data. When base flood elevation data has not been provided in accordance with subsection (A)(1) of this section (basis for establishing the areas of special flood hazard), the administrator shall obtain, review and reasonably utilize any base flood elevation and floodway data available from an agency of federal or state government, or other sources in order to administer this section including specific standards for residential construction, non-residential construction and floodways and floodway requirements.

d. Information to be Obtained and Maintained.

i. Where base flood elevation data is provided through the flood insurance study or required as in subsection (A)(1) of this section, obtain and record the actual elevation (in relation to mean sea level) of the lowest habitable floor (including basement) of all new or substantially improved structures and whether or not the structure contains a basement.

ii. For all new or substantially improved flood proofed non-residential structures the local administrator shall:

A. Verify and record the actual elevation (in relation to mean sea level) to which any non-residential structure has been flood proofed;

B. Maintain the flood proofing certifications;

C. Maintain for public inspection all records pertaining to the provisions of this chapter;

D. Notify adjacent communities and the Washington State Department of Ecology prior to any alteration of relocation of a watercourse and submit evidence of such notification to the Federal Insurance Administration;

E. Require that maintenance is provided within the altered or relocated portion of said watercourse so that the flood carrying capacity is not diminished; and interpretation of FIRM boundaries. Make interpretation, where needed, as to exact location of the boundaries of the areas of special flood hazards (for example, 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.

17. Variance Procedure-Additional State Requirements. The variance procedure contained in 44 CFR Part 60.6 and this title shall apply to the additional state requirements contained in WAC 173-158-064 and 173-158-070, unless an activity or use is expressly prohibited therein.

18. Appeal and Review of City Action.

    a. A person with standing may appeal the approval or denial of a floodplain permit.

        i. In acting on appeals or permit approval requests, the administrator shall consider all technical evaluations, all relevant factors and standards specified in other sections of this chapter and:

            A. The danger that materials may be swept onto other lands to the injury of others;

            B. The danger of 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 the waterfront location where applicable;

            F. The availability of alternative locations for the proposed use that 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 floodplain 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 floodwaters, 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 facilities and facilities such as sewer, gas, electrical, water systems, streets and bridges.

        ii. Upon consideration of the above factors and the purposes of this chapter, the appeal hearing body may attach such conditions to actions on appeals and approvals as it deems necessary to further the purpose of this chapter.

iii. The Administrator shall maintain the records of all appeal and approval actions of the City of Napavine.

19. Conditions for Variances.

a. 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 lot of one-half acre or less in size 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.

b. Variances may be issued for the reconstruction, rehabilitation or restoration of structures listed on the National Register of Historic Places or the State Inventory of Historic Places.

c. Variances shall not be issued within a designated floodway if any increase in flood levels during the base flood discharge would result.

d. Variances shall only be issued upon a determination that the variance is the minimum necessary considering the flood hazard to afford relief.

e. Variances shall only be issued upon:

i. Showing a good and sufficient cause;

ii. A determination that failure to grant the variance would result in exceptional hardship to the applicant;

iii. 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.

f. 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 the flood elevations shall be quite rare.

g. Variances may be issued for nonresidential buildings in very limited circumstances to allow a lesser degree of flood proofing than watertight or dry-flood proofing, where it can be determined that such action will have low damage potential, complies with all other variance criteria except subsection (A)(20)(a) of this section and otherwise complies with anchoring and construction materials and methods general standards below.

h. Any applicant to whom a variance is granted shall be given written notice that the structure will be permitted to be built with a lowest floor elevation below the base flood elevation and that the cost of flood insurance will be commensurate with the increased risk resulting from the reduced lowest floor elevation.

20. Penalties and Enforcement.

    a. The attorney general or the attorney for the local government shall bring such injunctive, declaratory or other actions as are necessary to ensure compliance with this chapter.

    b. Any person who fails to comply with this chapter shall also be subject to a civil penalty not to exceed one thousand dollars for each violation. Each violation or each day of noncompliance shall constitute a separate violation. The penalty provided for in this section shall be imposed by a notice in writing either by certified mail with return receipt requested or by personal service to the person incurring the same from the department or local government, describing the violation with reasonable particularity and ordering the act or acts constituting the violation or violations to cease and desist or in appropriate cases, requiring necessary corrective action to be taken within a specific and reasonable time.

    c. Any penalty imposed pursuant to this section by the department shall be subject to review by the pollution control hearing board. Any penalty imposed pursuant to this section by the administrator shall be subject to review by the city council. Any penalty jointly imposed by the department and city shall be appealed to the pollution control hearings board.

21. General Standards. In all areas of special flood hazards the following standards set forth in this article are required.

    a. Anchoring.

        i. All new construction and substantial improvements shall be anchored to prevent flotation, collapse or lateral movement of the structure.

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

    b. Construction Materials and Methods.

        i. All new construction and substantial improvements shall be constructed with materials and utility equipment resistant to flood damage.

        ii. All new construction and substantial improvements shall be constructed using methods and practices that minimize flood damage.

        iii. 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.

    c. Utilities.

i. All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of flood waters into the system;

ii. New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of flood waters into the systems and discharge from the systems into flood waters;

iii. On-site waste disposal systems shall be located to avoid impairment to them or contamination from the during flooding; and

iv. Water well shall be located on high ground outside the floodway.

d. Subdivision Proposals.

i. All subdivision proposals shall be consistent with the need to minimize flood damage;

ii. All subdivision proposals shall have public utilities and facilities such as sewer, gas, electrical and water systems located and constructed to minimize flood damage;

iii. All subdivision proposals shall have adequate drainage provided to reduce exposure to flood damage; and where base flood elevation data has not been provided or is not available from another authoritative source, it shall be generated for subdivision proposals and other proposed developments which contain at least fifty lots or five acres (whichever is less).

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

22. Additional Standards.

a. Critical Facilities.

i. Critical facilities should be afforded additional flood protection due to their nature. The Administrator shall use the 500-year frequency flood as a minimum standard instead of the 100-year frequency flood as used for other types of development.

ii. Construction of new critical facilities shall be, to the extent possible, located outside the limits of the 500-year floodplain as identified on the city's FIRM. Construction of new critical facilities shall be permissible within the 500-year frequency floodplain if no feasible alternative site is available. Critical facilities constructed within the 500-year frequency floodplain shall have the lowest floor elevated to or above the level of the 500-year frequency flood or the flood protection elevation, whichever is

greater. Flood proofing and sealing measures must be taken to ensure that toxic substances will not be displaced by or released into flood waters.

iii. Access routes elevated to or above the level of the 500-yeat frequency flood shall be provided to all critical facilities to the extent possible.

b. Flood Protection Elevation. In order to account for the impacts of future development on flood depths and in order to ensure the least expensive insurance rates for floodplain occupants, all development within special flood hazard areas which requires elevation of flood proofing shall be elevated or flood proofed to the flood protection elevation (base flood elevation plus one foot).

23. Specific Standards. In all areas of special flood hazards where base flood elevation data has been provided as set forth in subsection (A)(1) of this section, basis for establishing the areas of special flood hazard, or (A)(17)(c) of this section, use of other base flood data, the following provisions are required:

a. Residential Construction.

i. New construction and substantial improvement of any residential structure shall have the lowest floor, including basement, elevated to or above one foot above the base flood elevation. Fully enclosed areas below the lowest floor that are subject to flooding are prohibited, or shall be designed to automatically equalized hydrostatic flood forces on exterior walls by allowing for the entry and exit of flood waters. 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 flood waters.

b. Nonresidential Construction. New construction and substantial improvement of any commercial, industrial or other nonresidential structure shall either have the lowest floor including basement, elevated to the level of one foot above the base flood elevation or together with attendant utility and sanitary facilities shall:

i. Be flood proofed so that below the base flood level the structure is watertight with wall substantially impermeable to the passage of water;

ii. Have structural components capable of resisting hydrostatic and hydrodynamic loads and effects of buoyancy.

iii. 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;

iv. Nonresidential structures that are elevated not flood proofed must meet the same standards for space below the lowest flood as described in this subsection (A)(24)(b) of this section;

v. Applicants flood proofing nonresidential buildings shall be notified that flood insurance premiums will be based on rates that are one foot below the flood proofed level (e.g., a building constructed to the base flood level will be rated as one foot below that level).

24. Manufactured Homes. All manufactured homes to be placed or substantially improved within Zones A1—30, AH and AE shall be elevated on a permanent foundation such that the lowest floor of the manufactured home is at or above one foot above the base flood elevation and be securely anchored to an adequately anchored foundation system to resist flotation, collapse and lateral movement.

25. Recreational Vehicles. Recreational vehicles place on sites are required to either:

a. Be on site for fewer than one hundred eighty consecutive days;

b. Be fully licensed and ready for highway use on its wheels or jacking system, be attached to the site only by quick disconnect type utilities and security devices and have no permanently attached additions; or

c. Meet the requirements for a manufactured home and the elevation and anchoring requirements for manufactured homes; may be allowed in the floodway and floodway fringe areas on a temporary basis.

26. Floodways and Floodway Requirements.

a. Special Flood Hazard Areas with Designated Floodways. In addition to those NFIP requirements for designated floodways, the administrator shall restrict land uses within such areas to include the prohibition of construction or reconstruction of residential structures except for:

i. Repairs, reconstruction, or improvements to a structure which do not increase the ground floor area; and

ii. Repairs, reconstruction or improvements to a structure the cost of which does not exceed fifty percent of the market value of the structure either:

A. Before the repair, reconstruction or improvement is started, or

B. If the structure has been damaged and is being restored before the damage occurred. Any project for improvement of a structure to correct existing violations of state or local health, sanitary or safety code specifications which have been identified by the local code

enforcement officer and which are the minimum necessary to assure safe living conditions or to structures identified as historic places shall not be included in the fifty percent determination.

b. Special Flood Hazard Areas Without Designated Floodways. When a regulatory floodway for a stream has not been designated, the administrator may require that applicants for new construction and substantial improvements reasonably utilize the best available information from federal, state or other sources to consider the cumulative effect of existing, proposed and anticipated future development and determine that the increase in the water surface elevations of the base flood will not be more than one foot at any point in the community. Building and development near streams without a designated floodway shall comply with the requirement of 44 CFR 60.3 (b)(3) and (4) and (C)(10) of the NFIP regulations adopted by reference.

c. Located within areas of special flood hazard established in section (A)(1) of this section are areas designated as floodways. Since the floodway is an extremely hazardous area due to the velocity of flood waters which carry debris, potential projectiles and erosion potential, the following provisions apply:

i. Prohibit encroachments including fill, new construction, substantial improvements and other development unless certification by a registered professional engineer or architect is provided demonstrating that encroachments shall not result in any increase in flood levels during the occurrence of the base flood discharge.

ii. If subsection (A)(27)(c)(I) of this section is satisfied all new construction and substantial improvements shall comply with all applicable flood hazard reduction provisions of this article.

iii. Prohibit the placement of any manufactured homes.

27. Encroachments. The cumulative effect of any proposed development when combined with all other existing and anticipated development shall not increase the water surface elevation of the base flood more than one foot at any point.

14.10.210 Geologically Hazardous Areas, Erosion Hazards, and Steep Slopes

A. Geologically Hazardous Areas, Erosion Hazards and Steep Slopes. This section provides standards for the “Geologically Hazardous Areas” type of critical area and is applied pursuant to the general critical area regulations and processes in NMC Chapter 14.10.

1. Classification.

a. Steep Slopes.

i. Steep slopes are lands with slope of thirty percent or greater.

ii. Slope gradient shall be measured in two-foot contours in ten-foot intervals.

iii. Slopes greater than fifteen percent and less than thirty percent are generally considered buildable; however if the administrator in reliance upon evidence in the record or upon knowledge within the community, that a similarly situated slope between fifteen percent and thirty percent has previously exhibited movement or substantial instability, the administrator may find that the subject slope is a steep slope, for purposes of land use review and may require an applicant to provide substantial evidence, prepared by a qualified professional, a geotechnical or geological engineer, that the slopes within the proposed development area are stable and capable of safely supporting the proposed development.

b. Erosion hazard areas include severe and moderate erosion hazard areas.

   i. Severe erosion hazard areas are those areas that have severe or very severe erosion potential as detailed in the soil descriptions contained in the Soil Survey of Lewis County Area, Washington, 1987, Soil Conservation Service, USDA.

   ii. Moderate erosion hazard areas are those areas that have moderate erosion potential as detailed in the soil descriptions contained in the Soil Survey of Lewis County Area, Washington, 1987, Soil Conservation Service, USDA.

c. Landslide hazard areas are those areas meeting any of the following criteria:

   i. Areas with evidence of failure, such as areas designated as quaternary slumps, earth flows, mudflows or landslides including those areas shown on maps published by the United States Geological Survey or Department of Natural Resources Division of Geology and Earth Resources, areas that show evidence of historical failure or instability, including, but not limited to, back-rotated benches on slopes; areas with structures that exhibit structural damage such as settling and racking of building foundations; areas that have toppling, leaning or bowed trees caused by ground surface movement and areas that show past sloughing or calving of bluff sediments resulting in a vertical or steep bluff face with little or no vegetation;

   ii. Areas that are rated as unstable due to characteristics of the earth material and topography including slopes exceeding thirty percent with a vertical relief of ten or more feet, except areas composed of competent rock or constructed slopes designed and approved by a geotechnical engineer licensed in the state of Washington and experienced with the site or engineered slopes that show stable physical characteristics based on analysis by a qualified professional;

   iii. Any area with all the following:

      A. A slope greater than fifteen percent;

      B. Hillsides intersecting geologic contacts with a relatively permeable sediment overlying a relatively impermeable sediment or bedrock; and

C. Springs or ground water seepage.

iv. Slopes that are parallel or sub-parallel to planes of weakness (such as bedding planes, joint systems and fault planes) in subsurface materials;

v. Slopes having gradients greater than eighty percent subject to rock fall during seismic shaking;

vi. Areas potentially unstable as a result of rapid stream incision and stream bank erosion or undercutting. These include slopes exceeding ten feet in height adjacent to streams and lakes and with more than thirty-five percent gradient;

vii. Areas located in a canyon, on an alluvial fan or presently or potentially subject to inundation by debris flows or catastrophic flooding;

viii. Areas included in the Slope Stability Study of the Centralia-Chehalis Area, Lewis County, Washington by Allen J. Fiksdal, Department of Natural Resources, Division of Geology and Earth Resources, 1978: Areas mapped as "unstable," "landslides" and "old landslides" (if slopes are in excess of thirty percent); and

ix. Areas located outside the study area on the Slope Stability Study of the Centralia-Chehalis Area, regardless of slope, that are mapped as "landslide debris" by the Washington State Department of Natural Resources, Division of Geology and Earth Resources.

d. Seismic hazard areas.

2. Designation of Erosion and Landslide Hazard Areas. Lands of Lewis County meeting the classification criteria for erosion and landslide hazard areas are hereby, under Chapter 36.70A RCW, designated as erosion and landslide hazard areas, respectively.

   a. The approximate location and extent of geologically hazardous areas are shown on the adopted critical areas maps (see the Napavine Comprehensive Plan). These maps are to be used as a guide for the city, project applicants, and/or property owners and may be continuously updated as new critical areas are identified. They are meant to be used as a reference and do not provide a final, site-specific critical area designation.

3. Applicability.

   a. The provisions of this section shall apply to any development activity within areas classified as steep slopes, erosion hazard areas or landslide hazard areas. Development on lands classified as steep slopes, erosion hazards or landslide hazards is prohibited; provided that the Administrator may allow development on said lands only in strict conformance with the provisions of section NMC 14.10._____.

   b. Development, design, implementation and mitigation measures concerning steep slopes, erosion hazard areas and landslide hazard areas shall be prepared by a qualified professional, a geotechnical engineer, licensed in the

State of Washington, and said measures shall provide construction methodologies and quality assurances that the site can be developed without significant risk to public health, safety of welfare and in conformance with the development standards enumerated in sections NMC 14.10._____.

4. Maps and Inventory. The approximate location and extent of hazardous areas are shown on the city's critical area maps. The city shall update the maps as new hazard areas are identified and as new information becomes available. The maps and reports cited should be used only as a general guide for landslide hazard investigation. Maintenance of maps does not imply that land outside mapped geologically hazardous areas will be without risk. Preparation and maintenance of such maps shall not create liability on the part of the City of Napavine, or any officer or employee thereof, for any damages that result from reliance on said maps or any decision lawfully made hereunder.
5. Development Standards for Erosion Hazard Areas. Uses and activities shall conform to the following standards:
    a. Severe erosion hazard areas, including all slopes in excess of thirty percent shall be protected to provide multiple benefits including reduction of erosion, reduction of sedimentation in water bodies and preservation of related ecological values. Modification of topography and vegetation shall be strictly limited.
        i. Subdivision within erosion hazard areas shall be designed to fully avoid disturbance and removal of soil or vegetation within the severe erosion hazard area.
        ii. Land that is located partially or wholly within a severe erosion hazard area or its buffer may be divided provided that each resulting lot has sufficient buildable area outside of the severe erosion hazard area with provision for drainage, erosion control and related features that will not adversely affect the hazard area.
    b. Moderate erosion hazard areas, not including land classified as a steep slope, shall be protected through provisions adequate to limit erosion and sedimentation during construction and use.
    c. An erosion control plan for a severe and moderate erosion hazard area shall incorporate the following and shall be coordinated with requirements under other city or county codes and state National Pollutant Elimination System permits and other agency requirements:
        i. Alteration of topography and disturbance and removal of vegetation shall be minimized to the maximum extent feasible by location on the least sensitive portion of the site. In a land division or multi-unit development, structures shall be clustered.
        ii. To conform to existing topography of the site reduce topographic modification, foundations shall conform to the natural contours of the slope and be stepped/tiered where possible.

iii. Roads, driveways, other vehicular access, trails, walkways and parking areas shall be located in the least sensitive area of the site and designed with low gradients and/or parallel to the natural contours of the site. Retaining walls shall be preferred over cut and fill slopes to minimize topographic modification.

d. Clearing and Grading.

i. The area of clearing and grading shall be minimized to the maximum extent feasible;

ii. Impervious surfaces shall be minimized to the maximum extent feasible;

iii. Clearing and grading to create a flat area for lawn or recreation is prohibited in severe erosion hazard areas and steep slopes;

iv. Undergrowth shall be preserved to the maximum extent feasible.

e. Erosion Control Management.

i. The area of vegetation disturbance shall be minimized through a staging plan to develop sites in sequence with full stabilization of early phases, such as infrastructure installation, before disturbance for structures and other facilities in order to minimize erosion potential.

ii. Erosion and sedimentation control facilities such as silt fences shall be installed prior to any clearing and grading.

iii. Disturbed areas shall be protected from erosion through implementation of best management practices, including groundcovers, such as filter fabrics within twenty-four hours after disturbance. Vegetative cover shall be re-established on disturbed surfaces as soon as feasible, but in all cases prior to the rainy season.

iv. A drainage plan shall include:

A. Surface drainage, including downspouts, shall not be used in erosion hazard areas or steep slopes. Drainage originating above an erosion hazard area shall be collected and directed by a tight line drain, and provided with an energy dissipative device for discharge to a swale or other acceptable natural drainage areas.

B. Storm water retention and detention systems, including percolation systems utilizing buried pipe, are prohibited on steep slopes or severe hazard areas and strongly discouraged on moderate erosion hazard areas.

C. On-site sewage disposal system drain fields are prohibited on severe erosion hazard areas and strongly discouraged on moderate erosion hazard.

f. Utility lines and pipes shall be permitted in steep slopes or severe and moderate erosion hazard areas only where analysis by a qualified professional certifies that such system will not result in an increase in erosion. The qualified

professional shall also certify that the systems are installed as designed and function as predicted.

6. Development Standards for Landslide Hazard Areas. Uses and activities permit shall conform to the following standards:

    a. Protection of Landslide Area and Buffer. The landslide hazard area and associated buffer shall be protected from disturbance, except in compliance with the standards of this section. Modification of topography and vegetation in landslide hazard areas shall be stringently limited to provide multiple benefits of long-term stability of sensitive slopes and related benefits including reduction of erosion potential, reduction of storm water runoff and preservation of related ecological values. Unless otherwise provided or as part of an approved alteration, removal of vegetation from a landslide hazard area or related buffer shall be prohibited. The landslide and buffer shall include woody vegetation adequate to stabilize the soil and prevent mass wasting. If the designated buffer area lacks adequate woody vegetation, the Administrator, after consultation with a qualified professional through the city's peer review process, shall have the authority to require vegetation restoration or other measures to improve slope stability.

    b. A buffer shall be established from all edges of landslide hazard areas. The size of the buffer shall be determined by the Administrator, after consultation with a qualified professional through the city's peer review process, to minimize or eliminate the risk of death, personal injury, property damage and effects on other elements of the environment resulting from earth movement caused in whole or in part by the development.

        i. The buffer from the top of the slope shall be designed to protect persons and property from damage due to catastrophic slope failure and slope retreat over the lifetime of its use and provide an area of vegetation to promote the shallow stability, control erosions and multiple benefits to wildlife and other resources. The minimum dimensions of the buffer shall be equal to the greater of:

            A. The distance from the top of the slope equal to the vertical distance from the toe of slope to the top of slope;

            B. The distance from the top of the slope equal to the distance from the toe of the slope upslope at a slope of 2:1 (horizontal to vertical) to a point that intersects with the site's ground elevation; or

            C. Fifty feet from the top of the slope.

        ii. The minimum buffer from the bottom of a slope shall provide for safety of persons and property from the run-out resulting from slope failure and shall be the greater of:

            A. The height of the slope; or

            B. Fifty feet from the toe of the slope.

c. Landslide Hazard Area Design Standards:

   i. Subdivision within landslide hazard areas and associated buffers shall be designed to reduce soil disturbance and removal of vegetation. Land that is located partially within a landslide hazard area or its buffer may be divided provided that each resulting lot has sufficient buildable area outside of the hazardous area and buffer with provision for drainage, erosion control and related features that will not adversely affect the hazard area or its buffer. Land within a landslide hazard area and its buffer may not be subdivided to create buildable sites within the landslide hazard area. All plats and short plats shall demonstrate that each resulting lot contains sufficient buildable area outside the hazard area and its setback. All plats and short plats will clearly show the boundary of the hazard area and buffer together with a restriction prohibiting development within the hazard area.

   ii. Roads, driveways, other vehicular access, trails, walkways and parking areas may be permitted only if the standards for alteration exist, including through the provisions of Chapter 8.24 RCW. If access through hazardous areas is granted, exceptions or deviations from technical standards for width or other dimensions and specific construction standards to minimize impacts may be specified. Access roads and trails shall be engineered and built to standards that avoid the need for major repair or reconstruction beyond that which would be required in non-hazard areas and shall be:

      A. Located in the lease sensitive area of the site.

      B. Designed to minimize topographic modification with low gradients and/or parallel to the natural contours of the site.

      C. Retaining walls shall be preferred over cut and fill slopes to minimize topographic modification.

   iii. Structures may be permitted only if the standards for alteration below are met and shall be designed to meet the following standards:

      A. Structures and impervious surfaces shall be located on the least sensitive portion of the site and designed to minimize disturbance and removal of vegetation.

      B. Foundations should conform to the natural contours of the slope and foundations shall be stepped/tiered where possible to conform to existing topography of the site.

      C. Retaining walls shall be preferred over cut and fill and shall be incorporated into structures wherever feasible.

d. Clearing and grading may be permitted only if the standards for alteration below are met and shall meet the following standards:

i. Clearing and grading shall minimize ground disturbance to the maximum extent feasible to accommodate allowed development and generally shall not extend more than ten feet beyond the approved development;

ii. Undergrowth shall be preserved to the extent feasible; and

iii. No dead vegetation, fill or other foreign material shall be placed within a landslide hazard area, other than that approved for bulkhead or other methods of stream bank stabilization as provided in regulations for streams in this chapter and under the Shoreline Master Program.

e. Drainage.

i. Surface drainage, including downspouts, shall not be directed across the face of a hazard area. If drainage must be discharged from the top of a hazard area to its toe, it shall be collected above the top and directed to the toe by a tight line drain and provided with an energy dissipative device at the toe for discharge to a swale or other acceptable natural drainage areas.

ii. Storm water retention and detention systems, including percolation systems utilizing buried pipe, shall be located outside the landslide hazard area and its buffer.

f. On-site sewage disposal system drain fields shall be located outside the landslide hazard area and its buffer. The septic system drain field must be in compliance with the regulations of the Lewis County Health Department or its successors.

g. Utility lines and pipes shall be permitted in landslide hazard areas. The line or pipe shall be located above ground and properly anchored and/or designed so that it will continue to function in the event of an underlying slide.

h. Lot size. For the purpose of determining lot sizes within hazard areas, the Administrator shall review available information, including any required geotechnical assessments and make a decision on a case-by-case basis based on the reports.

i. An applicant may request a reduction to the minimum fifty (50) foot buffer established under subsection 6.b.i.C upon submittal of a geotechnical report prepared by a qualified professional demonstrating through slope stability analysis that the proposed reduced setback achieves a static factor of safety. The Administrator shall review the report and may require peer review at the applicant's expense. Approval of any setback reduction shall be conditioned on recordation of a notice on title identifying the hazard area, approved setback, and any conditions of approval.

14.10.220 Wetlands

A. Wetlands. This section provides standards for the "Wetlands" type of critical area and is applied pursuant to the general critical area regulations and processes in NMC Chapter 14.10.

1. Purpose. The purpose of this chapter is to:

    a. Recognize and protect the beneficial functions performed by wetlands. Wetlands constitute important natural resources which provide significant environmental functions including: the control and storage of flood waters, stabilizing stream banks, reduction in erosion, improving water quality through biofiltration, adsorption, retention, and transformation of sediments, nutrients, and toxicants, recharge of ground water and provisions of significant habitat areas for fish and wildlife. Uncontrolled urban-density development in and adjacent to wetlands can eliminate or significantly reduce the ability of wetlands to provide these important functions, thereby detrimentally affecting public health, safety and general welfare.

    b. Regulate land use to avoid adverse effects on wetlands and maintain the functions and values of wetlands throughout the City of Napavine.

    c. Establish review procedures for development proposals in and adjacent to wetlands.

2. Applicability. The provisions of this chapter apply to any disturbance occurring or land use proposal affecting a wetland or its buffer unless otherwise expressly exempted by this chapter. Except where a contrary intent clearly appears, the provisions of this chapter shall be construed to the maximum feasible extent consistent with the Federal Clean Water Act, 33 USC Section 1251 et seq., and the rules and guidelines promulgated pursuant thereto. Nothing in this chapter shall be construed to preclude application of the State Environmental Policy Act in approving applications not listed in NMC 14.10.070.

3. Identification, Delineation, and Rating.

    a. Identification and Delineation. Identification of wetlands and delineation of their boundaries pursuant to this chapter shall be done in accordance with the approved federal wetland delineation manual and applicable regional supplement. All areas within the City of Napavine meeting the wetland definition and designation criteria in that procedure are hereby designated critical areas and are subject to the provisions of this chapter. Wetland delineations are valid for five years; after such date the City of Napavine shall determine whether a revision or additional assessment is necessary. Wetland delineations will be documented on a ground-verified map using either professional surveying methods or an equivalent professional method using GPS with sub-meter accuracy.

    b. Rating. Wetlands shall be rated according to the Washington Department of Ecology wetland rating system, as set forth in the Washington State Wetland Rating System for Western Washington: 2014 Update Version 2 (Ecology Publication [23-06-009] or as revised). The descriptions of wetland categories according to the rating system are as follows:

        i. Category I. Category I wetlands are: (a) relatively undisturbed estuarine wetlands larger than one acre; (b) wetlands of high conservation value that

are identified by scientists of the Washington Natural Heritage Program/DNR; (c) bogs; (d) mature and old-growth forested wetlands larger than one acre; (e) wetlands in coastal lagoons; (f) interdunal wetlands that score eight or nine habitat points and are larger than one acre; and (g) wetlands that perform many functions well (scoring twenty-three points or more). These wetlands: (a) represent unique or rare wetland types; (b) are more sensitive to disturbance than most wetlands; (c) are relatively undisturbed and contain ecological attributes that are impossible to replace within a human lifetime; or (d) provide a very high level of functions. We cannot afford the risk of degradation to these wetlands because their functions and values are too difficult to replace.

ii. Category II. Category II wetlands are difficult, though not impossible, to replace, and provide high levels of some functions. These wetlands may include: (a) estuarine wetlands smaller than one acre, or disturbed estuarine wetlands larger than one acre; (b) interdunal wetlands larger than one acre or those found in a mosaic of wetlands; or (c) wetlands with a moderately high level of functions (scoring between twenty and twenty-two points).

iii. Category III. Category III wetlands are: (a) wetlands with a moderate level of functions (scoring between sixteen and nineteen points); (b) can often be adequately replaced with a well-planned mitigation project; and (c) interdunal wetlands between 0.1 and one acre. Wetlands scoring between sixteen and nineteen points generally have been disturbed in some ways and are often less diverse or more isolated from other natural resources in the landscape than Category II wetlands.

iv. Category IV. Category IV wetlands have the lowest levels of functions (scoring fewer than sixteen points) and are often heavily disturbed. These are wetlands that we should be able to replace, or in some cases to improve. However, experience has shown that replacement cannot be guaranteed in any specific case. These wetlands may provide some important functions, and should be protected to some degree.

c. Illegal modifications. Wetland rating categories shall not change due to illegal modifications made to the wetland.

d. Responsibility. The wetland delineation is the responsibility of the applicant. The Administrator shall verify the accuracy of the boundary delineation. This review period may be extended when excessively dry conditions prohibit the confirmation of the wetland delineation. If the delineation is found to be in question, the administrator will notify the applicant within thirty working days of receiving the delineation report, citing evidence (for example soil samples) that demonstrates where the delineation is believed to be in error. The applicant then may either revise the delineation and submit another report or administratively appeal. The City of Napavine may consult with agencies with expertise and jurisdiction over the critical areas during the review to assist with identification, analysis, and accuracy of critical area delineations.

4. Regulated Activities. For any proposed regulated activity, a critical area report may be required to support the requested activity.
    a. The following activities are regulated if they occur in a regulated wetland or its buffer:
        i. The removal, excavation, grading, or dredging of soil, sand, gravel, minerals, organic matter, or material of any kind;
        ii. The dumping of, discharging of, or filling with any material;
        iii. The draining, flooding, or disturbing of the water level or water table;
        iv. The placing of obstructions;
        v. The construction, reconstruction, demolition, or expansion of any structure;
        vi. The destruction or alteration of wetland vegetation through clearing, harvesting, shading, intentional burning, or planting of vegetation that would alter the character of a regulated wetland;
        vii. Class IV General Forest Practices under the authority of the 1992 Washington State Forest Practices Act Rules and Regulations, WAC 222-12-030, or as thereafter amended;
        viii. Activities that result in:
            A. A significant change of water temperature,
            B. A significant change of physical or chemical characteristics of the sources of water to the wetland,
            C. A significant change in the timing, frequency,
            D. depth, or duration of water entering or within the wetland,
            E. The introduction of pollutants;
    b. Subdivisions. The subdivision and/or short subdivision of land where wetlands and/or associated buffers are present are subject to the following:
        i. Land that is located wholly within a wetland and/or wetland buffer may not be subdivided.
        ii. Land that is located partially within a wetland and/or wetland buffer may be subdivided provided that an accessible and contiguous portion of each new lot is:
            A. Located outside of the wetland and buffer; and
            B. Meets the minimum lot size requirements of the City of Napavine zoning code.
5. Exempted Wetlands. Wetlands that meet the following criteria are not subject to the avoidance or minimization requirements of the mitigation NMC 14.10.___ in

accordance with the following provisions, and they may be filled if the impacts are fully mitigated based on the remaining actions in NMC 14.10.___.

a. All Category IV wetlands that are less than 4000 square feet where it has been shown by the applicant that they are not associated with a riparian areas or their buffers, are not associated with shorelines of the state or their associated buffers, are not part of a wetland mosaic, do not score six or more points for habitat function based on the Washington State Wetland Rating System for Western Washington: 2014 Update Version 2 (Ecology Publication [#23-06-009]), or as revised and approved by Ecology) and do not contain a Priority Habitat or Priority Species identified by the Washington Department of Fish and Wildlife and do not contain state or federally listed species or their critical habitat or species of local importance identified in the City of Napavine code.

b. Wetlands less than one thousand square feet that meet the above criteria are exempt from the buffer provisions contained in this chapter.

6. Wetland Buffers. Wetland buffers are vegetated areas directly adjacent to wetlands, which can reduce the impacts to wetlands from adjacent land uses and provide habitat for terrestrial or aquatic species that require terrestrial habitats.

a. Buffer Requirements. The buffer tables have been established in accordance with the best available science. They are based on the category of wetland and the habitat score as determined by a qualified wetland professional using the Washington State Wetland Rating System for Western Washington: 2014 Update Version 2 (Ecology Publication [23-06-009] or as revised).

b. All buffers shall be measured perpendicularly outward from the delineated wetland boundary. The required buffer widths in Table ___ assume that the buffer is vegetated with a native plant community appropriate for the ecoregion and minimization measures in Table 14.10.220.E(6)-2 are used to reduce the level of impact from adjacent land uses (whether proposed or existing). If the existing buffer is unvegetated, sparsely vegetated, or vegetated with invasive species that do not perform needed functions, the buffer should either be planted to create the appropriate plant community or the buffer width should be increased.

Table 14.10.___
Wetland buffer width requirements, in feet, if Table 2 is implemented and a habitat corridor is provided.

Category of wetland	Habitat score 3—5 points (corridor not required)	Habitat score 6—7 points	Habitat score 8—9 points	Buffer width based on special characteristics
Category I or II: Based on rating of wetland	75	110	225	NA

functions (and not listed below)				
Category I: Bogs and Wetlands of High Conservation Value	NA	NA	225	190
Category I: Forested	75	110	225	NA
Category III: All types	60	110	225	NA
Category IV: All types	40	40	40	NA

c. Buffer Reduction. Developments that produce the listed disturbances may request a buffer reduction from the base buffer widths in Table 14.10.____. Applicants are required to address the disturbance through the use of applicable minimization measures. Table 14.10.____ is not a complete list of measures, nor is every example measure required. Though not every measure is required, all effort should be made to implement as many measures as possible. The Administrator shall determine, in coordination with the applicant, which measures are applicable and practicable.

Table 14.10.____. Impact Minimization Measures		
Examples of disturbance	Activities and uses that cause disturbances	Examples of measures to minimize impacts
Lights	Parking lots Commercial/Industrial Residential Recreation (e.g., athletic fields) Agricultural buildings	Direct lights away from wetland Only use lighting where necessary for public safety and keep lights off when not needed Use motion-activated lights Use full cut-off filters to cover light bulbs and direct light only where needed Limit use of blue-white colored lights in favor of red-amber hues Use lower-intensity LED lighting Dim light to the lowest acceptable intensity
Noise	Commercial Industrial Recreation (e.g., athletic fields, bleachers, etc.) Residential Agriculture	Locate activity that generates noise away from wetland Construct a fence to reduce noise impacts on adjacent wetland and buffer Plant a strip of dense shrub vegetation adjacent to wetland buffer
Toxic runoff	Parking lots Roads Commercial/industrial	Route all new, untreated runoff away from wetland while ensuring wetland is not

	Residential areas Application of pesticides Landscaping Agriculture	dewatered Establish covenants limiting use of pesticides within 150 ft. of wetland Apply integrated pest management (These examples are not necessarily adequate for minimizing toxic runoff if threatened or endangered species are present at the site.)
Stormwater runoff	Parking lots Roads Residential areas Commercial/industrial Recreation Landscaping/lawns Other impermeable surfaces, compacted soil, etc.	Retrofit stormwater detention and treatment for roads and existing adjacent development Prevent channelized or sheet flow from lawns that directly enters the buffer Infiltrate or treat, detain, and disperse new runoff from impervious surfaces and lawns
Pets and human disturbance	Residential areas Recreation	Use privacy fencing Plant dense native vegetation to delineate buffer edge and to discourage disturbance Place wetland and its buffer in a separate tract Place signs around the wetland buffer every 50—200 ft., and for subdivisions place signs at the back of each residential lot When platting new subdivisions, locate greenbelts, stormwater facilities, and other lower-intensity uses adjacent to wetland buffers
Dust	Tilled fields Roads	Use best management practices to control dust

Table 14.10.____.
Wetland buffer width requirements, in feet, for applicants NOT providing a habitat corridor or implementing measures in Table 14.10.___

Category of wetland	Habitat score 3—5 points	Habitat score 6—7 points	Habitat score 8—9 points	Buffer width based on special characteristics

Category I & II: Based on rating of wetland functions (and not listed below)	100	150	300	NA
Category I: Bogs and Wetlands of High Conservation Value	NA	NA	300	250
Category I: Forested	100	150	300	NA
Category III: All types	80	150	300	NA
Category IV	NA	NA	NA	50

i. Wetlands that score six points or more for habitat function: the buffers in Table 14.10.____ can be used only if all of the following criteria are met:

   A. A relatively undisturbed, vegetated corridor at least one hundred feet wide is protected between the wetland and:

      1. A legally protected, relatively undisturbed and vegetated area (e.g., Priority Habitats, compensatory mitigation sites, wildlife areas/refuges, national, county, and state parks where they have management plans with identified areas designated as Natural, Natural Forest, or Natural Area Preserve, or

      2. An area that is the site of a Watershed Project identified within, and fully consistent with, a Watershed Plan as defined by RCW 89-08-460, or

      3. An area where development is prohibited according to the provisions of the local shoreline master program, or

      4. An area with equivalent habitat quality that has conservation status in perpetuity, in consultation with WDFW.

   B. The corridor is permanently protected for the entire distance between the wetland and the shoreline or legally protected area by a conservation easement, deed restriction, or other legal site protection mechanisms.

   C. Presence or absence of the shoreline or Priority Habitat must be confirmed by a qualified biologist or shoreline Administrator.

   D. The measures in Table 2 are implemented, as applicable, to minimize the impacts of the adjacent land uses.

ii. For wetlands that score five or fewer habitat points, only the measures in Table 2 are required for the use of the buffers in Table 1.

iii. If an applicant does not apply the mitigation measures in Table 2 or is unable to provide a protected corridor, then the buffers in Table 3 shall be used.

iv. The buffer widths in Tables 1 and 3 assume that the buffer is vegetated with a native plant community appropriate for the ecoregion. If the existing buffer is un-vegetated, sparsely vegetated, or vegetated with invasive species that do not perform needed functions, the buffer must either be planted to create the appropriate native plant community or be widened to ensure that the buffer provides adequate functions to protect the wetland.

d. Increased Wetland Buffer Width. Buffer widths shall be increased on a case-by-case basis as determined by the Administrator when a wider buffer is necessary to protect wetland functions and values. This determination shall be supported by appropriate documentation showing that it is reasonably related to the protection of the functions and values of the wetland. The documentation shall include but not be limited to the following criteria:

   i. The wetland is used by a state or federally listed plant or animal species. These species would be those listed under WAC 220-610-010, 50 CFR 17.11, 50 CFR 17.12, or other state or federal regulations.

   ii. The wetland has critical habitat; or a priority area for a priority species as defined by WDFW; or Wetlands of High Conservation Value as defined by the Washington Department of Natural Resources' Natural Heritage Program.

   iii. The adjacent land is susceptible to severe erosion, and erosion-control measures will not effectively prevent adverse wetland impacts.

   iv. The adjacent land has minimal vegetative cover.

   v. The land has slopes greater than thirty percent.

e. Buffer averaging to improve wetland protection may be permitted when all of the following conditions are met:

   i. The wetland has significant differences in characteristics that affect its habitat functions, such as a wetland with a forested component adjacent to a degraded emergent component or a dual-rated wetland with a Category I area adjacent to a lower-rated area.

   ii. The buffer is increased adjacent to the higher-functioning area of habitat or more sensitive portion of the wetland and decreased adjacent to the lower-functioning or less-sensitive portion as demonstrated by a critical area report from a qualified wetland professional.

   iii. The total area of the buffer after averaging is equal to the area required without averaging.

   iv. The buffer at its narrowest point is never less than either seventy-five percent of the required width or seventy-five feet for Category I and II, fifty feet for Category III, and twenty-five feet for Category IV, whichever is greater.

f. Averaging to allow reasonable use of a parcel may be permitted when all of the following are met:

   i. No feasible alternatives to the site design could be accomplished without buffer averaging.

   ii. The averaged buffer will not result in degradation of the wetland's functions and values as demonstrated by a critical area report from a qualified wetland professional.

   iii. The total buffer area after averaging is equal to the area required without averaging.

   iv. The buffer at its narrowest point is never less than either seventy-five percent of the required width or seventy-five feet for Category I and II, fifty feet for Category III and twenty-five feet for Category IV, whichever is greater.

g. Allowed Buffer Uses. The following uses may be allowed within a wetland buffer in accordance with the review procedures of this Chapter, provided they are not prohibited by any other applicable law, and they are conducted in a manner so as to minimize impacts to the buffer and adjacent wetland:

   i. Conservation or restoration activities aimed at protecting the soil, water, vegetation, or wildlife.

   ii. Passive recreation facilities designed in accordance with an approved critical area report, including walkways and trails, provided that they have no adverse impact on water quality. They should be generally parallel to the perimeter of the wetland, located only in the outer twenty-five percent of the wetland buffer area, and located to avoid removal of significant vegetation. They should be limited to pervious surfaces no more than five feet in width and designed for pedestrian use only. Raised boardwalks utilizing non-treated pilings may be acceptable, and wildlife-viewing structures.

   iii. Educational and scientific research activities.

   iv. Normal and routine maintenance and repair of any existing public or private facilities within an existing right-of-way, provided that the maintenance or repair does not increase the footprint or use of the facility or right-of-way.

   v. The harvesting of wild crops in a manner that is not injurious to natural reproduction of such crops and provided the harvesting does not require tilling of soil, planting of crops, chemical applications, or alteration of the wetland by changing existing topography, water conditions, or water sources.

   vi. Drilling for utilities/utility corridors under a buffer, with entrance/exit portals located completely outside of the wetland buffer boundary, provided that the drilling does not alter the ground water connection to

the wetland or percolation of surface water down through the soil column. Specific studies by a hydrologist are necessary to determine whether the ground water connection to the wetland or percolation of surface water down through the soil column would be disturbed.

vii. Enhancement of a wetland buffer through the removal of non-native invasive plant species. Removal of invasive plant species shall be restricted to hand removal. All removed plant material shall be taken away from the site and appropriately disposed of. Plants that appear on the Washington State Noxious Weed Control Board list of noxious weeds should be handled and disposed of according to a noxious weed control plan appropriate to that species. Revegetation with appropriate native species at natural densities is allowed in conjunction with removal of invasive plant species.

viii. Repair and maintenance of legally established non-conforming uses or structures, provided they do not increase the degree of nonconformity.

h. Functionally Disconnected Buffer Area. Buffers may exclude areas that are functionally and effectively disconnected from the wetland by an existing public or private road or historically preexisting structure, as determined by the administrator. Functionally and effectively disconnected means that the road or other significant development blocks the protective measures provided by a buffer. Significant developments shall include built public infrastructure such as roads and railroads, and private developments such as homes or commercial structures. The director shall evaluate whether the interruption will affect the entirety of the buffer. Individual structures may not fully interrupt buffer function. In such cases, the allowable buffer exclusion should be limited in scope to just the portion of the buffer that is affected. Where questions exist regarding whether a development functionally disconnects the buffer, or the extent of that impact, the administrator may require a critical area report to analyze and document the buffer functionality.

i. Signs and Fencing:

i. Temporary markers. The outer perimeter of the wetland buffer and the clearing limits identified by an approved permit or authorization shall be marked in the field with temporary high-visibility fencing in such a way as to ensure that no unauthorized intrusion will occur. The marking is subject to inspection by the Administrator prior to the commencement of permitted activities. This temporary marking shall be maintained throughout construction and shall not be removed until permanent signs, if required, are in place.

ii. Permanent signs. As a condition of any permit or authorization issued pursuant to this chapter, the Administrator may require the applicant to install permanent signs along the boundary of a wetland or buffer.

A. Permanent signs shall be made of an enamel-coated metal face attached to a metal post or another non-treated material of equal

durability. Signs shall be posted at an interval of one every fifty feet, or one per lot if the lot is less than fifty feet wide, and shall be maintained by the property owner in perpetuity. The signs shall be worded as follows or with alternative language approved by the administrator:

"Protected Wetland Area
Do Not Disturb
Contact The City of Napavine
Regarding Uses, Restrictions,
and Opportunities for Stewardship"

B. The provisions of subsection i may be modified as necessary to assure protection of sensitive features or wildlife.

iii. Fencing

A. The applicant shall be required to install a permanent fence around the wetland or buffer when adjacent activities could degrade the wetland or its buffer. Examples include domestic animal grazing, unauthorized access by humans or pets, noise generating activities, etc.

B. Fencing installed as part of a proposed activity or as required in this subsection shall be designed so as to not interfere with species migration, including fish runs, and shall be constructed in a manner that minimizes impacts to the wetland and associated habitat.

j. Buffer Maintenance. Except as otherwise specified or allowed in accordance with this chapter, wetland buffers shall be retained in an undisturbed or enhanced condition. In the case of compensatory mitigation sites, removal of invasive, non-native weeds is required for the duration of the mitigation bond (NMC 14.10.____).

k. Impacts to Buffers. Requirements for the compensation for impacts to buffers are outlined in NMC 14.10.

l. Overlapping Critical Area Buffers. If buffers for two critical areas overlap (such as buffers for a stream and a wetland), the wider buffer applies.

7. Critical Area Report for Wetlands:

a. If the administrator determines that the site of a proposed development includes, is likely to include, or is adjacent to a wetland or wetland buffer, a wetland report, prepared by a qualified professional, shall be required. The expense of preparing the wetland report shall be borne by the applicant.

b. Minimum Standards for Wetland Reports. The written report and the accompanying plan sheets shall contain the following information, at a minimum:

i. The written report shall include at a minimum:

A. The name and contact information of the applicant; the name, qualifications, and contact information of the primary author(s) of the report; a description of the proposal; identification of all the local, state, and/or federal wetland-related permit(s) required for the project; and a vicinity map for the project.

B. A statement specifying the accuracy of the report and all assumptions made and relied upon.

C. Documentation of any fieldwork performed on the site, including field data sheets for delineations, rating system forms, baseline hydrologic data, etc.

D. A description of the methodologies used to conduct the wetland delineations, wetland ratings, and impact analyses, including references.

E. Identification and characterization of all critical areas, water bodies, shorelines, floodplains, and buffers on or adjacent to the proposed project area. For areas off the project site, estimate conditions within three hundred feet of the project boundaries using all reliable available information.

F. For each wetland identified on site and within three hundred feet of the project boundary, provide the completed wetland rating, per NMC 14.10.____ of this Chapter; required buffers; hydrogeomorphic classification; wetland area based on the field delineation (area for on-site portion and estimate entire wetland area including off-site portions); Cowardin classifications; habitat elements; soil conditions based on site assessment and/or soil survey information; and to the extent possible, hydrologic information such as location and condition of inlets/outlets, estimated water depths within the wetland, and estimated hydroperiod patterns based on visual cues (e.g., algal mats, drift lines, flood debris, etc.). Provide area estimates, classifications, and ratings based on entire wetland units, not only the portion present on the proposed project site.

G. A description of the proposed actions, including an estimation of area of impacts to wetlands and buffers based on the field delineation, and an analysis of site development alternatives, including a no-development alternative.

H. An assessment of the probable cumulative impacts to the wetlands and buffers resulting from the proposed development, considering past development and potential future development.

I. A description of how mitigation sequencing has been followed, pursuant to section NMC 14.10.

J. An evaluation of the functions of the wetland and its buffer, including references for the method used and data sheets.

K. A discussion of the potential impacts to the wetland(s) associated with any anticipated hydroperiod alterations from the project.

L. Watershed-Scale Management Considerations. The critical areas report shall include a watershed-scale analysis addressing the following factors as they relate to fish and wildlife habitat conservation area (FWHCA) functions and values, consistent with WDFW Vol. 2 Section 3.4:

(1). Channel movement and bank stability;
(2). Sediment transport;
(3). Stormwater management implications for stream temperatures; and
(4).Movement of water, fish, and wildlife through the watershed, including along the stream channel and between the stream, its floodplain, and surrounding uplands.

ii. The site plan sheet(s) shall include, at a minimum:

A. Maps (to scale) depicting delineated and mapped wetlands and required buffers on site, including buffers for off-site wetlands that extend onto the project site; the development proposal; other critical areas and their buffers; grading and clearing limits; and areas of proposed impacts to wetlands and/or buffers (include square footage or acreage).

B. A depiction of the proposed stormwater management facilities and outlets (to scale) for the development, including estimated areas of intrusion into wetland buffers.

8. Compensatory Mitigation:

a. Compensatory Mitigation Preference Order. Compensatory mitigation for fish and wildlife habitat conservation areas shall follow the sequential order of preference listed below. A combination of types may be accepted. For off-site mitigation to be accepted, the project proponent must demonstrate that greater habitat function and value can be achieved off-site than on-site.

i. On-site, in-kind;

ii. Off-site, in-kind;

iii. On-site, out-of-kind;

iv. Off-site, out-of-kind.

"On-site" means on or adjacent to the project impact site. "In-kind" means the same species or habitat type that was impacted.

b. Mitigation Sequencing. Before being authorized to impact any wetland or its buffer, an applicant shall demonstrate that they have implemented mitigation in the following order:

i. Avoid impacts altogether by not taking a certain action or parts of an action.

ii. Minimize impacts by limiting the degree or magnitude of the action and its implementation, by using appropriate technology, or by taking affirmative steps to avoid or reduce impacts.

iii. Rectify impacts by repairing, rehabilitating, or restoring the affected environment.

iv. Reduce or eliminate impacts over time by preservation and maintenance operations.

v. Compensate for impacts by replacing, enhancing, or providing substitute resources or environments.

vi. Monitor required compensation and take remedial or corrective measures when necessary.

c. Requirements for Compensatory Mitigation:

i. Compensatory mitigation for alterations to wetlands shall be used only for impacts that cannot be avoided or minimized and shall achieve no net loss of wetland function. Compensatory mitigation plans shall be consistent with this chapter and Mitigation in Washington State-Part 2: Developing Mitigation Plans—Version 1 (Ecology Publication #06-06-011b, Olympia, WA, March 2006, or as revised), and Selecting Wetland Mitigation Sites Using a Watershed Approach Western Washington (Ecology Publication #09-06-32).

ii. Mitigation ratios, if used, shall be consistent with NMC 14.10.____.

iii. Mitigation requirements may be determined using the Credit-Debit Method described in Calculating Credits and Debits for Compensatory Mitigation in Wetlands of Western Washington (Ecology Publication #10-06-011) or as revised consistent with NMC 14.10.

iv. Plantings used in mitigation actions shall be native species appropriate to the ecoregion.

v. The following areas within a proposed compensation site shall not contribute to satisfying the requirements for compensatory mitigation:

A. Easements for utility corridors, maintained stormwater facilities, and rights-of-way.

B. Driveways.

C. Roads.

D. Any paved or graveled areas intended to convey vehicle or foot traffic.

vi. Buffers on Wetland Mitigation Sites. All wetland mitigation sites shall have buffers consistent with the buffer requirements of this chapter.

d. Compensating for Lost or Affected Functions. Compensatory mitigation shall address the functions affected by the proposed project, with an intention to achieve functional equivalency or improvement of functions. The goal shall be for the compensatory mitigation to provide similar wetland functions as those lost, except when either:

   i. The lost wetland provides minimal functions, and the proposed compensatory mitigation action(s) will provide equal or greater functions or will provide functions shown to be limited within a watershed through an existing watershed plan or a local or regional study that characterizes watershed processes; or

   ii. Out-of-kind replacement of wetland type or functions will best meet watershed goals formally identified by a watershed plan, such as replacement of historically diminished wetland types.

e. Approaches to Compensatory Mitigation. Mitigation for lost or diminished wetland and buffer functions shall rely on the approaches listed below:

   i. Wetland Mitigation Banks. Credits from a wetland mitigation bank certified under Chapter 173-700 WAC may be used to compensate for impacts located within the service area specified in the mitigation bank instrument if all the following are met:

      A. The administrator determines that it would provide appropriate compensation for the proposed impacts; and

      B. The proposed use of credits is consistent with the terms and conditions of the mitigation bank instrument.

      C. Mitigation ratios are consistent with ratios specified in the mitigation bank instrument.

   ii. Permittee-responsible, concurrent mitigation. Concurrent mitigation is a form of permittee-responsible mitigation implemented at the same time permitted impacts are occurring. The permittee is responsible for implementation and success of the compensation. Concurrent mitigation may occur at the site of the permitted impacts or at an off-site location, usually within the same watershed. Permittee-responsible, concurrent mitigation shall be used only if the applicant's qualified wetland professional demonstrates to the administrator's satisfaction that the proposed approach is ecologically preferable to use of a bank, consistent with the criteria in this section.

   iii. Permittee-responsible, advance mitigation. Advance mitigation is a form of permittee responsible mitigation implemented before a permitted impact takes place. It is designed to compensate for impacts expected to occur in the future. The applicant proposing the advance mitigation is the only one who can use the credits generated. Credits cannot be sold or transferred to another applicant. Advance mitigation proposals should be developed in accordance with state and federal rules and guidance on

advance mitigation (Interagency Regulatory Guide: Advance Permittee-Responsible Mitigation, Ecology Publication #12-06-015, December 2012, and Chapter 4.2 of Wetland Mitigation in Washington State-Part 1: Policies and Guidance—Version 2, Ecology Publication #21-06-003, April 2021, or as revised).

f. Methods of Compensatory Mitigation. Mitigation for wetland and buffer impacts shall rely on a method listed below in order of preference. A lower-preference form of mitigation shall be used only if the applicant's qualified wetland professional demonstrates to the administrator's satisfaction that all higher-ranked types of mitigation are not viable, consistent with the criteria in this section.

   i. Restoration: The manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural/historic functions and environmental processes to a former or degraded wetland. Restoration is divided into two categories:

      A. Re-establishment: The manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural/historic functions and environmental processes to a former wetland. Re-establishment results in rebuilding a former wetland and results in a gain in wetland area and functions. Example activities could include removing fill, plugging ditches, or breaking drain tiles to restore a wetland hydroperiod, which in turn will lead to restoring wetland biotic communities and environmental processes.

      B. Rehabilitation: The manipulation of the physical, chemical, or biological characteristics of a site with the goal of repairing natural/historic functions and environmental processes to a degraded wetland. Rehabilitation results in a gain in wetland function but does not result in a gain in wetland area. [In other words, the area already meets wetland criteria, but hydrological processes have been altered. Rehabilitation involves restoring historic hydrologic processes.] Example activities could involve breaching a dike to reconnect wetlands to a floodplain or return tidal influence to a wetland.

   ii. Establishment (Creation): The manipulation of the physical, chemical, or biological characteristics of a site to develop a wetland on an upland where a wetland did not previously exist at an upland site. Establishment results in a gain in wetland area and functions. An example activity could involve excavation of upland soils to elevations that will produce a wetland hydroperiod and hydric soils by intercepting groundwater, and in turn supports the growth of hydrophytic plant species.

      A. If a site is not available for wetland restoration to compensate for expected wetland and/or buffer impacts, the administrator may authorize establishment of a wetland and buffer upon demonstration by the applicant's qualified wetland professional that:

1. The hydrology and soil conditions at the proposed mitigation site are conducive for sustaining the proposed wetland and that establishment of a wetland at the site will not likely cause hydrologic problems elsewhere;
2. Adjacent land uses and site conditions do not jeopardize the viability of the proposed wetland and buffer (e.g., due to the presence of invasive plants or noxious weeds, stormwater runoff, noise, light, or other impacts); and
3. The proposed wetland and buffer will eventually be self-sustaining with little or no long-term maintenance.

iii. Preservation (Protection/Maintenance). The removal of a threat to, or preventing the decline of, wetlands by an action in or near those wetlands. This term includes activities commonly associated with the protection and maintenance of wetlands through the implementation of appropriate legal and physical mechanisms such as recording conservation easements and providing structural protection like fences and signs. Preservation does not result in a gain of aquatic resource area or functions but may result in a gain in functions over the long term. Preservation of a wetland and associated buffer can be used only if:

A. The administrator determines that the proposed preservation is the best mitigation option;
B. The proposed preservation site is under threat of undesirable ecological change due to permitted, planned, or likely actions that will not be adequately mitigated under existing regulations;
C. The area proposed for preservation is of high quality or critical for the health and ecological sustainability of the watershed or sub-basin. Some of the following features may be indicative of high-quality sites:
    1. Category I or II wetland rating (using the wetland rating system).
    2. Rare or irreplaceable wetland type (e.g., peatlands, mature forested wetland, estuaries, vernal pools, alkali wetlands) or aquatic habitat that is rare or a limited resource in the area.
    3. The presence of habitat for threatened or endangered species (state, federal, or both).
    4. Provides biological and/or hydrological connectivity to other habitats.
    5. Priority sites identified in an adopted watershed plan.
D. Permanent preservation of the wetland and buffer shall be provided through a legal mechanism such as a conservation easement or tract held by an appropriate natural land resource manager/land trust.

E. The administrator may approve another legal and administrative mechanism in lieu of a conservation easement if it is determined to be adequate to protect the site.

iv. Enhancement. The manipulation of the physical, chemical, or biological characteristics of a wetland to heighten, intensify, or improve specific function(s). Enhancement is undertaken for specified purposes such as water quality improvement, flood water retention, or wildlife habitat. Enhancement results in the gain of selected wetland function(s) but may also lead to a decline in other wetland function(s). Enhancement does not result in a gain in aquatic resource area. Enhancement activities could include planting vegetation, controlling non-native or invasive species, and modifying site elevations to alter hydroperiods in existing wetlands. Applicants proposing to enhance wetlands or associated buffers shall demonstrate how the proposed enhancement will increase the wetland's/buffer's functions, how this increase in function will adequately compensate for the impacts, and how existing wetland functions at the mitigation site will be protected.

v. Alternative Types of Mitigation/Resource Tradeoffs. The administrator may approve alternative mitigation proposals that are based on best available science, such as priority restoration plans that achieve restoration goals identified in the SMP. Alternative mitigation proposals shall provide an equivalent or better level of ecological functions and values than would be provided by standard mitigation approaches. Alternative mitigation approaches shall comply with all reporting, monitoring, and performance measures of this section including adherence to mitigation sequencing. The City of Napavine may consult with agencies with expertise and jurisdiction over the critical areas during the review to assist with analysis and identification of appropriate performance measures that adequately safeguard critical areas.

A. The administrator will consider the following for approval of an alternative mitigation proposal:

1. Clear identification of how an alternative approach will achieve equal or better ecological benefit.

2. The proposal uses a watershed approach consistent with Selecting Wetland Mitigation Sites Using a Watershed Approach Western Washington (Ecology Publication #09-06-32, Olympia, WA, December 2009).

3. All impacts are identified, evaluated, and mitigated.

4. Methods to demonstrate ecological success are clear and measurable.

g. Location of Compensatory Mitigation. Permittee-responsible compensatory mitigation actions shall be conducted using a watershed approach and shall

generally occur within the same sub-drainage basin. However, when the applicant can demonstrate that a mitigation site in a different sub-drainage basin is ecologically preferable, it should be used.

h. The following criteria will be evaluated when determining whether on-site or off-site mitigation is ecologically preferable. When considering the location of mitigation, preference should be given to using programmatic approaches, such as a mitigation bank.

    i. No reasonable opportunities exist on site or within the sub-drainage basin or opportunities on site or within the sub-drainage basin do not have a high likelihood of success based on a determination of the capability of the site to compensate for the impacts. Considerations should include anticipated replacement ratios for wetland mitigation, buffer conditions and required widths, available water to maintain anticipated hydrogeomorphic class(es) of wetlands when restored, proposed flood storage capacity, and potential to mitigate riparian fish and wildlife impacts (such as connectivity);

    ii. On-site mitigation would require elimination of high-quality upland habitat.

    iii. Off-site mitigation has a greater likelihood of providing equal or improved wetland functions compared to the altered wetland.

    iv. Off-site locations shall be in the same sub-drainage basin unless:

        A. Watershed goals for water quality, flood storage or conveyance, habitat, or other wetland functions have been established by the City of Napavine and strongly justify locating mitigation at another site; or

        B. Credits from a state-certified wetland mitigation bank are used as compensation, and the use of credits is consistent with the terms of the certified bank instrument;

    v. The design for the compensatory mitigation project needs to be appropriate for its position in the landscape. Therefore, compensatory mitigation should not result in the creation, restoration, or enhancement of an atypical wetland.

i. Timing of Compensatory Mitigation. It is preferred that compensatory mitigation projects be completed prior to activities that will impact wetlands. At the least, compensatory mitigation shall be completed immediately following wetland impacts and prior to use or occupancy of the action or development. Construction of mitigation projects shall be timed to reduce impacts to existing fisheries, wildlife, and flora.

    i. The administrator may authorize a one-time temporary delay in completing construction or installation of the compensatory mitigation when the applicant provides a written explanation from a qualified wetland professional as to the rationale for the delay. An appropriate rationale would include identification of the environmental conditions that could

produce a high probability of failure or significant construction difficulties. For example, a project delay that creates conflicts with other regulatory requirements (fisheries, wildlife, stormwater, etc.) or installing plants should be delayed until the dormant season to ensure greater survival of installed materials. The delay shall not create or perpetuate hazardous conditions or environmental damage or degradation, and the delay shall not be injurious to the health, safety, or general welfare of the public. The request for the delay shall include a written justification that documents the environmental constraints that preclude timely implementation of the compensatory mitigation plan. The justification will be verified by the City of Napavine who will issue a formal decision.

j. Wetland Mitigation Ratios.

Table 14.10.____. Compensation Ratios for Permanent Impacts				
Category of Impacted Wetland (Based on function score)	Re-establishment or Creation	Rehabilitation	Preservation	Enhancement
Category I	4:1	8:1	16:1	16:1
Category II	3:1	6:1	12:1	12:1
Category III	2:1	4:1	8:1	8:1
Category IV	1.5:1	3:1	6:1	6:1
Category I Wetlands of High Conservation Value (based on special characteristics)	6:1	12:1	24:1	24:1
Category I Forested (Based on special characteristics)	6:1	12:1	24:1	24:1
Note: Ratios for rehabilitation and enhancement may be reduced when combined with 1:1 replacement through creation or re-establishment. See Table 6B-2, Wetland Mitigation in Washington State - Part 1: Agency Policies and Guidance -Version 2, (Ecology et al., 2021, Publication #21-06-003, or as revised). See also NMC14.10.___ for more information on using preservation as compensation.				

k. Credit-Debit Method. To more fully protect functions and values, and as an alternative to the mitigation ratios found in the joint guidance Wetland Mitigation in Washington State Part 1 (Ecology Publication # 21-06-003, April 2021), the Administrator may allow mitigation based on the Credit-Debit Method developed by the Department of Ecology in Calculating Credits and Debits for Compensatory Mitigation in Wetlands of Western Washington57.

l. Mitigation Plan. When a project involves wetland and/or buffer impacts, a mitigation plan prepared by a qualified professional shall be required, meeting the following minimum standards:

i. Wetland Critical Area Report. A critical area report for wetlands shall accompany or be included in the compensatory mitigation plan and include the minimum parameters described in NMC 14.10.___, Minimum Standards for Wetland Reports.

ii. Mitigation Plan and Plan Sheets. The report shall include a written plan and plan sheets that contain, at a minimum, the following elements.

A. The written report shall be prepared by a qualified professional and contain, at minimum:

1. The name and contact information of the applicant; the name, qualifications, and contact information of the primary author(s) of the compensatory mitigation plan; a description of the development proposal; a summary of the impacts and proposed compensation concept; identification of all the local, state, and federal wetland related permits required for the project; and a vicinity map for the project.

2. Description of how the development project has been designed to avoid, minimize, or reduce adverse impacts to wetlands.

3. Description of the existing wetland and buffer areas proposed to be altered. Include acreage or square footage, water regime, vegetation, soils, functions, landscape position, and surrounding land uses. Also describe impacts in terms of acreage by Cowardin classification, hydrogeomorphic classification, and wetland rating, based NMC 14.10.___, Wetland Ratings.

4. Description of the compensatory mitigation site, including location and rationale for selection. Include an assessment of existing conditions, including acreage or square footage of wetlands and uplands, water regime, sources of water, vegetation, soils, functions, landscape position, and surrounding land uses. Estimate future conditions in this location if the compensation actions are not undertaken.

5. Surface and subsurface hydrologic conditions, including an analysis of existing and proposed hydrologic regimes for enhanced, established, or restored compensatory mitigation areas. Include illustrations of how data for existing hydrologic conditions were used to determine the estimates of future hydrologic conditions.

6. A description of the proposed actions for compensation of wetland and buffer areas affected by the project. Include overall goals of the proposed mitigation, including a description of the targeted functions, hydrogeomorphic classification, and expected categories of wetlands.

7. A description of the proposed mitigation construction activities and timing of activities.

8. Performance standards (measurable standards for years post installation) for wetland and buffer areas, a monitoring schedule, a maintenance schedule, and actions proposed by year.

9. A discussion of ongoing management practices that will protect wetlands after the development project has been implemented, including proposed monitoring and maintenance programs (for remaining wetlands and compensatory mitigation wetlands).

10. As required, a bond estimate for the entire compensatory mitigation project, including the following elements: site preparation, plant materials, construction materials, installation and oversight, maintenance at least twice per year for up to ten years, annual monitoring field work and reporting, contingency actions for a maximum of the total required number of years for monitoring, and removal of all nonnatural site implements (e.g., irrigation equipment, construction fencing, plant protectors, weed barrier fabric) at the end of the monitoring period.

B. The scaled plan sheets shall contain, at a minimum:

1. Mapped, ground-verified edges of the existing wetland and buffers, proposed areas of wetland and/or buffer impacts, and location of proposed wetland and/or buffer compensation actions.

2. Existing topography, in the zone of the proposed compensation actions if any grading activity is proposed in the compensation area(s). Also include existing cross sections of wetland areas on the development site that are proposed to be altered and of the proposed areas of wetland and buffer compensation.

3. Conditions expected from the proposed actions on site, including future hydrogeomorphic classes, vegetation community types by Cowardin class (wetland and upland), and future hydroperiods, or when applicable include a reference to these details within the mitigation plan.

4. Required wetland buffers for existing wetlands and proposed mitigation areas. Also identify any zones where buffers are proposed to be reduced or enlarged outside of the standards identified in this chapter.

5. A planting plan for the compensation area, including all species by proposed community type and hydroperiod, size and type of plant material to be installed, spacing of plants, typical clustering patterns, total number of each species by community type, and timing of installation or include a reference to these details within the mitigation plan.

k. Buffer Mitigation Ratios. Impacts to buffers shall be mitigated at a minimum 1:1 ratio. Compensatory buffer mitigation shall replace those buffer functions lost from development.

l. Protection of the Mitigation Site. A conservation covenant shall be recorded in a form approved by the city attorney as adequate to incorporate the other

restrictions of this section and to give notice of the requirement to obtain a permit prior to engaging in regulated activities within a wetland area or its buffer.

m. Monitoring. All proposed mitigation (not including the purchase of mitigation bank credits) shall include provisions for annual monitoring and performance standards for a period of three years minimum, five years being standard, and ten years when the replacement of forested habitat, or as approved by the administrator for projects with minimal impacts. For example, temporary impacts to herbaceous cover that require reseeding grasses.

i. The mitigation plan shall include monitoring elements that ensure success for the wetland and buffer's values and functions. If the mitigation goals are not attained within the specified monitoring period, the applicant remains responsible for managing the mitigation project until the mitigation plan's goals are achieved.

9. Unauthorized Alterations and Enforcement

a. When a wetland or its buffer has been altered in violation of this chapter, all ongoing development work shall stop, and the critical area shall be restored. The administrator shall have the authority to issue a stop-work order to cease all ongoing development work and order restoration, rehabilitation, or replacement measures at the owner's or other responsible party's expense to compensate for violation of provisions of this chapter.

b. Requirement for Restoration Plan. All development work shall remain stopped until a restoration plan is prepared and approved by the administrator. Such a plan shall be prepared by a qualified professional using currently accepted scientific principles and shall describe how the actions proposed meet the minimum requirements described in NMC 14.10._____. The administrator may, at the applicant's or other responsible party's expense, seek expert advice in determining the adequacy of the plan. Inadequate plans shall be returned to the applicant or other responsible party for revision and re-submittal.

(Ord. No. 651, § 1, 10-10-23)

14.10.130 Residential density transfer.

A. The administrator may permit density transfer from critical areas (sending lands) to designated non-critical areas (receiving areas).

1. Residential Density Transfer. A property owner may transfer residential density to a receiving area.

a. A receiving area shall be on the same parcel or same property, within the same zoning classification, owned by the property owner sending the density.

b. Density may be transferred from a sending area only one time.

c. The value of the transfer shall be calculated as follows:

i. LDR Districts: The gross areas of a critical area completely avoided times the minimum number of units allowed per gross acre in the affected zoning district times sixty percent. For example, in an R1-10 zone, if two acres of critical areas are completely avoided and the minimum density allowed is four units per acre, the allowable density transfer would be 4.8 units. (2ac. × 4du/ac × 60% = 4.8).

ii. MDR District: The gross acreage of a critical area completely avoided times the minimum number of units allowed per gross acre in the affected zoning district times sixty percent. For example, if two acres of critical areas are completely avoided and the minimum density allowed is eight units per acre, the allowable density transfer would be 9.6 units. (2ac. × 8du/ac × 60% = 9.6).

2. Transfer Criteria. The administrator shall approve requests to transfer density subject to the following criteria:

   a. Adverse impacts to natural resources on the receiving areas shall be mitigated consistent with the mitigation section of this chapter.

   b. The building height standards of the receiving area shall be met.

   c. No lot (gross area) shall be less than twenty percent of the minimum lot size within the receiving district.

   d. No lot created as a result of density transfer that is smaller than the average minimum lot required in the receiving district may be located on the perimeter of the project site.

   e. The transfer of density to a receiving area shall not result in an increase in density throughout the project greater than the maximum net density allowed in the base zone or in the construction of a housing type not otherwise allowed in the receiving area.

   f. Critical areas and buffers within the sending area shall be enhanced at a ratio of four acres of enhanced function for every one acre (4:1) used in the density transfer calculations.

   g. Sending areas shall be:

      i. Dedicated to the city for public use; or

3. Protected as an unbuildable area by means of deed restriction, conservation easement or other mechanism approved by the city council. Recordation required. Density may be transferred from a protected critical areas area only once. The administrator (upon consultation with the city attorney) shall be responsible for approving the mechanism used for protecting each critical area. The administrator shall maintain a list of sites from which density has been transferred and a corresponding list of sites that have received density from protected critical areas. The applicant shall record the density transfer mechanism with Lewis County and shall furnish the administrator with a copy of the recorded instrument.

(Ord. No. 651, § 1, 10-10-23)

14.10.150 Application fees.

At the time of application for land use review or critical areas review, the applicant shall pay a critical areas review fee, adopted and amended by the city council, from time to time by resolution.

(Ord. No. 651, § 1, 10-10-23)

14.10.170 Critical area inspections.

Reasonable access to the site shall be provided to the city, state, and federal agency review staff for the purpose of inspections during any proposal review, restoration, emergency action, or monitoring period.

(Ord. No. 651, § 1, 10-10-23)