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BOARD OF COUNTY COMMISSIONERS
WALLA WALLA COUNTY, WASHINGTON

ORDINANCE NO. 372

APPROVING ADOPTION OF CRITICAL AREAS PROVISIONS, COMPLYING WITH THE REQUIREMENTS OF RCW 36.70A.130(d) AND RCW 36.70A.172 WITH REGARD TO CRITICAL AREAS, ADOPTING THE BEST AVAILABLE SCIENCE REVIEW DOCUMENT, DESIGNATING CRITICAL AREAS WITHIN UNINCORPORATED WALLA WALLA COUNTY, SETTING FORTH PROVISIONS FOR PROTECTION OF THOSE CRITICAL AREAS, AND PARTIALLY REPEALING RESOLUTION 95-220, RESULTING IN AN AMENDMENT AND REPLACEMENT OF WALLA WALLA COUNTY CODE CHAPTER 18.08.

WHEREAS, the County is required to update the Walla Walla County critical areas regulations in accordance with RCW 36.70A.130; and

WHEREAS, the County is required to include best available science (BAS) in designating and protecting critical areas pursuant to RCW 36.70A.172 (1); and

WHEREAS, the County first adopted a critical areas ordinance in 1995; and

WHEREAS, the County has not amended its critical areas regulations since they were adopted; and

WHEREAS, the County updated the Walla Walla County Comprehensive Plan, including its Critical Areas Element, in 2007; and

WHEREAS, the state legislature enacted RCW36.70A.560 which placed a "time-out" until July 2010 on amendments to critical areas regulations that affect "agricultural activities;" and

WHEREAS, pursuant to RCW 36.70A.560 the County has not addressed "agricultural activities" in the 2008 update; and

WHEREAS, the Washington Supreme Court, in Futurewise v. Anacortes, 164. Wn. 2d 242, has clarified that Critical Areas Regulations under the Growth Management Act shall not be enacted within areas governed by the Shoreline Management Act.

NOW THEREFORE,

BE IT ORDAINED, by the Walla Walla County Board of County Commissioners that:

Section I. The Board of County Commissioners Makes the Following Findings of Fact:

A. Procedural History and Public Participation:

1. The County has spent a total of $145,000 on the cost of updating its critical areas regulations (not including the cost for County staff and resources).

2. The County received a grant from the Washington State Department of Community, Trade and Economic Development (CTED) in the amount of $25,000 to off-set the cost of updating these regulations.

3. The County's Current Expense Fund and the grant from CTED were the only sources of funds used to meet the State's mandate.

4. A written Request for Qualifications (RFQ) was issued by public notification in November 2007 requesting a statement by any qualified person or company to assist the County in the production of Best Available Science, and an initial draft of suggested new regulations that would meet the State's requirement for updating the County's Critical Areas Regulations;

5. In January 2008 the Board of County Commissioners entered into a professional consultant services contract with HDR Engineering, Inc. based on staff recommendation following personal interviews of both respondents to the County's RFQ, and review of each respondent's qualifications and experience with preparing best available science documentation and critical area regulations;

6. The County established a nine-member Technical Advisory Committee to assist County staff and the consultants with the best available science, critical areas designations, and draft regulations.

7. The Technical Advisory Committee included members of the following agencies and organizations with a technical background in critical areas: Washington State Department of Fish and Wildlife, Port of Walla Walla, Walla Walla County Conservation District, Washington Farm Bureau, Homebuilders Association of Tri-Cities, Snake River Salmon Recovery Board, Washington State Department of Ecology, Walla Walla Ranger District, and the Walla Walla County Watershed Planning Department.

8. The Technical Advisory Committee held workshop meetings open to the public on April 24, 2008, May 29, 2008, June 26, 2008, and July 17, 2008.

9. The Technical Advisory Committee conducted field observations on May 9, 2008.

10. The County's 2008 Critical Areas Ordinance Update website went "live" on May 22, 2008.

11. The Walla Walla Union Bulletin newspaper published an article on June 25, 2008 entitled "City, County to Discuss Critical Areas Rules."

12. The Planning Commissions of the City of College Place, the City of Walla Walla, and the County held a joint workshop meeting open to the public on the draft critical areas ordinance on June 26, 2008.

13. On August 1, 2008, the County sent notice to the Washington State Department of Community, Trade and Economic Development and other required state agencies of their intent to adopt amendments to the County's critical areas regulations and of the commencement of the 60-day comment period as required by RCW 36.70A.106.

14. The County released a final draft of a separate Critical Areas Ordinance Best Available Science Review document on August 1, 2008.

15. The 60-day comment period on the Draft 2008 Critical Areas Ordinance Update closed on September 30, 2008.

16. The County received comments from the Washington State Department of Fish and Wildlife and the Washington State Department of Community, Trade and Economic Development during the 60-day comment period required by RCW 36.70A.106.

17. The County received no public comments during the 60-day comment period required by RCW 36.70A.106.

18. The Walla Walla Union Bulletin newspaper ran an article on August 25, 2008 entitled "Workshop to Delve into Critical Areas Rule Update".

19. The Community Development Department held a public informational meeting on the critical areas ordinance in Walla Walla on August 26, 2008.

20. The County, along with the Cities of Walla Walla and College Place, issued a News Release on September 8, 2008 with background information, schedule information, contact information and frequently asked questions regarding the critical areas ordinance updates.

21. The Walla Walla Union Bulletin published an article on November 2, 2008 entitled "Hearing Set on Critical Areas Rule".

22. . The Walla Walla Union Bulletin published an article on November 7, 2008 entitled "Critical Areas Rule Nears Finish Line".

23. . The County issued a SEPA Determination of Non-Significance on September 30, 2008.

24. . The comment period for the Determination of Non-Significance closed on October 30, 2008.

25. The County received no comments on the Determination of Non-Significance.

26. The County received no appeals of the Determination of Non-Significance.

27. The County Planning Commission held a workshop meeting open to the public on the Draft 2008 Critical Areas Ordinance Update on October 8, 2008.

28. On November 5, 2008, based on the workshop, County staff and consultants forwarded to the County Planning Commission their analysis and proposed revisions to the County's critical areas regulations.

29. The County Planning Commission reviewed the analysis and proposed revisions prepared by County staff and consultants and held a public hearing on November 5, 2008 for the purposes of receiving testimony on the recommended revisions to the Draft 2008 Critical Areas Ordinance Update.

30. Two members of the public, including one representing the Walla Walla County Conservation District, testified at the November 5, 2008 public hearing.

31. The County Planning Commission reviewed the analysis and proposed revisions prepared by County staff and consultants, considered testimony, conducted deliberations, and made a recommendation to the Board of County Commissioners for approval of the draft ordinance on November 12, 2008.

32. On November 13, 2008 the Chairman of the Planning Commission signed Resolution No. 08-04 with their recommendation of approval to the Board of County Commissioners.

33. Community Development Department staff forwarded the recommendations of the County Planning Commission to the Board of County Commissioners on November 17, 2008.

34. The Board of County Commissioners passed Resolution No. 08-320 on November 17, 2008 setting the public hearing for December 15, 2008.

35. A Notice of Public Hearing for the December 15, 2008 hearing was published in the Waitsburg Times on November 20, 2008 and November 27, 2008.

36. The Board of County Commissioners held workshop meetings open to the public on the Draft 2008 Critical Areas Ordinance Update on September 9, 2008, December 2, 2008, December 9, 2008, and December 16, 2008.

37. Based on the workshops, staff proposed revisions to the Critical Areas Regulations.

38. The Walla Walla Union Bulletin newspaper published an article on December 13, 2008 entitled "Ordinance Update Near Done."

39. The Board of County Commissioners held a public hearing on December 15, 2008, for the purpose of receiving testimony on the Draft 2008 Critical Areas Ordinance Update and to consider the recommendations of the County Planning Commission and the proposed revisions.

40. No members of the public were in attendance at the public hearing on December 15, 2008.

41. No oral testimony was presented at the public hearing on December 15, 2008 and four written comment letters were entered into the record. Three similar letters were received from Walla Walla 2020, Futurewise and Citizens for Good Governance.

42. The Walla Walla Union Bulletin published an article titled "Comments Appear for Ordinance Hearing" on December 16, 2008.

43. The Washington State Supreme Court issued its decision in *Futurewise v. Anacortes* in July of 2008. However, motions for reconsideration were filed, and no mandate was issued until June 11, 2009. Walla Walla County delayed enacting its critical areas regulations until a mandate was issued in the case.

44. Based on the Court's mandate issued in *Futurewise v. Anacortes*, Walla Walla County revised its critical areas ordinance, specifically the applicability section, to comply with the decision.

45. A second public hearing was held on August 31, 2009 before the Board of County Commissioners on the limited issue of addressing the change to the applicability section and related footnotes in response to the *Futurewise v. Anacortes* decision.

B. Analysis of the sufficiency of proposed Critical Areas Regulations.

In addition to the analysis contained in the Best Available Science Document, addendums to the BAS document, and staff reports, the Board makes the following additional observations on the following topics addressed in the Futurewise, Citizens for Good Governance and Walla Walla 2020 letters:

1. CARA: CARA Analysis:

The Board has reviewed the BAS document and the memos from HDR and staff regarding the issue of whether the Shallow Gravel Aquifer should be designated as a Critical Aquifer Recharge Area. The Board concurs with the analysis contained therein, and adopts the analysis as its own. The Board concurs with the Best Available Science Document, which notes that the entire Gravel Aquifer is not designated as a Critical Aquifer Recharge Area, but that it is an area of concern that should be monitored.

Based on the BAS document, and the analysis of HDR and staff, the Board makes the following summarization of the gravel aquifer's vulnerability to contamination (susceptibility to contamination and contamination loading potential) as required by WAC 365 190-080(2).

(a) Susceptibility to Contamination.

i. Most of the recharge to the aquifer occurs in foothills of the Blue Mountains during high spring flows in the summer, the eastern edges of the gravel aquifer, or along the Walla Walla River and its tributaries and distributaries, springs and canals. The proposed buffers to streams adequately protect these waters, as well as federal, state, and local clean water laws, thus providing protection to the gravel aquifer.

ii. Soil Characteristics: The Gravel Aquifer consists of at least four different soil types, with a depth of 300 to 800 feet. The gravel aquifer is generally unconfined, with exceptions in a few places.

iii. Aquifer Properties. The permeability and porosity of the aquifer vary based on soil type Higher permeability is generally near stream and river channels.

iv. Groundwater Depth and Flow Characteristics. The groundwater flow is generally from east to west. Groundwater levels can be less than five feet near the Walla Walla River and its springs and tributaries. Water table elevations can vary from approximately 1,050 feet above mean sea level (msl) to 725-750 msl. The gravel aquifer is generally connected with streams, canals and ditches that overlie the surface. Most of the direct recharge from streams occurs in the higher elevation areas to the north and east of the city of Walla Walla. Groundwater levels vary through the year, with the highest levels occurring prior to June.

v. Vadose Zone. The permeability and contaminant attenuation properties of the gravel aquifer cannot be generalized, with shallow gravels having less attenuation properties, and the deeper sand, silt and clay having more attenuation properties.

(b) **Contamination Loading Potential.**

i. General Land Use. About 95 percent of the lands overlaying the gravel aquifer are designated as rural and resource lands in the County Comprehensive Plan. The uses allowed in these areas are generally agriculture or resource related. Agricultural activities are not to be regulated by this update of critical areas regulations. The agricultural activities are generally dry or irrigated crops; feedlots and dairies and other large concentrated animal operations are generally not present in the area of primary recharge, the foothills of the Blue Mountains. Grazing is present in those areas. One feedlot exists on the western part of the study area.

Within the Urban Growth Areas, higher density residential uses, as well as commercial and industrial uses are allowed. However, these areas are served by public sewer systems, and any land division of more than a one-time split requires connection to water and sewer utilities. (Comprehensive Plan Policy LU 18.) Stormwater regulations at both the state and local level within UGAs will lower the possibility of contaminants entering groundwater.

There are six sites in Walla Walla County that are listed as environmental cleanup sites by the State Department of Ecology; whether because the property owners have violated existing laws and disposed of contaminants unlawfully, or because of historic business practices that are not now legal. Three of those listed sites are located in unincorporated Walla Walla County. Additional land use regulations on new development will not solve the problem created by those sites. Clean up of those sites is required by Ecology, and in some cases, the County. There is also one site in the study area listed on EPA's Toxics Release Inventory System. Releases are transferred offsite.

ii. Waste Disposal Sites. Only one solid waste disposal site exists in the area, and it is located within the City of Walla Walla. The Sudbury landfill is a regulated landfill, with new portions lined to prevent contamination. Monitoring wells are part of the landfill, and regular reports are made regarding groundwater contamination.

iii. Agricultural Activities. As mentioned in No. 1 above, a large percentage of acreage overlaying the gravel aquifer are dedicated to agricultural activities, mostly crop production. This update of the Critical Areas Ordinance is not intended to regulate agricultural activities.

iv. Well Logs and Water Quality Results. Water quality information on file at the County Health Department indicates that there has been some contamination of wells from fecal coliform and nitrates. These test results are not broken down by geographic or hydrogeologic area. A twenty-year old study did note some contamination in wells south of Walla Walla. Improved septic system design regulations and increased connection to public water and sewer systems should decrease these issues. Increased regulation of engineered systems as well as increased categorizing of well tests may be helpful to control and study these issues in the future. The Board may choose to investigate this issue when the Health Department next updates its septic regulation.

v. Other information. Most of the area where recharge occurs is located in the eastern part of the aquifer and in the Blue Mountains. These areas are zoned for rural and resource uses.

2. Posting of signs for major aquifer recharge areas. The Board recognizes that public education is an important part of protecting critical areas. The purpose of this ordinance is to ensure that the County's development regulations are in compliance with the Growth Management Act. Should funding become available, a signing project, as well as other public education/outreach programs, might be supported by the County in the future. However, at this time, particularly with regard to public water systems, such education projects are better left to the purview of water system purveyors or state entities.

3. Additional Criteria for impacting wetlands. The Board finds that the provisions of 18.08 adequately protect wetlands and are consistent with the County's Comprehensive Plan. The Board finds that these requirements are stringent and will achieve the following policies of the Comprehensive Plan:

CA 7: Promote public health and welfare by instituting local measures to protect, preserve and enhance where applicable, wetlands for their associated values that exist in this county. Wetlands serve a variety of vital functions, including, but not limited to: flood storage and conveyance, water quality protection, recharge and discharge areas for groundwater, erosion control, sediment control, fish and wildlife habitat, recreation, education, and scientific research.

CA: 8: Implement wetland protection strategies that will achieve, to the maximum extent possible, a zero net loss of natural wetlands acreage, functions, and values. If possible, when faced with a loss, Walla Walla County will implement wetland banking practices.

For an activity to be permitted in a wetland or a wetland buffer, applicants *must show* that the proposed activity will not degrade the functions and values of the wetland and other critical areas. 18.08.340. To do this, the applicant must prepare a critical areas report if a project is within, adjacent to or likely to impact a critical area. 18.08.060 (E). Any and all mitigation shall address all identified adverse impacts to critical areas. 18.08.105. The Mitigation requirements specific to wetlands, at 18.08.346, are consistent with the Department of Ecology's most recent mitigation directives, and are thus considered to be the best available science.

4. Stream Buffer Widths: The Board notes that the discussion of stream buffers contained in Chapter 2 of the Best Available Science document is very detailed, and sets forth a variety of different possibilities for stream buffers. See Table 2.53. As noted in the memo from HDR dated December 16, 2008, a detailed study was done to determine the appropriate stream buffer widths based on available science and local conditions. With regard to the Washington State Department of Fish and Wildlife Document referenced by Futurewise, Citizens for Good Governance and Walla Walla 2020, the Board notes two items. First, the Washington State Department of Fish and Wildlife document, prepared by K.L. Knutson, and V.L. Naef was prepared in 1997, and does not have information regarding buffers specific to Walla Walla County conditions. It addresses general conditions across the state. Many of the recommendations in the document are focused on heavy timber conditions, which only apply to a limited portion of the County. The Board notes that the WDFW document was indeed referenced as a source material for the Best Available Science document, as is appropriate. However, the Board notes that the WDFW document does not reference or discuss site potential tree height (SPTH) as a factor for buffer width. The detailed discussion contained in the BAS document regarding SPTH at pages 2-42 and 2-43 of the BAS is convincing to the Board. SPTH provides a logical and rational nexus for buffer width, and nothing in the record in front of this Board suggests that SPTH should not be used to determine buffer width. No evidence or testimony has been presented to this Board that SPTH is not good or appropriate scientific input for determining buffer width. Finally, the Board notes that the SPTH analysis in the BAS appropriately utilizes local credible evidence from Larry Hooker of the NRCS with regard to what an appropriate SPTH is in Walla Walla County. Hooker's analysis has also not been rebutted by any party, including members of the County's technical advisory committee, which discussed this issue extensively.

In summary, the suggested stream buffer widths are based on credible scientific data. The SPTH analysis is convincing to this Board, especially with regard to woody debris recruitment. Finally, the buffer widths are based on local circumstances – the local height of a tree – and thus appropriately tailored for Walla Walla County. For the forgoing reasons, the Board will not increase stream buffer widths as proposed by Futurewise, Walla Walla 2020 and Citizens for Good Governance.

Section II. The Board of County Commissioners Makes the Following Conclusions of Law:

1. The County has reviewed and evaluated its previously adopted Critical Areas Ordinance, and finds that it should be replaced in its entirety by the new proposed Critical Areas Regulations, except as outlined below.

2. The proposed critical areas regulations amendments will be consistent with and implement the goals and policies of the Walla Walla County Comprehensive Plan.

3. The critical areas regulations amendments will be consistent with and implement the County-wide Planning Policies.

4. The critical areas regulations amendments do not require amendment of any other section of the County Code or the Comprehensive Plan.

5. The critical areas regulations amendments are consistent with the Growth Management Act.

Section III. Adoption of Critical Areas Regulation and Best Available Science.

A. Based on its review of the requirements of RCW 36.70A, the analysis and proposed revisions prepared by County staff and consultants, the recommended proposed revisions forwarded by the County Planning Commission, and the public comments received, the Board of County Commissioners modified the proposed revisions to more fully comply with RCW 36.70A and hereby declares that the Walla Walla County critical areas regulations as revised by this ordinance comply with the requirements of RCW 36.70A.130.

B. The Best Available Science document, as prepared and amended by HDR and Walla Walla County Staff, is **adopted**.

C. The 2008 Critical Areas regulations are **adopted** as presented to the Board of County Commissioners on this date, as attached at Exhibit A.

Section IV. Effective Date and Savings. This ordinance is effective as of the date of signing. Any previous ordinance amended by this Ordinance shall remain in force and effect until the effective date of this ordinance.

Section V. Severability. If any section, subsection, paragraph, sentence, clause or phrase of this ordinance is declared unconstitutional or invalid for any reason, such decision shall not affect the validity of the remaining parts of this ordinance.

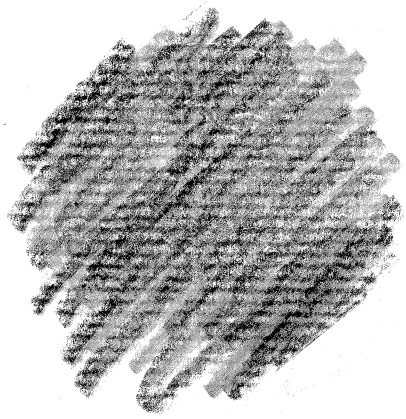
Section VI. Effect of *Futurewise v. Western Washington Growth Management Hearings Board.* In July of 2008, the Washington State Supreme Court issued its decision in the above case. After motions to reconsider were filed, the Court issued its mandate on June 11, 2009, without modifying its opinion. Until such time as the provisions of the Critical Areas regulations attached at Exhibit A are reviewed under the Shoreline Management Act, RCW 90.58, these regulations shall not apply to shorelines or associated wetlands designated in the Walla Walla County Shoreline Master Plan. Until such time as such review has occurred, the County's critical areas regulations enacted by Resolution 95-220 shall continue to apply to shorelines and their associated wetlands designated in the Shoreline Master Plan.

Section VII. Partial Repeal of Resolution 95-220. Resolution 95-220 is repealed to the extent that it applies to areas not governed by the Shoreline Master Plan. For those areas governed by the Walla Walla County Shoreline Master Plan, Resolution 95-220 shall continue to apply until such time as review of the Critical Areas regulations attached at Exhibit A is reviewed under the Shoreline Management Act, RCW 90.58.

Section VIII. Publication. This ordinance will be published by an approved summary consisting of the title.

PASSED by the Walla Walla County Board of County Commissioners in regular session at Walla Walla, Washington, then signed by its membership and attested by its Clerk in authorization of such passage this 31st day of August, 2009.

Approved this 31st Day of August, 2009



Gregory A. Tompkins, Chairman, District 3

Gregg C. Loney, Commissioner, District 1

Perry L. Dozier, Commissioner, District 2

Constituting the Board of County Commissioners of Walla Walla County, Washington

Attest:

Connie R. Vinti, Clerk of the Board

Approved as to form:

Jesse D. Nolte
Deputy Prosecuting Attorney

Exhibit A

Final Version

Walla Walla County
Critical Areas Regulations

Prepared by:
HDR Engineering, Inc.
2805 St. Andrews Loop, Suite A
Pasco, WA 99301

HDR

Chapter 18.08
CRITICAL AREA PROTECTION

18.08.005 Purpose

A. The purpose of this Chapter is to designate and classify ecologically sensitive and hazardous areas and to protect these areas and their functions and values, while also allowing for reasonable use of private property.

18.08.010 Authority

A. As provided herein, the Community Development Director (Director) is given the authority to interpret and apply, and the responsibility to enforce this Chapter to accomplish the stated purpose.

B. The County may withhold, condition, or deny development permits or activity approvals to ensure that the proposed action is consistent with this Chapter.

18.08.015 Applicability

A. Until such time as the provisions of this Chapter are reviewed under the Shoreline Management Act, RCW 90.58, this Chapter shall not apply to shorelines or associated wetlands designated in the Walla Walla County Shoreline Master Plan. Until such time as such review has occurred, the County's critical areas regulations enacted by Resolution 95-219 shall continue to apply to shorelines designated in the Shoreline Master Plan.

B. The provisions of this Chapter shall apply to all lands, all land uses and development activity, and all structures and facilities in the County, whether or not a permit or authorization is required, and shall apply to every person, firm, partnership, corporation, group, governmental agency, or other entity that owns, leases, or administers land within the County. No person, company, agency, or applicant shall alter a critical area or buffer except as consistent with the purposes and requirements of this Chapter. This Chapter does not apply to lawful uses or legal non-conforming uses existing at the time of adoption. Agricultural uses or changes from one agricultural use to another are exempt from this ordinance. The provisions of this chapter shall not impinge upon water rights.

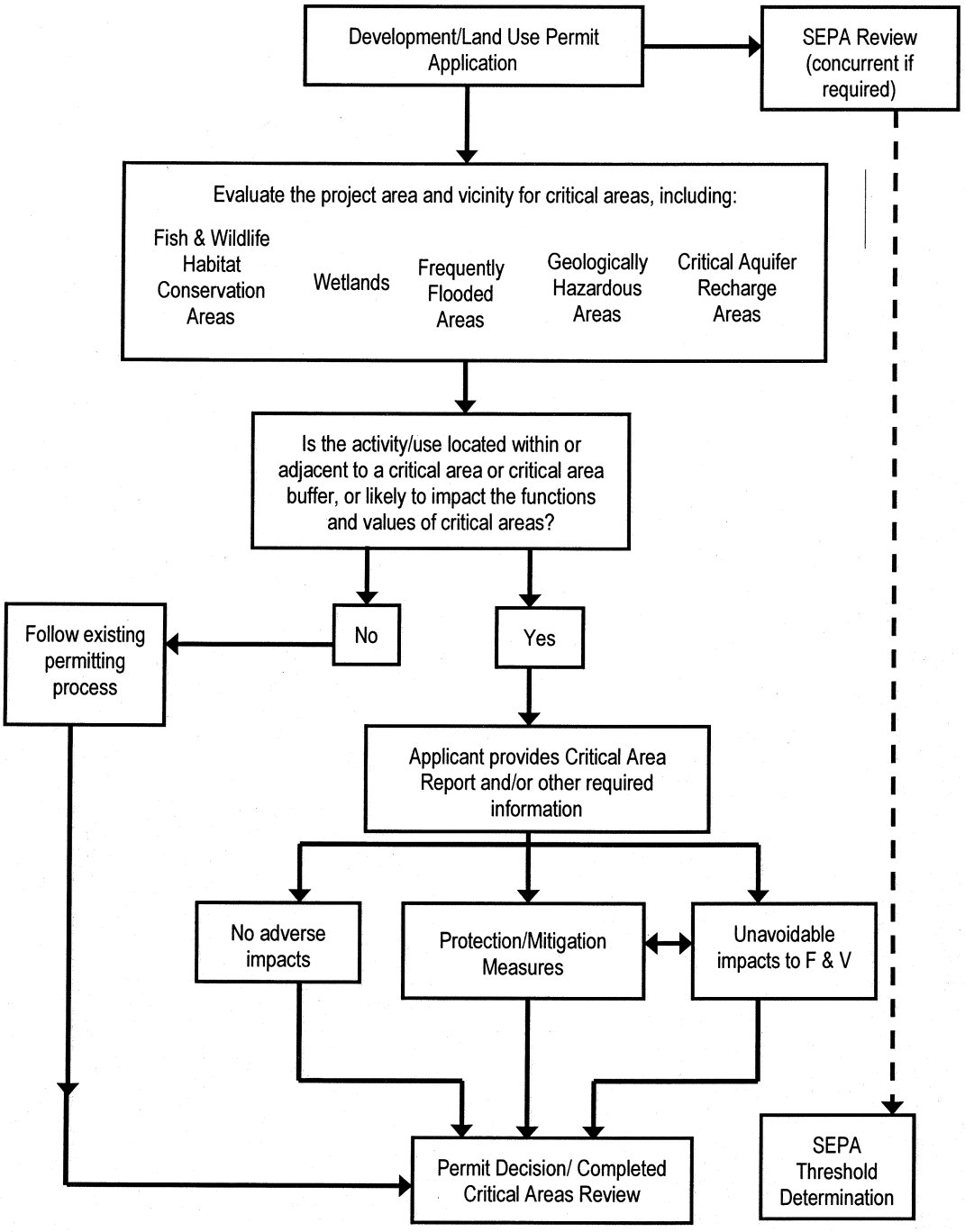
C. The County shall not approve any permit, including but not limited to those listed below, or otherwise issue any authorization to alter the condition of any land, water, or vegetation, or to construct or alter any structure or improvement in, over, or on a critical area or associated buffer, without first ensuring compliance with the requirements of this Chapter:

1. Building permit;
2. Conditional use permit;
3. Clearing and Grading permit;
4. Short subdivision;
5. Subdivision;
6. Planned unit development;
7. Binding site plan; or
8. Any other adopted permit or required approval not expressly exempted by this Chapter.

D. Approval or denial of a permit or development proposal pursuant to the provisions of this Chapter does not discharge the obligation of the applicant to comply with the provisions of this Chapter.

Figure 1 identifies how critical areas review is incorporated into the application process for the underlying permit:

Figure 1: Summary of Critical Areas Review Process and Integration into Underlying Permit Process



18.08.020 Definitions

Words not defined in this Chapter shall be as defined in the Walla Walla County Code, the Washington Administrative Code, or the Revised Code of Washington. Words not found in either code shall be as defined in the Webster's Third New International Dictionary, latest edition.

Adaptive management – Adaptive management relies on scientific methods to evaluate how well regulatory and non-regulatory actions protect the critical area. An adaptive management program is a formal and deliberate scientific approach to taking action and obtaining information in the face of uncertainty.

Adjacent – Immediately adjoining (in contact with the boundary of the influence area) or within a distance that is less than that needed to separate activities from critical areas to ensure protection of the functions and values of the critical areas. Adjacent shall mean any activity or development located:

A. On a site immediately adjoining a critical area;

B. A distance equal to or less than the required critical area buffer width and building setback;

C. A distance equal to or less than 200 feet upland from a stream, wetland, or water body;

D. Bordering or within the floodway, floodplain or channel migration zone; or

E. A distance equal to or less than 200 feet from a critical aquifer recharge area.

Agricultural Reserve Ground – Ground in/or around an ongoing agricultural operation that is not currently in production such as steep hillsides, grass waterways, field eyebrows, areas too small to be economically viable at this time, and areas that are unfit to be utilized because of their general inaccessibility to the operation, but which at a later time may be used for active agricultural activities.

Agricultural Uses – Agricultural activities including farming, horticulture, silviculture, irrigation delivery systems, drainage systems, ranching and grazing of animals and pest and weed control. This includes agricultural set-aside land, lands lying idle under government programs and changes between agricultural activities.

Alteration – 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 (vegetation), construction, compaction, excavation or any other activity that changes the character of the critical area.

Applicant – A person who files an application for permit under this Chapter and who is either the owner of the land on which that proposed activity would be located, a contract purchaser, or the authorized agent of such a person.

Aquifer – A geological formation, group of formations or part of formation that is capable of yielding a significant amount of water to a well or spring.

Aquifer recharge areas – Areas that, due to the presence of certain soils, geology, and surface water, act to recharge ground water by percolation.

Aquifer susceptibility – The ease with which contaminants can move from the land surface to the aquifer based solely on the types of surface and subsurface materials in the area. Susceptibility usually defines the rate at which a contaminant will reach an aquifer unimpeded by chemical interactions with the vadose zone media.

Aquifer, unconfined – An aquifer not bounded above by a bed of distinctly lower permeability than that of the aquifer itself and containing ground water under pressure approximately equal to that of the atmosphere. This term is synonymous with the term "water table aquifer."

Base flood – A flood event having a one percent chance of being equaled or exceeded in any given year, also referred to as the one hundred-year flood. Designations of base flood areas on flood insurance map(s) always include the letters A or V.

Best available science – Current scientific information used in the process to designate, protect, or restore critical areas that is derived from a valid scientific process as defined by WAC 365-195-900 through 925. Sources of best available science are included in Walla Walla County's Best Available Science document prepared during this ordinance update process.

Best management practices (BMPs) – 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, and sediment;

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

C. Protect trees and vegetation designated to be retained during and following site construction; and

D. Provide standards for proper use of chemical herbicides within critical areas.

Buffer or buffer zone – An area contiguous to and protects a critical habitat that is required for the continued maintenance, functioning, and/or structural stability of a critical area.

Compensation project – Actions necessary to replace project-induced critical area and buffer losses, including land acquisition, planning, construction plans, monitoring and contingency actions.

Compensatory mitigation – Replacing project-induced critical wetland habitat losses or impacts, and includes, but is not limited to, the following:

Restoration: Actions performed to reestablish wetland functional characteristics and processes that have been lost by alterations, activities, or catastrophic events within an area that no longer meets the definition of a wetland.

Creation: Actions performed to intentionally establish a wetland at a site where it did not formerly exist.

Enhancement: Actions performed to improve the condition of existing degraded wetlands so that the functions they provide are of a higher quality.

Preservation: Actions taken to ensure the permanent protection of existing, high-quality wetlands.

Conservation easement – A legal agreement that the property owner enters into to restrict uses of the land. Such restrictions can include, but are not limited to, passive recreation uses such as trails or scientific uses and fences or other barriers to protect habitat. The easement is recorded on a property deed, runs with the land, and is legally binding on all present and future owners of the property, therefore, providing permanent or long-term protection.

Critical aquifer recharge area – Areas designated by WAC 365-190-080(2) that are determined to have a critical recharging effect on aquifers used for potable water as defined by WAC 365-190-030(2).

Critical areas – Critical areas include any of the following areas or ecosystems: Aquifer recharge areas, fish and wildlife habitat conservation areas, frequently flooded areas, geologically hazardous areas, and wetlands, as defined in RCW 36.70A and this Chapter.

Critical species – All animal and plant species listed by the state or federal government as threatened or endangered.

Cumulative Impacts or Effects – The combined, incremental effects of human activity on critical areas functions and values. Cumulative impacts result when the effects of an action are added to or interact with other effects in a particular place and within a particular time. It is the combination of these effects, and any resulting environmental degradation, that should be the focus of cumulative impact analysis and changes to policies and permitting decisions.

Developable area – A site or portion of a site that may be utilized as the location of development, in accordance with the rules of this Chapter.

Development – Any activity upon the land consisting of construction or alteration of structures, earth movement, dredging, dumping, grading, filling, mining, removal of any sand, gravel, or minerals, driving of piles, drilling operations, bulk heading, clearing of vegetation, or other land disturbance. Development includes the storage or use of equipment or materials inconsistent with the existing use. Development also includes approvals issued by the Walla Walla County that binds land to specific patterns of use, including but not limited to, subdivisions, short subdivisions, conditional use permits, and binding site plans. Development activity does not include the following activities:

A. Interior building improvements.

B. Exterior structure maintenance activities, including painting and roofing.

C. Routine landscape maintenance of established, ornamental landscaping, such as lawn mowing, pruning and weeding.

D. Maintenance of the following existing facilities that does not expand the affected area: septic tanks (routine cleaning); wells; individual utility service connections; and individual cemetery plots in established and approved cemeteries.

Development permit – Any permit issued by Walla Walla County, or other authorized agency, for construction, land use, or the alteration of land.

Director – The County official for the Walla Walla County community development department or other responsible official or other County staff granted the authority to act on behalf of the Director.

Eco-connectivity – Eco-connectivity is a physical feature of the land as well as functional one. It is the geo-physical connection between natural habitat areas that allow fish and animals to move between feeding, reproductive, rearing, and resting areas. The functional connection is dependent on the physical connection.

Ecologically sustainable – The establishment of site conditions that preserve or result in no net loss of ecological functions and values, as identified in a mitigation plan.

EDT Priority Protection Reach – Reach designated as a priority using the Ecosystem Diagnosis and Treatment method.

Elevated Building – A building that has no basement and its lowest elevated floor is raised above ground level by foundation walls, shear walls, post, piers, pilings, or columns.

Emergent Wetland – A wetland with at least thirty percent of the surface area covered by erect, rooted, herbaceous vegetation extending above the water surface as the uppermost vegetative strata.

Erosion – The process whereby wind, rain, water, and other natural agents mobilize and transport particles.

Erosion hazard areas – At least those areas identified by the United State Department of Agriculture National Resources Conservation Service as have a "severe" rill and inter-rill erosion hazard.

Exotic – Any species of plants or animals, which are (not listed on the State plant list) foreign to the planning area.

Extreme slope hazard areas – Those areas with pre-development slope greater than 45% percent.

Fish and wildlife habitat conservation areas – Areas necessary for maintaining species in suitable habitats within their natural geographic distribution so that isolated subpopulations are

not created as designated by WAC 365-190-080(5). These areas are guided by the State's Priority Habitats and Species list and include the following:

A. Areas with which state or federally designated endangered, threatened, and sensitive species have a primary association;

B. Habitats of local importance, including but not limited to areas designated as priority habitat by the Department of Fish and Wildlife, areas that provide important habitat for neotropical migratory songbirds, areas that provide important habitat for wintering birds of prey, and areas that provide unique habitats within the County;

C. Naturally occurring ponds under twenty acres and their submerged aquatic beds that provide fish or wildlife habitat, including those artificial ponds intentionally created from dry areas in order to mitigate impacts to ponds;

D. Waters of the state, including lakes, rivers, ponds, streams, inland waters, underground waters, salt waters and all other surface waters and watercourses within the jurisdiction of the state of Washington;

E. Lakes, ponds, streams, and rivers planted with game fish by a governmental or tribal entity;

F. State natural area preserves and natural resource conservation areas designated by the Department of Natural Resources; and

G Land essential for preserving connections between habitat blocks and open spaces.

Fish habitat – Habitat that is used by fish at any life stage at any time of the year, including off-channel habitat.

Flood or flooding – A general and temporary condition of partial or complete inundation of normally dry land areas from the overflow of inland waters and/or the unusual and rapid accumulation of runoff of surface waters from any source.

Flood insurance map – The official map on which the Federal Insurance Administration has delineated the areas of special flood hazards and include the risk premium zones applicable to the community. Also known as "flood insurance rate map" or "FIRM."

Flood insurance study – 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.

Floodplain – The total land area adjoining a river, stream, watercourse or lake subject to inundation by the base flood.

Floodway – The channel of a river or other watercourse and the adjacent land area that must be reserved in order to discharge the base flood without cumulatively increasing the surface water elevation more that one foot. Also known as the "zero rise floodway."

Forested Wetland – A wetland with at least thirty percent of the surface area covered by woody vegetation greater than twenty feet in height that is at least partially rooted within the wetland.

Formation – An assemblage of earth materials grouped together into a unit that is convenient for description or mapping.

Frequently flooded areas – Lands in the floodplain subject to a one percent or greater chance of flooding in any given year and those lands that provide important flood storage, conveyance and attenuation functions, as determined by the Director in accordance with WAC 365-190-080(3). Frequently flooded areas perform important hydrologic functions and may present a risk to persons and property. Classifications of frequently flooded areas include, at a minimum, the one hundred-year floodplain designations of the Federal Emergency Management Agency and the National Flood Insurance Program.

Functions and values – The beneficial roles served by critical areas including, but not limited to, water quality protection and enhancement, fish and wildlife habitat, food chain support, flood storage, conveyance and attenuation, ground water recharge and discharge, erosion control, wave attenuation, protection from hazards, historical and archaeological and aesthetic value protection, and recreation. These beneficial roles are not listed in order of priority.

Generators, medium quantity – When referring to critical aquifer recharge areas, means those businesses that generate more than two hundred twenty (220) pounds, but less than two thousand two hundred (2,200) pounds of dangerous waste per month. They are limited to the accumulation of less than two thousand two hundred (2,200) pounds of dangerous waste at any time. They are limited to the generation of, and accumulation of, less than 2.2 pounds of acutely hazardous waste or toxic extremely hazardous waste.

Generators, large quantity – When referring to critical aquifer recharge areas, means those businesses that generate more than two thousand two hundred (2,200) pounds of dangerous waste per month. They accumulate more than two thousand two hundred (2,200) pounds of dangerous waste at any time. They generate and accumulate more than 2.2 pounds of acutely hazardous waste or toxic extremely hazardous waste.

Geologically hazardous areas - Areas that may not be suited to development consistent with public health, safety or environmental standards, because of their susceptibility to erosion, sliding, earthquake, or other geological events as designated by WAC 365-190-080(4). Types of geologically hazardous areas include: erosion, landslide, seismic, mine, and volcanic hazards.

Ground water – Water in a saturated zone or stratum beneath the surface of land or a surface water body.

Growth Management Act – RCW 36.70A, and 36.70B, as amended.

Habitat – the place or environment where a plant or animal naturally occurs.

Habitat conservation areas – Areas designated as fish and wildlife habitat conservation areas.

Habitats of Local Importance – These areas include a seasonal range or habitat element with which a given species has a primary association, and which, if altered may reduce the likelihood

that the species will maintain and reproduce over the long-term. These might include areas of high relative density, breeding habitat, winter range, and movement corridors. These might also include habitats that are of limited availability or high vulnerability to alterations such as cliffs, talus, and wetlands. (WAC 365-190-030)

Hazard areas – Areas designated as frequently flooded areas or geologically hazardous areas due to potential for erosion, landslide, seismic activity, extreme slopes, or other geological condition.

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

High quality wetlands – Those wetlands that meet the following criteria:

A. No, or isolated, human alteration of the wetland topography;

B. No human-caused alteration of the hydrology or the wetland appears to have recovered from the alteration;

C. Low cover and frequency of exotic plant species;

D. Relatively little human-related disturbance of the native vegetation, or recovery from past disturbance;

E. If the wetland system is degraded, it still contains a viable and high quality example of a native wetland community; and

F. No known major water quality problems.

Historic condition – Condition of the land, is including flora, fauna, soil, topography, and hydrology that existed before the area and vicinity were developed or altered by human activity.

Hydraulic project approval (HPA) – A permit issued by the state Department of Fish and Wildlife for projects that affect the bed or flow of waters of the state in accordance with Chapter 77.55 RCW and WAC 220.110.

Hydric soil – A soil that is saturated, flooded or ponded long enough during the growing season to develop anaerobic conditions in the upper part. The presence of hydric soil shall be determined following the methods described in the *Washington State Wetland Identification and Delineation Manual, as amended.*

Hydrophytic vegetation – Macrophytic 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 *Washington State Wetland Identification and Delineation Manual, as amended.*

Impervious surface – A hard surface area 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 from the flow present under natural conditions prior to development. Common impervious surfaces 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 stormwater.

In-kind compensation – Same species, habitat type, and function impacted. If the impacted habitat is disturbed, it means replacement with the natural habitat that would occur. It does not mean replacement "in-category."

Isolated wetlands – Those wetlands that are outside of and not contiguous to any one hundred-year floodplain of a lake, river, or stream, and have no contiguous hydric soil or hydrophytic vegetation between the wetland and any surface water.

Infiltration – The downward entry of water into the immediate surface of soil.

Injection well(s)

A. **Class I** – A well used to inject industrial, commercial, or municipal waste fluids beneath the lowermost formation containing, within one quarter mile of the well bore, an underground source of drinking water.

B. **Class II** – A well used to inject fluids:

   1. Brought to the surface in connection with conventional oil or natural gas exploration or production and may be commingled with wastewaters from gas plants that are an integral part of production operations, unless those waters are classified as dangerous wastes at the time of injection;

   2. For enhanced recovery of oil or natural gas; or

   3. For storage of hydrocarbons that are liquid at standard temperature and pressure.

C. **Class III** – A well used for extraction of minerals, including but not limited to the injection of fluids for:

   1. In-situ production of uranium or other metals that have not been conventionally mined;

   2. Mining of sulfur by Frasch process; or

   3. Solution mining of salts or potash.

D. **Class IV** – A well used to inject dangerous or radioactive waste fluids.

E. **Class V** – All injection wells not included in Classes I, II, III, or IV.

Inter-rill – Inter-rills are areas subject to sheetwash.

Landslide hazard areas – Areas that are potentially subject to risk of mass movement due to a combination of geologic landslide resulting from a combination of geologic, topographic, and hydrologic factors. These areas are typically susceptible to landslides because of a combination of factors including: bedrock, soil, slope gradient, slope aspect, geologic structure, ground water, or other factors.

Minerals – materials including gravel, sand, and valuable metallic substances. [R.C.W. 36.70A.030(11); W.A.C. 365-190-030(12).

Mitigation – Avoiding, minimizing or compensating for adverse critical areas impacts. Mitigation, in the following order of preference, is:

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

B. Minimizing impacts by limiting the degree or magnitude of the action and its implementation, by using appropriate technology, or by taking affirmative steps, such as project redesign, relocation, or timing, to avoid or reduce impacts;

C. Rectifying the impact to wetlands, critical aquifer recharge areas, and habitat conservation areas by repairing, rehabilitating or restoring the affected environment to the conditions existing at the time of the initiation of the project;

D. Minimizing or eliminating the hazard by restoring or stabilizing the hazard area through engineered or other methods;

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

F. Compensating for the impact to wetlands, critical aquifer recharge areas, and habitat or critical areas by replacing, enhancing, or providing substitute resources or environments; and

G. Monitoring the hazard or other required mitigation and taking remedial action when necessary.

Mitigation for individual actions may include a combination of the above measures.

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

Native vegetation – Plant species that are indigenous to the area in question. Plants that are not listed in Chapter 16-750 WAC.

Nonconformity – A legally established existing use or legally constructed structure that is not in compliance with current regulations.

Non-indigenous – See "exotic."

Off-site mitigation – To replace critical areas away from the site on which a critical area has been impacted.

On-site mitigation – On or adjacent to the project impact site or in the same stream reach, based on resource needs.

Ordinary high water mark (OHWM) – That mark which is found by examining the bed and banks 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 or vegetation has a character distinct from that of the abutting upland..

Permeability – The capacity of an aquifer or confining bed to transmit water. It is a property of the aquifer or confining bed and is independent of the force causing movement.

Potable water – Water that is safe and palatable for human use.

Practical alternative – An alternative that is available and capable of being carried out after taking into consideration, cost, existing technology, and logistics in light of overall project purposes, and having fewer impacts to critical areas.

Primary association area – The area used on a regular basis by, is in close association with, or is necessary for the proper functioning of the habitat of a critical species. Regular basis means that the habitat area is normally, or usually known to contain a critical species, or based on known habitat requirements of the species, the area is likely to contain the critical species. Regular basis is species and population dependent. Species that exist in low numbers may be present infrequently yet rely on certain habitat types.

Priority habitat - Habitat type or elements with unique or significant value to one or more species as classified by the Department of Fish and Wildlife. A priority habitat may consist of a unique vegetation type or dominant plant species, a described successional stage, or a specific structural element. (WAC 173-26-020(34))

Project area – All areas within fifty feet of the area proposed to be disturbed, altered, or used by the proposed activity or the construction of any proposed structures.

Qualified professional – A person with experience and training in the pertinent scientific discipline, and who is a qualified scientific expert with expertise appropriate for the relevant critical area subject. A qualified professional must have obtained a B.S. or B.A. or equivalent degree in biology, engineering, environmental studies, fisheries, geomorphology or related field, and two years of related work experience.

A. A qualified professional for habitats or wetlands must be a professional wetland scientist with at least two years of full-time work experience as a wetlands professional, including delineating wetlands using the state or federal manuals, preparing wetland reports, conducting function assessments, and developing and implementing mitigation plans.

B. A qualified professional for a geological hazard must be a professional geologist (preferred) or engineer, licensed in the state of Washington.

C. A qualified professional for critical aquifer recharge areas means a hydrogeologist, geologist, engineer, or other scientist with experience in preparing hydrogeologic assessments.

Recharge – The process involved in the absorption and addition of water to ground water.

Reclaimed water – Municipal wastewater effluent that has been adequately and reliability treated so that it is suitable for beneficial use. Following treatment it is no longer considered wastewater (treatment levels and water quality requirements are given in the water reclamation and reuse standards adopted by the state Departments of Ecology and Health).

Regulatory Flood – A level of flooding that a regulatory agency's design regulations apply to.

Repair or maintenance – 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.

Restoration – Measures 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 reestablish structural and functional characteristics of the critical area that have been lost by alteration, past management activities, or catastrophic events.

Rills – Steep-sided channels resulting from accelerated erosion. A rill is generally a few inches deep and not wide enough to be an obstacle to farm machinery. Rill erosion tends to occur on slopes, particularly steep slopes with poor vegetative cover.

Riparian habitat – Any area adjacent to surface water which possesses elements of both aquatic and terrestrial ecosystems that mutually influence each other. The width of these areas extends from the Ordinary High Water Mark to that portion of the terrestrial landscape that directly influences the aquatic ecosystem by providing shade, fine or large woody material, nutrients, organic and inorganic debris, terrestrial insects, or habitat for riparian-associated wildlife. It includes the entire extent of the floodplain and the extent of vegetation adapted to wet conditions as well as adjacent upland plant communities that directly influence aquatic ecosystem. Riparian habitat areas include those riparian areas severely altered or damaged due to human development activities.

River – See "Watercourse."

Section 404 Permit – A permit issued by the Corps of Engineers for the placement of dredge or fill material or clearing in waters of the U.S., including wetlands, in accordance with 33 USC § 1344.

Seeps – A spot where water oozes from the earth, often forming the source of a small stream.

Seismic hazard areas – Seismic hazard areas are those areas subject to severe risk of damage as a result of earthquake-induced ground shaking, slope failure, soil liquefaction or surface faulting including:

1. Areas subject to surface faulting during a seismic event;

2. Areas with underlying deposits indicative of a risk of liquefaction during a seismic event, including those areas mapped as "moderate", "moderate to high" and "high" by the Washington State Department of Natural Resources;

3. Areas subject to slope failure during a seismic event;

4. Areas that are at risk of mass wasting due to seismic forces.

Serviceable – Presently usable.

SEPA – Washington State Environmental Policy Act, Chapter 43.21C RCW.

Shorelines – All of the water areas of the state as defined in RCW 90.58.030, including reservoirs and their associated shorelands, together with the lands underlying them except:

A. Shorelines of statewide significance;

B. Shorelines on segments of streams upstream of a point where the mean annual flow is twenty cubic feet per second or less and the wetlands associated with such upstream segments; and

C. Shorelines on lakes less than twenty acres in size and wetlands associated with such small lakes.

Shorelines of the state – The total of all "shorelines," as defined in RCW 90.58.030(2)(d), and "shorelines of statewide significance" within the state, as defined in RCW 90.58.030(2)(c).

Shorelines of statewide significance – Those areas defined in RCW 90.58.030(2)(e).

Shorelands or shoreland areas – Those lands extending landward for two hundred feet in all directions as measured on a horizontal plane from the ordinary high water mark; floodways and contiguous floodplain areas landward two hundred feet from such floodways; and all wetlands and river deltas associated with the streams, lakes and tidal waters which are subject to the provisions of Chapter 90.58 RCW.

Significant portion of its range – That portion of a species range likely to be essential to the long-term survival of the population in Washington.

Soil survey – The most recent soil survey for the local area or County by the National Resources Conservation Service, U.S. Department of Agriculture.

Special Flood Hazard Areas – The land in the floodplain within an area subject to a one percent or greater chance of flooding in any given year. Designations of special flood hazard areas on flood insurance map(s) always include the letters A or V.

Special Protection Areas – Aquifer recharge areas defined by WAC 173-200-090 that require special consideration or increased protection because of unique characteristics, including, but not limited to:

A. Ground waters that support an ecological system requiring more stringent criteria than drinking water standards;

B. Ground water recharge areas and wellhead protection areas that are vulnerable to pollution because of hydrogeologic characteristics; and

C. Sole source aquifer status.

Species – Any group of animals classified as a species or subspecies as commonly accepted by the scientific community.

Species, endangered – Any fish or wildlife species that is threatened with extinction throughout all or a significant portion of its range and is listed by the state or federal government as an endangered species.

Species of local importance – Those species of local concern due to their population status or their sensitivity to habitat manipulation, or that are game species.

Species, priority – Any fish or wildlife species requiring protective measures and/or management guidelines to ensure their persistence as genetically viable population levels as classified by the Department of Fish and Wildlife, including endangered, threatened, sensitive, candidate and monitor species, and those of recreational, commercial, or tribal importance.

Species richness – the number of species in a given area

Species, threatened – Any fish or wildlife species that is likely to become an endangered species within the foreseeable future throughout a significant portion of its range without cooperative management or removal of threats, and is listed by the state or federal government as a threatened species.

Stream – See "watercourse."

Subbasin Plan Protection Reach – Reaches recommended for priority protection by the Walla Walla Subbasin Plan (NPCC 2001).

Sub-drainage basin or ***subbasin*** – The drainage area of the highest order stream containing the subject property impact area. Stream order is the term used to define the position of a stream in the hierarchy of tributaries in the watershed. The smallest streams are the highest order (first order) tributaries. These are the upper watershed streams and have no tributaries of their own. When two first order streams meet, they form a second order stream, and when two second order streams meet they become a third order stream, and so on.

Unavoidable – Adverse impacts that remain after all appropriate and practicable avoidance and minimization have been achieved.

Valid Scientific Process – According to WAC 365-195-905, in the context of critical areas protection, a valid scientific process is one that produces reliable information useful in understanding the consequences of a local government's regulatory decisions and in developing critical areas policies and development regulations that will be effective in protecting the functions and values of critical areas. To determine whether information received during the public participation process is reliable scientific information, a County or city should determine whether the source of the information displays the characteristics of a valid scientific process. The characteristics generally to be expected in a valid scientific process are as follows:

1. Peer review. The information has been critically reviewed by other persons who are qualified scientific experts in that scientific discipline. The criticism of the peer reviewers has been addressed by the proponents of the information. Publication in a refereed scientific journal usually indicates that the information has been appropriately peer-reviewed.

2. Methods. The methods that were used to obtain the information are clearly stated and able to be replicated. The methods are standardized in the pertinent scientific discipline or, if not, the methods have been appropriately peer-reviewed to assure their reliability and validity.

3. Logical conclusions and reasonable inferences. The conclusions presented are based on reasonable assumptions supported by other studies and consistent with the general theory underlying the assumptions. The conclusions are logically and reasonably derived from the assumptions and supported by the data presented. Any gaps in information and inconsistencies with other pertinent scientific information are adequately explained.

4. Quantitative analysis. The data have been analyzed using appropriate statistical or quantitative methods.

5. Context. The information is placed in proper context. The assumptions, analytical techniques, data, and conclusions are appropriately framed with respect to the prevailing body of pertinent scientific knowledge.

6. References. The assumptions, analytical techniques, and conclusions are well referenced with citations to relevant, credible literature and other pertinent existing information.

Vulnerability – The combined effect of susceptibility to contamination and the presence of potential contaminants.

Watercourse – Any portion of a channel, bed, bank, or bottom waterward of the ordinary high water line of waters of the state including areas in which fish may spawn, reside, or through which they may pass, and tributary waters with defined beds or banks. This definition includes watercourses that flow on an intermittent basis or which fluctuate in level during the year and applies to the entire bed of such watercourse whether or not the water is at peak level. This definition does not include irrigation ditches, canals, stormwater run-off devices, or other entirely artificial watercourses, except where they exist in a natural watercourse that has been altered by humans.

Water dependent – A use or portion of a use that cannot exist in a location that is not adjacent to the water, but is dependent on the water by reason of the intrinsic nature of its operations. A use that can be carried out only on, in, or adjacent to water. Examples of water dependent uses include ship cargo terminal loading areas; fishing; ferry and passenger terminals; barge loading, ship building, and dry docking facilities; marinas, moorage, and boat launching facilities; aquaculture; float plane operations; surface water intake; and sanitary sewer and storm drain outfalls.

Water resource inventory area (WRIA) – One of sixty-two watersheds in the state of Washington, each composed of the drainage areas of a stream or streams, as established in Chapter 173-500 WAC as it existed on January 1, 1997.

Water Typing System - Waters classified according to the following:

A. **"Type S Water"** means all waters, within their bankfull width, as inventoried as "shorelines of the state" under chapter 90.58 RCW and the rules promulgated pursuant to chapter 90.58 RCW including periodically inundated areas of their associated wetlands.

B. **"Type F Water"** means segments of watercourses other than Type S Waters, which are within the bankfull widths of defined channels and periodically inundated areas of their associated wetlands, or within lakes, ponds, or impoundments having a surface area of one half acre or greater at seasonal low water and which in any case contain fish habitat or are described by one of the following categories:

1. Waters, which are diverted for use by federal, state, tribal or private fish hatcheries. Such waters shall be considered Type F Water upstream from the point of diversion for one thousand five hundred feet, including tributaries if highly significant for protection of downstream water quality.

2. Riverine ponds, wall-based channels, and other channel features that are used by fish for off-channel habitat. These areas are critical to the maintenance of optimum survival of fish. This habitat shall be identified based on the following criteria:

   a. The site must be connected to a fish habitat stream and accessible during some period of the year; and

   b. The off-channel water must be accessible to fish.

C. **"Type Np Water"** means all segments of watercourses within the bankfull width of defined channels that are perennial nonfish habitat streams. Perennial streams are flowing waters that do not go dry any time of a year of normal rainfall and include the intermittent dry portions of the perennial channel below the uppermost point of perennial flow.

D. **"Type Ns Water"** means all segments of watercourses within the bankfull width of the defined channels that are not Type S, F, or Np Waters. These are seasonal, nonfish habitat streams in which surface flow is not present for at least some portion of a year of normal rainfall and are not located downstream from any stream reach that is a Type Np

Water. Ns Waters must be physically connected by an above-ground channel system to Type S, F, or Np Waters.

E. For purposes of this section: "Seasonal low water" means the conditions of the seven-day, two-year low water situation, as measured or estimated by accepted hydrologic techniques recognized by the Department of Natural Resources.

Well – A bored, drilled or driven shaft, or a dug hole whose depth is greater that the largest surface dimension for the purpose of withdrawing or injecting water or other liquids.

Wellhead protection area (WHPA) – The portion of a zone of contribution for a well, wellfield or spring, as defined using criteria established by the State Department of Health.

Wetlands – Those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation 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-lined swales, canals, detention facilities, wastewater treatment facilities, farm ponds, and landscape amenities, or those wetlands created after July 1, 1990, that were unintentionally created as a result of the construction of a road, street, or highway. Wetlands may include those artificial wetlands intentionally created from non-wetland areas to mitigate the conversion of wetlands. For identifying and delineating a wetland, local government shall use the Washington State Wetland Identification and Delineation Manual, as amended.

Wetland category – Wetlands that are categorized into Category I, II, III or IV based upon the categorization procedures in the Washington State Wetland Rating System for Eastern Washington, as amended (Hruby T. 2004).

Wetland edge – The boundary of a wetland as delineated based on the definitions contained in this Chapter.

Wetlands mitigation bank – A site where wetlands are restored, created, enhanced, or in exceptional circumstances, preserved expressly for the purpose of providing compensatory mitigation in advance of authorized impacts to similar resources.

Zone of contribution – The area surrounding a well or spring that encompasses all areas or features that supply ground water recharge to the well or spring.

18.08.025 Severability

If any clause, sentence, paragraph, section, or part of this Chapter or the application thereof to any person or circumstances shall be judged by any court of competent jurisdiction to be invalid, such order or judgment shall be confined in its operation to the controversy in which it was rendered. The decision shall not affect or invalidate the remainder of any part thereof and to this end the provisions of each clause, sentence, paragraph, section, or part of this law are hereby declared to be severable.

18.08.030 Jurisdiction – Critical Areas

A. The County shall regulate all uses, activities, and developments within, adjacent to, or likely to affect, one or more critical areas, consistent with the best available science and the provisions herein.

B. Critical areas regulated by this Chapter include:

1. Critical aquifer recharge areas as designated in Critical Aquifer Recharge Areas [Chapter 18.08.200];

2. Wetlands as designated in Wetlands [Chapter 18.08.300];

3. Frequently flooded areas as designated in Frequently Flooded Areas [Chapter 18.08.400];

4. Geologically hazardous areas as designated in Geologically Hazardous Areas [Chapter 18.08.500]; and

5. Fish and wildlife habitat conservation areas as designated in Fish and Wildlife Habitat Conservation Areas [Chapter 18.08.600].

C. All areas within the County meeting the definition of one or more critical areas, regardless of any formal identification, are hereby designated critical areas and are subject to the provisions of this Chapter.

D. Areas Adjacent to Critical Areas Subject to Regulation. Areas adjacent to critical areas shall be considered to be within the jurisdiction of these requirements and regulations to support the intent of this Chapter and ensure protection of the functions and values of critical areas. Adjacent shall mean any activity located:

1. On a site immediately adjoining a critical area;

2. A distance equal to or less than the required critical area buffer width and building setback;

3. A distance equal to or less than 200 feet upland from a stream, wetland, or water body;

4. Within the floodway, floodplain, or channel migration zone; or

5. A distance equal to or less than 200 feet from a critical aquifer recharge area.

18.08.035 Critical Area Maps

A. The approximate location and extent of critical areas will be displayed on various inventory maps available at the County Community Development Department. These maps will be updated as inventories are completed in compliance with the requirements of the Growth Management Act, and additional maps may be added as appropriate. These maps include:

1. Walla Walla County Critical Area Map 1: Critical Aquifer Recharge Areas;

2. Walla Walla County Critical Area Maps 2a and 2b: Wetlands;

3. Walla Walla County Critical Area Map 3: Frequently Flooded Areas;

4. Walla Walla County Critical Area Maps 4a, 4b, 4c and 4d: Geologic Hazard Areas - Potential Liquefaction Susceptibility, Steep Slope/Landslide Hazards, Potential Water Erosion Susceptibility, and Potential Wind Erosion Susceptibility;

5. Walla Walla County Critical Area Map 5: Riparian Buffers;

6. Walla Walla County Critical Area Map 6: Terrestrial Habitat.

B. Maps and inventory lists are not complete and are to be considered only as guides to the general location and extent of critical areas. Maps will be used for a preliminary determination to suggest the presence or absence of a critical area. However, where additional properties containing features meeting the definitions of critical areas contained in this chapter are identified by the County, properties containing such critical areas shall be subjected to the requirements of this chapter. Where mapped areas are confirmed through an advance determination under this chapter or through site visits and analysis of other available data as part of a permit application to not actually contain critical areas, the provisions of this chapter shall not apply.

18.08.040 Best Available Science

A. Protect Functions and Values of Critical Areas With Special Consideration to Anadromous Fish. 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, such as salmon and bull trout, and their habitat.

B. Nonscientific Information. Nonscientific information may supplement scientific information, but it is not an adequate substitute for valid and available scientific information. Common sources of nonscientific information include anecdotal information, non-expert opinion and hearsay.

C. Absence of Valid Scientific Information. Where there is an absence of valid scientific information or incomplete scientific information relating to a critical area leading to uncertainty about the risk to critical area function of permitting an alteration of or impact to the critical area, the Director shall:

1. Take a "precautionary or a no-risk approach," that strictly limits development and land use activities until the uncertainty is sufficiently resolved; and

2. Require application of an effective adaptive management program that relies on scientific methods to evaluate how well regulatory and non-regulatory actions protect the critical area. An adaptive management program is a formal and deliberate scientific

approach to taking action and obtaining information in the face of uncertainty. An adaptive management program shall:

a. Address funding for the research component of the adaptive management program;

b. Change course based on the results and interpretation of new information that resolves uncertainties; and

c. Commit to the appropriate timeframe and scale necessary to reliably evaluate regulatory and non-regulatory actions affecting protection of critical areas and anadromous fisheries.

18.08.045 Administrative Procedures

The administrative procedures followed during the critical area review process shall conform to the standards and requirements of the County. This shall include, but not be limited to, timing, appeals, and fees associated with applications covered by this Chapter.

18.08.050 Fees

A. The County has established fees, as established in Walla Walla County Code 3.08 Land Development Application Fees, for critical area review processing, and other services provided by the County as required by this Chapter. Basis for these fees shall include, but not be limited to, the cost of engineering and planning review time, cost of inspection time, costs for administration, and any other special costs attributable to the critical area review process.

B. Unless otherwise indicated in this Chapter, the applicant shall be responsible for the initiation, preparation, submission, and expense of all required reports, assessment(s), studies, plans, reconnaissance(s), peer review(s) by qualified consultants, and other work prepared in support of or necessary to review the application.

18.08.055 Administrative Rules

The County community development department is authorized to adopt such administrative rules and regulations as necessary and appropriate to implement this Chapter and to prepare and require the use of such forms as necessary for its administration.

18.08.060 Permit Processing

A. The approval or denial of an activity or modification within or adjacent to a critical area shall be an administrative action of the Director for actions requiring only a building permit or other permit action requiring only ministerial action as defined by relevant County codes. The review process will be integrated with the review of the underlying permit. Public notice is required only if required by the underlying permit.

B. If a project requires another permitting action by the County that requires a public hearing, consideration of critical areas will be integrated with the underlying permitting process.

C. Preliminary Consultation. Any person preparing to submit an application for development or use of land that may be regulated by the provisions of this Chapter shall hold a consultation meeting with the Director or designee prior to submitting an application for development or other approval. At this meeting, the Director or designee shall discuss the requirements of this Chapter; provide critical area maps, scientific information, and other source materials; outline the review process; and work with the activity proponent to identify any potential concerns that might arise during the review process, in addition to discussing other permit procedures and requirements.

D. The County shall perform the process discussed below:

1. Verify the information submitted by the applicant for the applicable permit;

2. Evaluate the project area and vicinity for critical areas. Such evaluation may include a staff site visit if the Director has reason to believe that a project may involve a critical area;

3. For wetland and/or fish and wildlife habitat conservation areas, the County may require that boundaries be verified and mapped by a qualified professional. The scale of the boundary information shall be the same as the County maps, and such boundaries shall be submitted to the County as part of the application for the applicable permit if the project is within two hundred feet of a wetland, or fish and wildlife habitat critical area; and

4. The Director may require that the applicant mark the following boundaries on the site to reflect the proposed construction plan: the location of the building footprint, critical area(s) boundaries, the outer extent of required critical area buffers, areas to remain undisturbed, and trees and vegetation to be removed.

   a. Field markings are intended to prevent disturbance of critical areas and buffers and may include such items such as temporary fences;

   b. If field markings are required by the Director, the applicant shall obtain the Director's approval on the field markings before beginning any permitted activities;

   c. The applicant shall maintain the field markings for critical area(s), critical area buffers, and areas to remain undisturbed throughout the duration of the permit.

5. Determine whether the proposed project is within a critical area or critical area buffer, or is likely to impact the functions or values of critical areas, and if so, require a critical area report; and

6. Determine if the proposed project adequately addresses the impacts and avoids impacts to the critical area associated with the project.

E. Critical Areas Present and Potential Impact Likely. If the Director determines that the proposed project is within a critical area or critical area buffer, or is likely to impact a critical area, the Director shall:

1. Notify the applicant that a critical area report, SEPA checklist, and other applicable information must be submitted prior to further review of the project, and indicate each of the critical area types that should be addressed.

2. Require a critical area report or other applicable information from the applicant that has been prepared by a qualified professional;

3. Review and evaluate the critical area report and other applicable information to determine whether the development proposal conforms to the purposes and performance standards of this Chapter;

4. Assess potential impacts to the critical area and determine if they are necessary and unavoidable;

5. Determine if any mitigation, monitoring plans and bonding measures proposed by the applicant are sufficient to protect the functions and values of the critical area and public health, safety, and welfare concerns consistent with the goals, purposes, objectives, and requirements of this Chapter; and

6. Include a summary of this analysis and the findings in any decision on the underlying permit(s). Critical area review findings may result in: a) no adverse impacts to critical area(s), b) list of applicable critical area(s) protection conditions for the underlying permit(s), or c) denial of permit based upon unavoidable impacts to critical area(s) functions and values.

F. Independent Review. Based on a review of the information contained in the critical area report and the conditions of the development proposal site, the Director may require independent review of any such study. This independent review shall be performed by a qualified professional selected by the County and paid for by the applicant. The purpose of such independent review is to assist the County in evaluating the effects on critical areas that may be caused by a development proposal and to facilitate the decision making process. Independent review may also include a request for consultation with the State of Washington Department of Fish and Wildlife, Washington State Department of Ecology, State Department of Natural Resources, or other appropriate local, state, federal or tribal agency.

18.08.065 Appeals

Any decision to approve, condition, or deny a development proposal or other activity based on the requirements of this Chapter may be appealed according to, and as part of, the appeal procedure for the permit or approval involved, as provided in Title 14, Development Code Administration.

18.08.070 Interpretation

In the interpretation and application of this ordinance, the provisions of this Chapter shall be considered to be the minimum requirements necessary, shall be liberally construed to serve the purpose of this ordinance, and shall be deemed to neither limit nor repeal any other provisions under state statute.

18.08.075 Relationship to Other Regulations

A. These critical area regulations shall apply as an overlay to the County's existing regulations. In the case of conflict among regulations, whichever provision or regulation provides the greater protection to the critical area involved shall apply.

B. These critical area regulations shall apply concurrently with review conducted under the State Environmental Policy Act (SEPA), as locally adopted.

C. Compliance with the provisions of this Chapter does not constitute compliance with other federal, state, and local regulations and permit requirements that may be required (for example, Shoreline Substantial Development Permits, Hydraulic Project Approvals permits, Army Corps of Engineers Section 404 permits, National Pollutant Discharge Elimination System permits). The applicant is responsible for complying with these requirements, apart from the process established in this Chapter. Where applicable, the Community Development Director will encourage use of information such as permit applications to other agencies or special studies prepared in response to other regulatory requirements to support required documentation submitted for critical areas review.

18.08.080 Multiple Designations

Where any parcel may be designated as having more than one critical area designation, the development standards for each category of critical area must be met. Where there is conflict between development standards of critical area categories, the most restrictive standards shall apply.

18.08.085 Allowed Activities

The following developments, activities, and associated uses are allowed in critical areas, and do not require approval or submission of a critical area report, provided they are consistent with the provisions of other local, state, and federal laws and requirements. Allowed activities may intrude into the critical area or required buffer subject to any listed conditions, related permits, and in conformance with other portions of the Walla Walla County Code, and applicable state or federal law or regulation.

A. Emergency actions are those activities necessary to prevent an immediate threat to life, to public health, safety, or welfare, or that pose an immediate risk of damage to private structures or improvements and that require remedial or preventative action in a time frame too short to allow for compliance with the procedural requirements of this chapter.

   1. Emergency actions that create an impact on a critical area or its buffer shall be limited to those actions that are required to address the emergency and generally are limited to the actions necessary to remove the immediate threat. Additional actions to permanently address a deficiency generally do not qualify as emergency actions and require full compliance with the procedural requirements of this chapter. Emergency actions also must be carried out in a manner that has the least feasible impact on the critical area or its buffer.

2. The person or agency undertaking emergency action shall notify the Director within five working days following commencement of the emergency activity. Within twenty-one days, the Director shall determine if the action taken was within the scope of the emergency actions allowed in this subsection. If the Director determines that the action taken, or any part of the action taken, was beyond the scope of an allowed emergency action, then the enforcement provisions of Section 18.08.135 shall apply.

3. After the emergency, the person or agency undertaking the action shall submit a critical area report to assess effects on critical areas and conduct necessary restoration and/or mitigation for any impacts to the critical area and buffers resulting from the emergency action in accordance with an approved critical area report and mitigation plan. The person or agency undertaking the action shall apply for all approvals required by this chapter. Restoration and/or mitigation activities must be initiated within sixty days of the date of the emergency, unless an extension is approved by the Director, and completed in a timely manner.

B. Conservation and restoration activities. Conservation or restoration activities aimed at protecting the soil, water, vegetation, or wildlife;

C. Minimal vegetation management that is part of ongoing maintenance of facilities, infrastructure, public right-of-ways, or utilities, provided the vegetation management activity does not expand further into the critical area or its buffer. Properties within the floodplain outside of other critical areas are exempted from this provision.

D. Low impact activities such as lawful hunting, hiking, canoeing, nature study, photography, fishing, education or scientific research, and wildlife viewing that do not involve the construction of trails.

E. Maintenance, operation and/or repair of existing rights-of-way, trails, roads, utilities, buildings and other facilities within critical areas and buffers; provided, that the activity does not further alter, impact, or encroach upon the sensitive area or buffer or further affect the functions of sensitive areas, and there is no increased risk to life or property as a result of the proposed operation, maintenance, or repair.

F. Maintenance of existing, lawfully established landscaping and gardens within a regulated critical area or its buffer, including but not limited to mowing lawns, weeding, removal of noxious and invasive species, harvesting and replanting of garden crops, pruning and planting of ornamental vegetation or indigenous native species to maintain the condition and appearance of such areas as they existed prior to adoption of this code; provided, that native growth protection areas, mitigation sites, or other areas protected via conservation easements or similar restrictive covenants are not covered by this exception.

G. Maintenance, repair or replacement of an existing legal nonconforming structure, consistent with the nonconforming structure provisions of Title 17, that does not further alter or increase the impact to the critical area or buffer and results in no increased risk to life or property. Changes in use of a nonconforming structure requires critical areas review.

H. Replacement, modification, installation, or construction of utility facilities, lines, pipes, mains, equipment, or appurtenances, not including substations, when such facilities are located

within the existing improved portion of the public right-of-way (road surface, shoulder, sidewalks, and fill slopes) or the improved portion of County-authorized private roadway; provided, that no fill or discharge occurs outside the existing improved area and with appropriate best management practices to control erosion, sedimentation and other potential impacts. Excluded from this allowed activity is work within a water body or wetland, including but not limited to culverts or bridge replacement or construction.

I. Utility projects that have minor or short-duration impacts to critical areas and buffers, as determined by the Director in accordance with the criteria below, and which do not significantly impact the functions or values of a sensitive area(s); provided, that such projects are constructed with best management practices and appropriate restoration measures are provided. These activities shall not result in the transport of sediment or increased stormwater. Such allowed minor utility projects shall meet the following criteria:

1. There is no practical alternative to the proposed activity with less impact on sensitive areas;

2. The activity involves the placement of a utility pole, street signs, anchor, or vault or other small component of a utility facility; and

3. The activity involves disturbance of less than seventy-five square feet of the sensitive area and/or buffer.

J. Public and private pedestrian trails, provided they are subject to the following:

1. The trail surface shall not exceed six feet in width;

2. The trail surface shall consist of gravel or pervious materials, including boardwalks;

3. The trail shall meet all other County requirements including water quality standards;

4. Sensitive area and/or buffer widths shall be increased, where possible, equal to the width of the trail corridor, including disturbed areas; and

5. Trails proposed to be located in landslide or erosion hazard areas shall be constructed in a manner that does not increase the risk of landslide or erosion and in accordance with an approved geotechnical report.

K. The following vegetation removal activities:

1. The removal of the noxious weeds or non-native invasive species designated by Washington State or the local weed control authority with hand labor and light equipment. Bare areas that remain after weed removal shall be re-vegetated with native shrubs and trees at natural densities. Some hand seeding may also be done over the bare areas with native vegetation.

2. The removal of hazard trees from sensitive areas and buffers that are posing a threat to public safety, or an imminent risk of damage to a permanent structure

3. Measures to control a fire or halt the spread of disease or damaging insects consistent with the state Forest Practices Act, Chapter 76.09 RCW.

L. Minor site investigative 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, removal of native trees or shrubs, or displacement of more than five cubic yards of material. Investigations involving displacement of more than five cubic yards of material, including geotechnical soil borings, groundwater monitoring wells, percolation tests, and similar activities shall require submittal of specific plans and restoration plans. In every case, impacts to the sensitive area shall be minimized and disturbed areas shall be immediately restored.

M. The application of herbicides, pesticides, organic or mineral-derived fertilizers, or other hazardous substances, connected with any allowed activity, provided that their use is conducted in accordance with applicable state and federal law.

N. Forest practices governed by a valid forest practices permit granted by the Washington State Department of Natural Resources, except where:

1. The lands have been or are proposed to be converted under a conversion option harvest plan to a use other than commercial forest product production as provided in RCW 76.09.050 and 76.09.240; or

2. On lands which have been platted after January 1, 1960, as provided in RCW 76.09.050 and 76.09.240.

O. Activities undertaken to comply with a United States Environmental Protection Agency superfund related order, or a Washington Department of Ecology order pursuant to the Model Toxics Control Act that specifically preempts local regulations in the findings of the order.

P. Project and facilities for restoration and enhancement of ecological functions of critical areas and related resources may be allowed within critical areas and buffers, upon approval of a restoration and mitigation plan in accordance with the provisions of this chapter, or for restoration of enhancement programs in an adopted shoreline restoration plan pursuant to Chapter 173-26 WAC, a watershed planning document prepared and adopted pursuant to Chapter 90.82 RCW, a watershed restoration project pursuant to RCW 89.08.460, a salmonid recovery plan, the salmon recovery board habitat project list, or identified by the Washington Department of Fish and Wildlife as essential for fish and wildlife habitat enhancement pursuant to RCW 77.55.290.

Q. The repair and maintenance of existing drainage ditches.

R. The installation of individual service lines for agricultural purposes and to existing uses.

S. Normal and routine activities conducted by a public agency to control mosquitoes and weeds.

T. Agricultural activities including farming, horticulture, normal maintenance and repair of irrigation delivery systems and drainage systems, ranching and grazing of animals and pest and weed control. This includes land lying idle under a government program, agricultural set-aside land and changes between agricultural activities.

U. Normal and routine maintenance of agricultural ponds, livestock watering ponds and fish ponds.

V. Intentional construction of artificial structures from upland areas for purposes of stormwater drainage or water quality control, grassy swales or ornamental landscape ponds, which are not a part of a critical mitigation plan, and are consistent with the Stormwater Management Manual for Eastern Washington (Ecology 2004) and the Clean Water Act.

W. Normal maintenance and repair of the concrete-lined Mill Creek channel within the County's jurisdiction from Rooks Park to Gose Street for flood control purposes.

X. Normal dredging required to maintain ongoing water navigational facilities including boat and barge slips, docking facilities, entrance channels and agricultural irrigation facilities, provided that other applicable permits are obtained.

Y. Cases where a federal agency has jurisdictional control over a wetland and the Director determines that those permit conditions would satisfy the requirements of this ordinance.

18.08.090 Reasonable Use

A. If the application of this Chapter would deny all reasonable use of the subject property, the property owner may apply for an exception pursuant to this Section.

B. Exception request and review process. An application for a reasonable use exception shall be made to the County and shall include a critical area report, including mitigation plan, if necessary; and any other related project documents, such as permit applications to other agencies, special studies, and environmental documents prepared pursuant to the State Environmental Policy Act (Chapter 43.21C RCW) (SEPA documents). The Director shall determine whether an exception request shall be granted based on review of the submitted information, a site inspection, and the proposal's ability to comply with reasonable use exception criteria. The Director may issue, as part of the findings in any decision made under this Subsection, conditions of approval, including modifications to the size and placement of structures and facilities to minimize impacts to critical areas and associated buffers. As part of the findings, the Director may also specify reasonable mitigation requirements. Mitigation measures may not be unduly burdensome to the property owner. The Director shall approve with conditions, or deny the request based on the proposal's ability to comply with all of the following reasonable use exception review criteria:

1. The application of this Chapter would deny all reasonable use of the property;

2. No other reasonable use of the property has less impact on the critical area;

3. The proposed impact to the critical area is the minimum necessary to allow for reasonable economic use of the property;

4. The inability of the applicant to derive reasonable use of the property is not the result of actions by the applicant, or his/her predecessor(s) after the effective date of this Chapter; and

5. The proposal does not pose an unreasonable threat to the public health, safety, or welfare on or off the development proposal site;

6. Measures to mitigate impacts to the critical areas are in place on or off site to the maximum reasonable extent.

C. Burden of proof. The burden of proof shall be on the applicant to bring forth evidence in support of the application and to provide sufficient information on which any decision has to be made on the application.

18.08.095 Critical Area Reports – General Requirements

A. Prepared by qualified professional. If required by Section 18.08.060D(5), the applicant shall submit a report prepared by a qualified professional.

B. Incorporating best available science. The report shall use scientifically valid methods and studies in the analysis of data and field reconnaissance and reference the source of science used. The report shall evaluate the proposal and all probable impacts to critical areas in accordance with the provisions of this Chapter.

C. Minimum report contents. At a minimum, the 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 showing:

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

   b. Limits of any areas to be cleared; and

   c. A description of the proposed stormwater management plan for the development and consideration of impacts to drainage alterations;

3. The names and professional qualifications of the persons preparing the report and documentation of any fieldwork performed on the site;

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

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

6. An assessment of the probable cumulative impacts to critical areas resulting from development of the site and the proposed development;

7. An analysis of site development alternatives;

8. A description of reasonable efforts made to apply mitigation sequencing pursuant to Section 18.08.105 to avoid, minimize, and mitigate impacts to critical areas;

9. Plans for adequate mitigation, as needed, to offset any impacts, in accordance with Section 18.08.105 through 18.08.115, including, but not limited to:

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

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

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

11. Financial guarantees to ensure compliance, if applicable; and

12. Any additional information required for the critical area as specified in the corresponding section.

D. Unless otherwise provided, a report may be supplemented by or composed, in whole or in part, of any reports or studies required by other laws and regulations or previously prepared for and applicable to the development proposal site, as approved in advance by the Director.

18.08.100 Critical Area Reports – Modifications to Requirements

A. Limitations to Study Area. The Director may limit the required geographic area of the critical area report as appropriate if:

   1. The applicant, with assistance from the County, cannot obtain permission to access properties adjacent to the project area; or

   2. The proposed activity will affect only a limited part of the subject site.

B. Modifications to Required Contents. The applicant may consult with the Director prior to or during preparation of the critical area report to obtain County 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 critical area impacts and required mitigation.

C. Additional Information Requirements. The Director may require additional information to be included in the critical area report when determined to be necessary to the review of the proposed activity in accordance with this Chapter. Additional information that may be required, includes, but is not limited to:

1. Historical data, including original and subsequent mapping, aerial photographs, data compilations and summaries, and available reports and records relating to the site or past operations at the site;

2. Grading and drainage plans; and

3. Information specific to the type, location, and nature of the critical area.

18.08.105 Mitigation Requirements

A. The applicant shall avoid all identified impacts that degrade the functions and values of a critical area or areas. Unless otherwise provided in this Chapter, if alteration to the critical area is unavoidable, all identified adverse impacts to or from critical areas and buffers resulting from a development proposal or alteration shall be mitigated using the best available science in accordance with an approved critical area report and SEPA documents.

B. Mitigation shall be in-kind and on-site, when possible, and sufficient to maintain the functions and values of the critical area, and to prevent risk from a hazard posed by a critical area.

C. The Director may approve off-site mitigation if the applicant demonstrates that no viable on-site mitigation opportunities exist. Compensatory mitigation proposed off-site shall be provided in the location that will provide the greatest ecological benefit and have the greatest likelihood of success. Preference will be given to off-site mitigation as close as possible to the impact area and within the same watershed sub-basin as the permitted alteration; provided, that off-site mitigation may occur within the County or within WRIA 32 upon demonstration through a watershed- or landscape-based analysis that mitigation within an alternative sub-basin of the watershed would have greater ecological benefit. Off-site mitigation sites preference shall be given to sites and restoration activities identified in an adopted shoreline restoration plan pursuant to Chapter 173-26 WAC, a watershed planning document prepared and adopted pursuant to Chapter 90.82 RCW, a watershed restoration project pursuant to RCW 89.08.460, a salmonid recovery plan, the salmon recovery board habitat project list, or identified by the Washington Department of Fish and Wildlife as essential for fish and wildlife habitat enhancement pursuant to RCW 77.55.290.

D. The County may approve mitigation banking as a form of compensatory mitigation for wetlands and fish and wildlife habitat conservation area impacts when the provisions of this chapter require mitigation and when it is clearly demonstrated that the use of a mitigation bank will provide equivalent or greater replacement of critical area functions and values when compared to conventional on-site mitigation; provided, that all of the following criteria are met:

1. Mitigation banks shall only be used when they provide significant ecological benefits including long-term conservation of critical areas, important species, habitats and/or habitat linkages, and when they are consistent with the County's comprehensive plan and create a viable alternative to the piecemeal mitigation for individual project impacts to achieve ecosystem-based conservation goals.

2. The mitigation bank shall be established in accordance with the Washington State Draft Mitigation Banking Rule, Chapter 173-700 WAC or as revised, and Chapter 90.84 RCW and the federal mitigation banking guidelines as outlined in the Federal Register, Volume 60, No. 228, November 28, 1995. These guidelines establish the procedural and technical criteria that banks must meet to obtain state and federal certification.

3. Preference shall be given to mitigation banks that implement restoration actions that have been identified in an adopted shoreline restoration plan, watershed planning document prepared and adopted pursuant to Chapter 90.82 RCW, a salmonid recovery plan or project that has been identified on the salmon recovery board habitat project list or by the Washington Department of Fish and Wildlife as essential for fish and wildlife habitat enhancement.

E. Mitigation shall not be implemented until after County receipt of a report or other applicable information that includes a mitigation plan, and mitigation shall be in accordance with County provisions in the underlying permit(s).

F. Mitigation monitoring shall be required for a minimum of five years. The project mitigation plan shall include monitoring elements that ensure certainty of success for the project natural value and functions. If the mitigation goals are not obtained within the initial five year period, the applicant remains responsible for restoration of the natural values and functions until the mitigation goals agreed to in the mitigation plan are achieved.

18.08.110 Mitigation Sequencing

Applicants shall demonstrate that all reasonable efforts have been examined with the intent to avoid and minimize impacts to critical areas. When an alteration to a critical area is proposed, such alteration shall be avoided, minimized, or compensated for in the following order of preference:

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

B. Minimizing impacts by limiting the degree or magnitude of the action and its implementation, by using appropriate technology, or by taking affirmative steps, such as project redesign, relocation, or timing, to avoid or reduce impacts;

C. Rectifying the impact to wetlands, critical aquifer recharge areas, frequently flooded areas, and habitat conservation areas by repairing, enhancing, or restoring the affected environment to the historical conditions, or pre-development, or the conditions existing at the time of the initiation of the project;

D. Minimizing or eliminating the hazard by restoring or stabilizing the hazard area through approved engineered or other methods;

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

F. Compensating for the impact to wetlands, critical aquifer recharge areas, frequently flooded areas, and fish and wildlife habitat, and vegetation conservation areas by replacing, enhancing, or providing substitute resources or environments; and

G. Monitoring the hazard or other required mitigation for a reasonable period of time and taking remedial action when necessary.

H. Mitigation for individual actions may include a combination of the above measures.

18.08.115 Mitigation Plan Requirements

When mitigation is required, the applicant shall submit to the County a mitigation plan as part of the critical area report or other applicable information. The goals and objectives will be related to the functions and values of the impacted critical area, they include;

A. Environmental Goals and Objectives. The mitigation plan shall include a written report identifying environmental goals and objectives of the compensation proposed and including:

1. A description of the anticipated impacts to the critical areas and the mitigating actions proposed and the purposes of the compensation measures, including the site selection criteria; identification of compensation goals; identification of resource functions; and dates for beginning and completion of site compensation construction activities.

2. A review of the best available science supporting the proposed mitigation and a description of the report author's experience to date in restoring or creating the type of critical area proposed; and

3. An analysis of the likelihood of success of the compensation project.

B. Performance Standards. The mitigation plan shall address the applicable performance standards identified in this Chapter.

C. Detailed Construction Plans. The mitigation plan shall include written specifications and descriptions of the mitigation proposed, such as:

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

2. Grading and excavation details;

3. Erosion and sediment control features;

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

5. Measures to protect and maintain plants until established.

These written specifications 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. Monitoring Program. The mitigation plan shall include a program for monitoring construction of the compensation project, and for assessing a completed project. A protocol shall be included outlining the schedule for site monitoring in years one, three and five after site construction, 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 compensation project. At a minimum, a monitoring report shall be submitted to document mitigation plan performance in year five after site construction.

E. Contingency Plan. The mitigation plan shall include identification of potential courses of action, and any corrective measures to be taken if monitoring or evaluation indicates project performance standards are not being met.

F. Financial Guarantees. The mitigation plan shall include financial guarantees, if necessary, to ensure that the mitigation plan is fully implemented. Financial guarantees ensuring fulfillment of the compensation project, monitoring program, and any contingency measures shall be posted in accordance with Section 18.08.120.

G. Other Permits. Other local, state, and federal regulatory jurisdictions may require permits for habitat mitigation projects. The applicant shall comply with all other appropriate regulatory permits, agreements, and authority, as required by each respective jurisdiction.

18.08.120 Bonds to Ensure Mitigation, Maintenance and Monitoring

A. When mitigation measures are necessary to implement after final project permit approval, the County shall require the applicant to post a performance bond or other security in a form and amount deemed acceptable by the County. In addition, if the development proposal is subject to mitigation, the applicant shall post a mitigation bond or other security in a form and amount deemed acceptable by the County to ensure mitigation is fully functional.

B. The bond shall be in the amount of one hundred and twenty-five percent of the estimated cost of any uncompleted actions or the estimated cost of restoring the functions and values of the critical area that are at risk, whichever is greater.

C. The bond shall be in the form of a surety bond, performance bond, assignment of savings account, or an irrevocable letter of credit guaranteed by an acceptable financial institution with terms and conditions acceptable to the County attorney.

D. Bonds or other security authorized by this Section shall remain in effect until the County determines, in writing, that the standards bonded for have been met. Bonds or other security shall be held by the County for a minimum of five 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, or 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 County may demand payment of any financial guarantees or require other action authorized by the County code or any other law.

H. Any funds recovered pursuant to this Section shall be used to complete the required mitigation.

18.08.125 Notice on Title

A. In order to inform subsequent purchasers of real property of the existence of critical areas, the owner of any property containing a critical area or buffer on which a development proposal is submitted shall file a notice with the County Auditor according to the direction of the County. The notice shall state the presence of the critical area or buffer on the property, the application of this Chapter to the property, and the fact that limitations on actions in or affecting the critical area or buffer may exist. The notice shall "run with the land." Presence of critical areas and/or buffers shown on development permits recorded with the Auditor need not be recorded separately.

B. This notice on title shall not be required for a development proposal by a public agency or public or private utility:

1. Within a recorded easement or right-of-way;

2. Where the agency or utility has been adjudicated the right to an easement or right-of-way; or

3. On the site of a permanent public facility.

18.08.130 Critical Area Inspections

Reasonable access to the site shall be provided to the County, state, and federal agency review staff for the purpose of inspections during any proposal review, restoration, emergency action, or monitoring period.

18.08.135 Unauthorized Critical Area Alterations and Enforcement

A. When a critical area 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 County shall have the authority to issue a stop work order to cease all ongoing development work, and order restoration, rehabilitation, replacement or where determined appropriate by the Director, mitigation measures at the owner's or other responsible party's expense to compensate for violation of provisions of this Chapter and other applicable County codes governing the underlying permit(s).

B. Restoration/Mitigation Plan Required. All development work shall remain stopped until a restoration/mitigation plan is prepared by the violator and approved by the County. Such a plan shall be prepared by a qualified professional and shall describe how the actions proposed meet the minimum requirements described in Subsection C of this section and/or mitigation requirements outlined in Sections 18.08.105, 110, and 115, if mitigation is determined to be appropriate by the Director. The Director shall, at the violator's expense, seek expert advice in determining the adequacy of the plan. Inadequate plans shall be returned to the applicant or violator for revision and resubmittal.

C. Minimum Performance Standards for Restoration or Mitigation.

1. For alterations to critical aquifer recharge areas, frequently flooded areas, wetlands, and habitat conservation areas the following minimum performance standards shall be met for the restoration or mitigation of impacts to a critical area, provided that if the violator can demonstrate in a restoration/mitigation plan that greater functional and habitat values can be obtained, these standards may be modified by the Director:

   a. The historic structural and functional values shall be restored, including water quality and habitat functions;

   b. The historic soil types and configuration shall be replicated;

   c. The critical area and buffers shall be replanted with native vegetation that replicates the vegetation historically found on the site in species types, sizes, and densities; and

   d. The historic functions and values should be replicated at the location of the alteration.

2. For alterations to flood and geological hazards, the following minimum performance standards shall be met for the restoration of a critical area, provided that, if the violator can demonstrate that greater safety can be obtained, these standards may be modified:

   a. The hazard shall be reduced to a level equal to, or less than, the pre-development hazard;

   b. Any risk of personal injury resulting from the alteration shall be eliminated or minimized; and

   c. The hazard area and buffers shall be replanted with native vegetation sufficient to minimize the hazard.

D. Site Investigations. The Director is authorized to make site inspections and take such actions as are necessary to enforce this Chapter. The Director shall present proper credentials and make a reasonable effort to contact any property owner before entering onto private property.

E. Enforcement and Penalties. Any violation of this Chapter shall be enforced under the provisions of Walla Walla County Code Chapter 14.13. In addition, any development or

activity carried out contrary to the provisions of this Chapter shall constitute a public nuisance and may be enjoined as provided by the statutes of the state of Washington.

18.08.200 Critical Aquifer Recharge Areas - Designation

Critical aquifer recharge areas (CARA) are areas with a recharging effect on aquifers used for potable water that are vulnerable to contamination that would affect water quality. Critical aquifer recharge areas function to protect human health from contaminated drinking water (anti-degradation of ground water). Federal and State laws established three regulatory measures to account for susceptibility and value of groundwater resources: Wellhead Protection Areas, Sole Source Aquifer, and Susceptible Ground Water Management Areas and Special Protection Areas. Of those three, only Wellhead Protection Areas currently applies to Walla Walla County. Therefore, CARA in Walla Walla County are designated as follows:

Wellhead Protection Areas. Potable water-supply purveyors using ground water must develop and implement wellhead protection programs that include delineation of protection areas around each well, inventorying of contamination sources within wellhead protection areas, and development and implementation of water supply contingency and spill response plans to address contamination incidents that could cause loss of a well. The State of Washington wellhead protection regulations exclude individual domestic wells and well systems that do not meet the definition of public water supplies.

Walla Walla County maintains a database of wellhead protection areas submitted by community water systems required to prepare wellhead protection plans and periodically updates its database with DOH provided information from systems. Wellhead protection areas are defined by the boundaries of the ten year time of travel of ground water travel to the wellhead, or boundaries established using alternate criteria approved by the Washington State Department of Health, in accordance with WAC 246-290-135. The CARA delineated by the 10-year capture zones are shown on Walla Walla County Critical Areas Map 1: Critical Aquifer Recharge Areas.

In order to protect the public health and safety, prevent degradation of ground water, and for potentially usable potable water, and to provide for regulations that prevent and control risks to the degradation of ground water quality, development in critical aquifer recharge areas shall be subject to the standards described in this section. [1]

18.08.210 Mapping of Critical Aquifer Recharge Areas

A. The approximate location and extent of critical aquifer recharge areas are shown on the following adopted critical areas map: Walla Walla County Critical Area Map 1: Critical Aquifer Recharge Areas.

B. These maps are to be used as a guide for the County, project applicants, and/or property owners and may be continuously updated as new critical areas are identified. They are a reference and do not provide a final critical area designation.

18.08.220 Activities Allowed in Critical Aquifer Recharge Areas

In addition to those activities allowed in Section 18.08.085, the following are allowed in critical aquifer recharge areas, and do not require approval or submission of a critical area report:

A. All residential uses;.

[1] See WWCC 18.08.015(A).

B. Development and improvement of parks, recreation facilities, open space, or conservation areas resulting in less than five percent total site impervious surface area that do not increase the use of a hazardous substance.

C. Approved water system source development and associated infrastructure;

D. Aquifer storage and recovery (ASR) facilities approved by the Department of Ecology;

E. Public water pipelines and supply storage structures;

F. The following underground storage tank (UST) systems, including any piping connected thereto, so long as all state and federal laws are followed;

1. Any UST system holding hazardous wastes subject to Subtitle C of the Federal Solid Waste Disposal Act, or a mixture of such hazardous waste and other regulated substances;

2. Any wastewater treatment tank system that is part of a wastewater treatment facility regulated under Section 402 or 307(b) of the Clean Water Act;

3. Equipment or machinery that contains regulated substances for operational purposes such as hydraulic lift tanks and electrical equipment tanks;

4. Any UST system whose capacity is one hundred ten (110) gallons or less;

5. Any UST system that contains a de minimis concentration of regulated substances;

6. Any emergency spill or overflow containment UST system that is expeditiously emptied after use;

7. Farm or residential UST systems of one thousand one hundred (1,100) gallons or less capacity used for storing motor fuel for noncommercial purposes (i.e., not for resale);

8. UST systems used for storing heating oil for consumptive use on the premises where stored;

9. On-site domestic septic systems releasing less than five hundred (500) gallons of effluent per day and that are limited to a maximum density of one system per one acre.

10. Any pipeline storage tank facility (including gathering lines) regulated under:

a. The Natural Gas Pipeline Safety Act of 1968 (49 U.S.C. App. 1671 , et seq.), or

b. The Hazardous Liquid Pipeline Safety Act of 1979 (49 U.S.C. App. 2001, et seq.), or

c. Which is an intrastate pipeline facility regulated under state laws comparable to the provisions of the laws referred to in 18.08.220(10)(a) or (b);

11. Surface impoundments, pits, ponds, or lagoons;

12. Stormwater or wastewater collection systems;

13. Flow-through process tanks;

14. Liquid traps or associated gathering lines directly related to oil or gas production and gathering operations; or

15. Storage tanks situated in an underground area (such as a basement, cellar, vault, mineworking drift, shaft, or tunnel) if the storage tank is situated upon or above the surface of the floor.

18.08.230 Critical Area Report – Additional Requirements for Critical Aquifer Recharge Areas

In addition to the general critical area report requirements of Section 18.08.095, critical area reports for CARA must meet the requirements of this Section. Critical area reports for two or more types of critical areas must meet the report requirements for each relevant type of critical area.

A. Preparation by a Qualified Professional.

B. Hydrogeologic Assessment. For all proposed activities to be located in a CARA, a level one hydrogeologic assessment must be prepared:

1. Above- and below-ground storage tanks not included in 18.08.220(F) and on-site septic systems that release greater than five hundred gallons of effluent per day;

2. Facilities that conduct biological research;

3. Boat repair shops;

4. Chemical research facilities;

5. Dry cleaners;

6. Gasoline service stations;

7. Pipelines;

8. Printing and publishing shops (that use printing liquids);

9. Below-ground transformers and capacitors;

10. Sawmills [producing over ten thousand (10,000) board feet per day];

11. Solid waste handling and processing;

12. Commercial vehicle repair, recycling, and recyclable materials – automotive;

13. Funeral services;

14. Furniture stripping;

15. Motor vehicle service garages (both private and government);

16. Photographic processing;

17. Chemical manufacturers and reprocessing;

18. Creosote and asphalt manufacture and treatment;

19. Petroleum and petroleum products refining, including reprocessing;

20. Wood products preserving;

21. Golf course;

22. Regulated waste treatment, storage, disposal facilities that handle hazardous material, excluding landfills;

23. Medium quantity generators (dangerous, acutely hazardous, and toxic extremely hazardous waste);

24. Large quantity generators (dangerous, acutely hazardous, and toxic extremely hazardous waste); and

25. Any other activity not included in 18.08.220 that is determined by the Director likely to contribute to contamination that would affect the drinking water quality in a CARA.

C. Level One Hydrogeologic Assessment. A level one hydrogeologic assessment shall include the following site- and proposal-related information at a minimum:

1. Available information regarding geologic and hydrogeologic characteristics of the site including the surface location of all CARA located on site or immediately adjacent to the site, and permeability of the unsaturated zone;

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

3. Currently available data on wells and springs within one thousand three hundred feet of the project area;

4. Location of other critical areas, including surface waters, within one thousand three hundred feet of the project area;

5. Available historic water quality data for the area to be affected by the proposed activity; and

6. Applicable best management practices proposed to be utilized. Applicants must demonstrate how they will integrate necessary and appropriate best management practices to prevent degradation of groundwater.

D. Level Two Hydrogeologic Assessment.

A level two hydrogeologic assessment shall be required for any applicant that wants to avoid implementation of the necessary and appropriate best management practices, as referenced in 18.08.230(C)(6). A level two hydrogeologic assessment shall include the following site- and proposal-related information at a minimum, in addition to the requirements for a level one hydrogeological assessment:

1. Historic water quality data for the area to be affected by the proposed activity compiled for at least the previous five year period;

2. Ground water monitoring plan provisions;

3. Discussion of the effects of the proposed project on the ground water quality and quantity, including:

   a. Predictive evaluation of ground water withdrawal effects on nearby wells and surface water features; and

   b. Predictive evaluation of contaminant transport based on potential releases to ground water; and

4. A spill plan that identifies equipment and/or structures that could fail, resulting in an impact. Spill plans shall include provisions for regular inspection, repair, and replacement of structures and equipment that could fail.

18.08.240 Performance Standards – General Requirements

A. Activities may only be permitted in a critical aquifer recharge area if the applicant can show that the proposed activity will not cause contaminants to enter the aquifer.

B. The proposed activity must comply with the water source protection requirements and recommendations of the U.S. Environmental Protection Agency, Washington State Department of Health, Washington State Department of Ecology, and the Walla Walla County Health Department.

C. The proposed activity must be designed and constructed in accordance with existing local, state and federal laws and regulations, and the Stormwater Management Manual for Eastern Washington, as amended (Ecology 2004) for those geographic areas covered under the Eastern Washington Phase II Municipal Stormwater Permit (Ecology 2007) or activities covered under the Ecology General Construction Permit (Ecology 2005) , and/or the locally adopted stormwater program, as applicable.

D. The Community Development Department shall require as part of completing the critical areas report the applicable Washington State Department of Ecology guidance documents that identify best management practices and how these practices are incorporated into the report.

18.08.250 Performance Standards – Specific Uses

No dry wells shall be allowed in critical aquifer recharge areas on sites used for vehicle repair and servicing. Dry wells existing on the site prior to facility establishment must be abandoned using techniques approved by the state Department of Ecology prior to commencement of the proposed activity.

18.08.260 Uses Prohibited in Critical Aquifer Recharge Areas

The following activities and uses are prohibited in CARA:

A. Landfills. Landfills, including hazardous or dangerous waste, municipal solid waste, special waste, woodwaste, and inert and demolition waste landfills;

B. Underground Injection Wells. Class I, III, and IV wells and subclasses 5F01, 5D03, 5F04, 5W09, 5W10, 5W11, 5W31, 5X13, 5X14, 5X15, 5W20, 5X28, and 5N24 of Class V wells, unless otherwise approved by the State or Federal government;

C. Mining in areas determined to be highly susceptible or vulnerable to contamination in a public water system Wellhead Protection Plan;

D. Wood Treatment Facilities. Wood treatment facilities that allow any portion of the treatment process to occur over permeable surfaces (both natural and manmade);

E. Storage, Processing, or Disposal of Radioactive Substances. Facilities that store, process, or dispose of radioactive substances.

18.08.300 Wetlands Critical Areas – Designation

A. Designating wetlands. Wetlands are those areas, designated in accordance with the *Washington State Wetland Identification and Delineation Manual*, as amended that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation adapted for life in saturated soil conditions. All areas within Walla Walla County meeting the wetland designation criteria in the *Identification and Delineation Manual*, as amended, regardless of any formal identification, are hereby designated critical areas and are subject to the provisions of this Title.[1]

B. Wetland ratings. Wetland Types I to IV shall be rated according to the Department of Ecology wetland rating system found in the Washington State Wetland Rating for Eastern Washington, as amended (*Ecology Publication #04-06-015*). These categories are generally defined as follows (Hruby 2004):

1. Category 1 Wetlands. Wetlands which are: alkali wetlands, wetlands that have been identified through the Washington Natural Heritage Program (DNR) as high quality wetlands, bogs, mature old-growth forested wetlands over 1/4 acre with slow-growing trees, forests with stands of aspen, and wetlands that perform many functions very well function at a very high level (scores of 70 points or more). meet at least one of the following criteria: 1) represent a unique or rare wetland type; or 2) are more sensitive to disturbance than most wetlands; or 3) are relatively undisturbed and contain ecological attributes that are impossible to replace within a human lifetime; 4) provide a high level of functions (scores of 70 points or more using the Eastside Rating System); or 5) documented wetlands of local significance.

2. Category II Wetlands. Category II wetlands are difficult, though not impossible, to replace, and provide high levels of some functions (scores between 51 and 69 points). These wetlands occur more commonly than Category I wetlands, but still need a relatively high level of protection.

3. Category III wetlands. Category III wetlands are 1) vernal pools that are isolated, and 2) wetlands with a moderate level of functions (scores between 30 and 50 points). Wetlands scoring between 30 and 50 points generally have been disturbed in some ways, and are often smaller, less diverse and/or more isolated from other natural resources in the landscape than Category II wetlands.

4. Category IV Wetlands. Category IV wetlands have the lowest levels of functions (scores less than 30 points) and are often heavily disturbed.

18.08.310 Mapping of Wetland Areas

A. The approximate location and extent of known wetlands are shown on the adopted critical area map (Exhibit 2, or the latest revision of this map). This information is to be used as a guide for the County, project applicants and/or property owners, and may be updated as

[1] See WWCC 18.08.015(A).

new information becomes available. In some instances (uncertified boundaries), it is a reference and does not provide a final critical area designation.

B. The exact location of a wetland's boundary shall be determined through the performance of a field investigation by a qualified professional applying the *Washington State Wetlands Identification and Delineation Manual*, as amended, as required by RCW 36.70A.175 (*Ecology Publication #96-94*).

18.08.320 Critical Area Report – Additional Requirements for Wetland Areas Requirements

A. Prepared by a qualified professional.

B. Area addressed in critical area report. The following areas shall be addressed in a critical area report for wetlands:

1. The project area of the proposed activity;

2. All wetlands and recommended buffers within 200 feet of the project area; and

3. All shoreline areas, water features, flood plains, and other critical areas, and related buffers within 200 feet of the project area.

C. Wetland analysis. In addition the minimum required contents of critical area reports in Section 18.08.095 a critical area report for wetlands shall contain an analysis of the wetlands including the following site- and proposal-related information at a minimum:

1. A written assessment and accompanying maps of the wetlands and buffers within two hundred (200) feet of the project area, or one half mile upstream or downstream if the wetland is a riverine wetland, including the following information at a minimum:

a. Wetland rating, wetland delineation and required buffers;

b. Existing wetland acreage;

c. Wetland category; vegetative, faunal, and hydrologic characteristics;

d. Soil and substrate conditions; and

e. Topographic elevations, at least ten-foot contours

f. A discussion of the water sources supplying the wetland and documentation of hydrologic regime (locations of inlet and outlet features, water depths throughout the wetland, evidence of recharge or discharge, evidence of water depths throughout the year – drift lines, algal layers, moss lines, and sediment deposits).

2. A discussion of measures, including avoidance, minimization and mitigation, proposed to preserve existing wetlands and restore any wetlands that were degraded prior to the current proposed land use activity.

3. Functional evaluation for the wetland and adjacent buffer using a local or state agency staff-recognized method and including the reference of the method and all data sheets.

4. Proposed mitigation, if needed, including a written assessment and accompanying maps of the mitigation area, including the following information at a minimum:

   a. Existing wetland acreage and proposed impact area;

   b. Vegetative, faunal, and hydrologic conditions;

   c. Relationship within watershed and to existing waterbodies;

   d. Soil and substrate conditions, topographic elevations;

   e. Existing and proposed adjacent site conditions;

   f. Required wetland buffers; and

   g. Property ownership.

5. A discussion of ongoing management practices that will protect wetlands after the project site has been developed, including proposed monitoring and maintenance programs.

D. Additional information may be required. When appropriate, the County may also require the critical area report to include an evaluation by the Department of Ecology or an independent qualified expert regarding the applicant's analysis and the effectiveness of any proposed mitigating measures or programs, and to include any recommendations as appropriate.

18.08.330 Activities Allowed in Wetlands

In addition to those activities allowed in Section 18.08.085, the following are allowed in wetlands, and do not require approval or submission of a critical area report:

A. Conservation or preservation of soil, water, vegetation, fish, shellfish, and other wildlife that does not entail changing the structure, or functions of the existing wetland.

B. 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, or alteration of the wetland by changing existing topography, water conditions or water sources.

C. Boat mooring, excluding docks.

D. Drilling for utilities under a wetland provided that the drilling does not interrupt 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 is disturbed.

18.08.340 Performance standards – General requirements

A. Activities may only be permitted in a wetland or wetland buffer if the applicant can show that the proposed activity will not degrade the functions and values of the wetland and other critical areas.

B. Activities which do not meet the requirements of subsection A of this section, or that are not allowed activities as provided in this Chapter shall be prohibited.

C. Wetland buffers

1. Wetland buffer zones shall be required for all regulated activities adjacent to regulated wetlands. Any wetland created, restored or enhanced as compensation for approved wetland alterations shall also include the standard buffer required for the category of the created, restored or enhanced wetland.

2. Buffers shall not include areas that are functionally and effectively disconnected from the wetland by a road or other substantially developed surface of sufficient width and with use characteristics such that buffer functions are not provided.

3. Standard buffer widths. The standard buffer widths are based on wetland category, intensity of impacts, and wetland functions or special characteristics. The buffer is to be vegetated with native vegetation that are appropriate for the site conditions. If vegetation in the buffer is disturbed (grazed or mowed), proponents planning changes to land that will increase impacts to wetlands need to rehabilitate the buffer with native vegetation that are appropriate for the site conditions. The width of the buffer is measured in horizontal distance.

4. Measurement of wetland buffers. All buffers shall be measured from the wetland boundary as surveyed in the field. The width of the wetland buffer shall be determined according to the wetland category and the proposed land use. The buffer for a wetland created, restored, or enhanced as compensation for wetland alterations shall be the same as the buffer required for the category of the created, restored, or enhanced wetland.

Table 3
Land Use Intensity Table: Types of Proposed Land Use that can result in High, Moderate, and Low Levels of Impacts to Adjacent Wetlands

Level of Impact from Proposed Change in Land Use	Types of Land Use Based on Common Zoning Designations
High	• Commercial • Urban • Industrial • Institutional • Retail sales • Residential (more than 1 unit/acre) • High-intensity recreation (golf courses, ball fields, etc.)

Moderate	• Residential (1 unit/acre or less) • Moderate-intensity open space (parks with biking, jogging, etc.) • Paved driveways and gravel driveways serving 3 or more residences • Paved trails
Low	• Low-intensity open space (hiking, bird-watching, preservation of natural resources, etc.) • Timber management • Gravel driveways serving 2 or fewer residences • Unpaved trails • Utility corridor without a maintenance road and little or no vegetation management.

Table 4 Required Buffer Widths		
Wetland Characteristics	**Buffer Width by Impact of Proposed Land Use**	**Other Measures Recommended for Protection**
Category IV Wetlands (For wetlands scoring less than 30 points or more for all functions)		
Score for all 3 basic functions is less than 30 points	Low – 25 ft Moderate – 40 ft High – 50 ft	No recommendations at this time
Category III Wetlands (For wetlands scoring 30-50 points or more for all functions)		
Moderate level of function for habitat (score for habitat 20-28 points)	Low – 75ft Moderate – 110ft High – 150 ft	No recommendations at this time
Not meeting above characteristic	Low – 40 ft Moderate – 60 ft High – 80 ft	No recommendations at this time
Category II Wetlands (For wetlands that score 51-69 points or more for all functions or having the "Special Characteristics" identified in the rating system)		
High level of function for habitat (score for habitat 29-36 points)	Low – 100 ft Moderate – 150 ft High – 200 ft	Maintain connections to other habitat areas.
Moderate level of function for habitat (score for habitat 20-28 points)	Low – 75ft Moderate – 110ft High – 150 ft	No recommendations at this time
High level of function for water quality improvement and low for habitat (score for water quality 24-32 points; habitat less than 20 points)	Low – 50 ft Moderate – 75 ft High – 100 ft	No additional surface discharges of untreated runoff
Vernal pool	Low – 100 ft Moderate – 150 ft High – 200 ft OR Develop a regional plan to protect the most important vernal pool complexes – buffers of vernal pools outside protection zones can then be reduced to: Low – 40 ft Moderate - 60 ft High – 80 ft	No intensive grazing or tilling of wetland
Riparian forest	Buffer width to be based on score for habitat functions or water quality functions	Riparian forest wetlands need to be protected at a watershed or subbasin scale Other protection based on needs to protect habitat and/or water quality functions
Not meeting above characteristic	Low – 50 ft Moderate – 75 ft High – 100 ft	No recommendations at this time[1]
Category I Wetlands (For wetlands that score 70 points or more for all functions or having the "Special Characteristics" identified in the rating system)		
Natural Heritage Wetlands	Low – 125 ft Moderate – 190 ft High – 250 ft	No additional surface discharges to wetland or its tributaries. No septic systems within 300 ft of wetland. Restore degraded parts of buffer.
Bogs	Low – 125 ft	No additional surface

Table 4 Required Buffer Widths		
Wetland Characteristics	**Buffer Width by Impact of Proposed Land Use**	**Other Measures Recommended for Protection**
	Moderate – 190 ft High – 250 ft	discharges to wetland or its tributaries. Restore degraded parts of buffer.
Alkali	Low – 100 ft Moderate – 150 ft High – 200 ft	No additional surface water discharges to wetland or its tributaries Restore degraded parts of buffer
Forested	Buffer width based on score for habitat functions or water quality functions	If forested wetland scores high for habitat, need to maintain connections to other habitat areas.
High level of function for habitat (score for habitat 29-36 points)	Low – 100 ft Moderate – 150 ft High – 200 ft	Restore degraded parts of buffer. Maintain connections to other habitat areas
Moderate level of function for habitat (score for habitat 20-28 points)	Low – 75ft Moderate – 110ft High – 150 ft	No recommendations at this time
High level of function for water quality improvement (24-32 points) and low for habitat (less than 20 points)	Low – 50 ft Moderate – 75 ft High – 100 ft	No additional surface discharges of untreated runoff
Not meeting above characteristics	Low – 50 ft Moderate – 75 ft High – 100 ft	No recommendations at this time

18.08.341 Signs and Fencing of Wetlands

A. Temporary Markers. The outer perimeter of the wetland or buffer and the limits of those areas to be disturbed pursuant to an approved permit or authorization shall be marked in the field in such a way as to ensure that no unauthorized intrusion will occur and is subject to inspection by the Director prior to the commencement of permitted activities. This temporary marking shall be maintained throughout construction and shall not be removed until permanent signs, if required, are in place.

B. Permanent Signs. As a condition of any permit or authorization issued pursuant to this Chapter, the Director may require the applicant to install permanent signs along the boundary of a wetland or buffer.

1. Permanent signs shall be made of an enamel-coated metal face and attached to a metal post, or another non-treated material of equal durability. Signs must be posted at an interval of one per lot or every fifty feet, whichever is less, and must be maintained by the property owner in perpetuity. The sign shall be worded as follows or with alternative language approved by the Director:

2. The provisions of subsection (a) may be modified as necessary to ensure protection of sensitive features or wildlife.

C. Fencing.

1. The Director shall determine if fencing is necessary to protect the functions and values of the critical area. If found to be necessary, the Director shall condition any permit or authorization issued pursuant to this Chapter to require the applicant to install a permanent fence at the edge of the wetland buffer, when fencing will prevent future impacts to the wetland.

2. The applicant shall be required to install a permanent fence around the wetland or buffer when domestic grazing animals not connected to an agricultural use are present or may be introduced on site.

3. Fencing installed as part of a proposed activity or as required in this Section 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.

18.08.342 Performance Standards – Wetland Buffer Averaging

The permit approval authority may average wetland buffer widths on a case-by-case basis when the applicant demonstrates through a critical area study to the satisfaction of the Director that all the following criteria are met:

A. Averaging to improve wetland protection may be permitted when all of the following conditions are met as demonstrated by a critical area report pursuant to Section18.08.320:

1. 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;

2. 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;

3. The total area of the buffer after averaging is equal to the area required without averaging and all increases in buffer dimension for averaging are generally parallel to the wetland edge;

4. The buffer at its narrowest point is never less than seventy-five percent of the required width.

B. Averaging to allow reasonable use of a parcel may be permitted when all of the following are met as demonstrated by a critical area report pursuant to Section 18.08.320:

1. There are no feasible alternatives to the site design that could be accomplished without buffer averaging;

2. The averaged buffer will not result in degradation of the wetland's functions and values;

3. The total buffer area after averaging is equal to the area required without averaging and all increases in buffer dimension for averaging are generally parallel to the wetland edge;

4. The buffer at its narrowest point is never less than three-quarters of the required width except where the Director finds that there is an existing feature such as a roadway that limits buffer dimension, or an essential element of a proposed development such as access that must be accommodated for reasonable use and requires a smaller buffer.

C. The applicant implements all reasonable measures to reduce the adverse effects of adjacent land uses and ensure no net loss of wetland functions and values in conjunction with a wetland assessment study and mitigation plan.

18.08.343 Performance Standards – Wetland Buffer Increase

The permit approval authority may increase the width of the standard buffer width on a case-by-case basis, based on a critical area report, when a larger buffer is required to protect critical habitats as outlined in Section 18.08.600, or such increase is necessary to:

A. Protect the function and value of that wetland from proximity impacts of adjacent land use, including noise, light and other disturbance, not sufficiently limited by buffers provided above;

B. Maintain viable populations of priority species of fish and wildlife; or

C. Protect wetlands or other critical areas from landslides, erosion or other hazards.

18.08.344 Performance Standards – Wetland Buffer Decrease

The Director shall have the authority to reduce the standard buffer widths identified in Section 18.08.340, provided that the general standards for avoidance and minimization per Section 18.08.110A and B shall apply, and provided further that all of the following apply:

A. The buffer reduction shall not adversely affect the functions and values of the adjacent wetlands;

B. The buffer of a Category I or II wetland shall not be reduced to less than seventy-five percent of the required buffer or fifty feet, whichever is greater;

C. The buffer of a Category III or IV wetland shall not be reduced to less than seventy-five percent of the required buffer, or twenty-five feet, whichever is greater;

D. The applicant implements all reasonable measures to reduce the adverse effects of adjacent land uses and ensure no net loss of buffer functions and values. The specific measures that may be implemented include, but are not limited to, the following:

1. Direct lights away from the wetland and buffer.

2. Locate facilities that generate substantial noise (such as some manufacturing, industrial and recreational facilities) away from the wetland and buffer.

3. Establish covenants limiting use of pesticides within two hundred feet of wetland.

4. Implement integrated pest management programs.

5. Infiltrate or treat, detain and disperse runoff into buffer.

6. Post signs at the outer edge of the critical area or buffer to clearly indicate the location of the critical area according to the direction of the County.

7. Plant buffer with native vegetation appropriate for the region to create screens or barriers to noise, light, human intrusion and discourage domestic animal intrusion.

8. Use low impact development where appropriate.

9. Establish a permanent conservation easement to protect the wetland and the associated buffer.

18.08.345 Performance standards – Specific activities and uses.

The following activities may be permitted 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 to minimize impacts to the buffer and adjacent wetland:

A. Passive recreation. Passive recreation facilities designed and in accordance with the critical area report, including walkways and trails that are generally parallel to the perimeter of the wetland shall be located in the outer twenty-five percent (25%) of the buffer area;

B. Stormwater management facilities. Stormwater management facilities are not allowed in buffers of Category I or II wetlands. Stormwater management facilities, limited to stormwater dispersion outfalls and bioswales, may be allowed within the outer twenty-five percent (25%) of the buffer of Category III or IV wetlands only, provided that:

1. No other location is feasible; and

2. The location of such facilities will not degrade the functions or values of the wetland.

C. Subdivisions. The subdivision and short subdivision of land in wetlands and associated buffers is subject to the following:

1. Land that is located wholly within a wetland or its buffer may not be subdivided;

2. Land that is located partially within a wetland or its buffer may be divided provided that an accessible and contiguous portion of each new lot is located outside of the wetland and its buffer.

3. Access roads and utilities serving the proposed subdivision may be permitted within the wetland and associated buffers only if the County determines that no other feasible alternative exists in and when consistent with this Title. Mitigation requirements outlined in 18.08.346 apply to these roads.

D. On-site sewage disposal system conventional drainfields may be permitted in the outer twenty-five percent of a Category II, III and IV wetland buffer when accessory to an approved residential structure, if the following conditions are met:

1. It is not feasible to connect to a public sanitary sewer system;

2. There is no reasonable location outside the wetland buffer based on analysis of conditions within the contiguous property owned by the applicant;

3. The facility is located as far from the wetland edge as possible and is designed and constructed in a manner that minimizes disturbance of soils and vegetation, and no trees in excess of four inches in diameter are removed or disturbed;

4. Clearing, grading, and excavation activities are limited to the minimum necessary and the area is restored following installation.

E. Maintenance, repair, or operation of existing structures, facilities, or improved areas, including minor modification of existing serviceable structures within a buffer zone where modification does not adversely impact wetland functions, and subject to the provisions for nonconforming use and facilities.

F. Access to private development sites may be permitted to cross Category II, III, or IV wetlands or their buffers, pursuant to the criteria in subsection F of this section; provided, that alternative access shall be pursued to the maximum extent feasible, including through the provisions of Chapter 8.24 RCW. Exceptions or deviations from technical standards for width or other dimensions, and specific construction standards to minimize impacts may be specified, including placement on elevated structures as an alternative to fill, if feasible.

G. Utility lines and facilities providing local delivery service, not including facilities such as electrical substations, water and sewage pumping stations, water storage tanks, petroleum products pipelines and not including transformers or other facilities containing hazardous substances, may be located in Category II, III, and IV wetlands and their buffers and/or Category I wetland buffers if the following criteria are met:

1. There is no reasonable location or route outside the wetland or wetland buffer based on analysis of system needs, available technology and alternative routes. Location within a wetland buffer shall be preferred over a location within a wetland.

2. The utility line is located as far from the wetland edge as possible and in a manner that minimizes disturbance of soils and vegetation.

3. Clearing, grading, and excavation activities are limited to the minimum necessary to install the utility line, which may include boring, and the area is restored following utility installation.

4. Buried utility lines shall be constructed in a manner that prevents adverse impacts to subsurface drainage. This may include the use of trench plugs or other devices as needed to maintain hydrology.

5. Impacts on wetland functions are mitigated in accordance with Section 18.08.347.

18.08.346 Performance standards – Mitigation requirements

When the acreage required for compensatory mitigation is divided by the acreage of impact, the result is a number known variously as a *replacement,* compensation, or *mitigation* ratio. Compensatory mitigation ratios are used to help ensure that compensatory mitigation actions are adequate to offset unavoidable wetland impacts by requiring a greater amount of mitigation area than the area of impact. Requiring greater mitigation area helps compensate for the risk that a mitigation action will fail and for the time lag that occurs between the wetland impact and achieving a fully functioning mitigation site.

A. The Director shall have the authority to adjust these ratios when a combination of mitigation approaches is proposed. In such cases, the area of altered wetland shall be replaced at a one-to-one ratio through re-establishment or creation, and the remainder of the area needed to meet the ratio can be replaced by enhancement at a two to- one ratio. For example, impacts to one acre of a Category II wetland requiring a three-to-one ratio for creation can be compensated by creating one acre and enhancing four acres (instead of the additional two acres of creation that would otherwise be required).

Table 7
Ratios for Projects in Eastern Washington that do not alter the Type or HGM setting of a Compensation Site (Source: Ecology 2006)

Category and Type of Wetland Impacts	Re-establishment or Creation	Rehabilitation Only	Re-establishment or Creation (R/C) and Rehabilitation (RH)	1:1 Re-establishment or Creation (R/C) and Enhancement (E)	Enhancement Only
All Category IV	1.5:1	3:1	1:1 R/C and 1:1 RH	1:1 R/C and 2:1 E	6:1
All Category III	2:1	4:1	1:1 R/C and 2:1 RH	1:1 R/C and 4:1 E	8:1
Category II Forested	4:1	8:1	1:1 R/C and 4:1 RH	1:1 R/C and 6:1 E	16:1
Category II Vernal pool	2:1 Compensation must be seasonally ponded wetland	4:1 Compensation must be seasonally ponded wetland	1:1 R/C and 2:1 RH	Case by Case	Case-by-case
All other Category II	3:1	6:1	1:1 R/C and 4:1 RH	1:1 R/C and 8:1 E	12:1
Category I (Forested)	6:1	12:1	1:1 R/C and 10:1 RH	1:1 R/C and 20:1 E	24:1

Table 7 Ratios for Projects in Eastern Washington that do not alter the Type or HGM setting of a Compensation Site (Source: Ecology 2006)					
Category and Type of Wetland Impacts	**Re-establishment or Creation**	**Rehabilitation Only**	**Re-establishment or Creation (R/C) and Rehabilitation (RH)**	**1:1 Re-establishment or Creation (R/C) and Enhancement (E)**	**Enhancement Only**
Category I (based on score for functions)	4:1	8:1	1:1 R/C and 6:1 RH	1:1 R/C and 12:1 E	16:1
Category I (Natural Heritage site)	Not considered possible	6:1 rehabilitation of a Natural Heritage site	R/C Not Considered possible	R/C Not considered possible	Case by Case
Category I Alkali	Not considered possible	6:1 rehabilitation of an alkali wetland	R/C Not Considered possible	R/C Not considered possible	Case by Case
Category I (Bog)	Not considered possible	6:1 rehabilitation of a bog	R/C Not Considered possible	R/C Not Considered possible	Case by Case

B. Buffers. Replacement wetlands established pursuant to these mitigation provisions shall have adequate buffers to ensure their protection and sustainability. The buffer shall be based on the category and land-use intensity in Section 18.08.340C; provided, that the Director shall have the authority to approve a smaller buffer when existing site constraints (such as a road) prohibit attainment of the standard buffer.

C. Mitigation maintenance and monitoring. Mitigation areas will be maintained and monitored for a minimum of five years or a period necessary to establish that performance standards have been met after the mitigation has been completed. Annual maintenance and monitoring reports will be submitted to the County and, where applicable, the Department of Ecology, and shall include:

1. Descriptive data for vegetation, soils, and hydrology
2. Itemized list of dead, dying, and replaced vegetation
3. Quantitative assessment of invasive species
4. Descriptive photographs
5. Statement of overall success of mitigation
6. Schedule of activities for the next year of maintenance and monitoring

The County may extend maintenance and monitoring for mitigation projects that fail to achieve performance standards outlined in the mitigation plan.

18.08.347 Performance Standards - Wetland Mitigation Plan

In addition to meeting the requirements of Section 18.08.115, a compensatory mitigation plan for wetland and wetland buffer impacts shall meet the following requirements:

A. The plan shall be based on applicable portions of the Washington State Department of Ecology's Wetland Mitigation in Washington State Part 2: Developing Mitigation Plans, 2006, as amended, or other appropriate guidance document that is consistent with best available science.

B. The plan shall contain sufficient information to demonstrate that the proposed activities are logistically feasible, constructible, ecologically sustainable, and likely to succeed. Specific information to be provided in the plan shall include:

1. The rationale for site selection;

2. General description and scaled drawings of the activities proposed including, but not limited to, clearing, grading/excavation, drainage alterations, planting, invasive plant management, installation of habitat structures, irrigation, and other site treatments associated with the development activities and proposed mitigation action(s);

3. A description of the ecological functions and values that the proposed alteration will affect and the specific ecological functions and values the proposed mitigation area(s) shall provide, together with a description of required or recommended mitigation ratios and an assessment of factors that may affect the success of the mitigation program;

4. Overall goals of the plan, including wetland function, value, and acreage;

5. Description of baseline (existing) site conditions including topography, vegetation, soils, hydrology, habitat features (i.e., snags), surrounding land use, and other pertinent information;

6. Field data confirming the presence of adequate hydrology (surface and/or groundwater) to support existing and compensatory wetland area(s);

7. Nature of mitigation activities, including area of restored, created, enhanced and preserved wetland, by wetland type;

8. Detailed grading and planting plans showing proposed post-construction topography; general hydrologic patterns; spacing and distribution of plant species, size and type of proposed planting stock, watering or irrigation plans, and other pertinent information;

9. A description of site treatment measures including invasive species removal, use of mulch and fertilizer, placement of erosion and sediment control devices, and best management practices that will be used to protect existing wetlands and desirable vegetation;

C. Specific measurable performance standards that the proposed mitigation action(s) shall achieve together with a description of how the mitigation action(s) will be evaluated and

monitored to determine if the performance standards are being met and identification of potential courses of action, and any corrective measures to be taken if monitoring or evaluation indicates that project performance standards are not being met. The performance standards shall be tied to and directly related to the mitigation goals and objectives.

D. Cost estimates for the installation of the mitigation program, monitoring, and potential corrective actions if project performance standards are not being met.

E. Timing. Mitigation activities shall be timed to occur in the appropriate season based on weather and moisture conditions and shall occur as soon as possible after the permitted alteration.

18.08.350 Wetland Mitigation Banks

A. Credits from a wetland mitigation bank may be approved for use as compensation for unavoidable impacts to wetlands when:

1. The bank is certified under Chapter 173-700 WAC;

2. The Director determines that the wetland mitigation bank provides appropriate compensation for the authorized impacts; and

3. The proposed use of credits is consistent with the terms and conditions of the bank's certification.

B. Replacement ratios for projects using bank credits shall be consistent with replacement ratios specified in the bank's certification.

C. Credits from a certified wetland mitigation bank may be used to compensate for impacts located within the service area specified in the bank's certification. In some cases, bank service areas may include portions of more than one adjacent drainage basin for specific wetland functions.

18.08.400 Frequently Flooded Areas - Designation

A. All areas within the County meeting the frequently flooded designation criteria in the Identification and Delineation Manual, as amended, regardless of any formal identification, are hereby designated critical areas and are subject to the provisions of this Chapter. The flood areas are classified as either one of two types:

   1. Floodway: Floodways are defined as the channel of a stream and adjacent land areas which are required to carry and discharge the flood water or flood flows of any river or stream associated with a regulatory flood.

   2. Floodway Fringe: The flood fringe is defined as that land area which is outside a stream's floodway, but is subject to periodic inundation due to flooding, associated with a regulatory flood.

B. These flood areas have been accurately delineated based on hydrologic and hydraulic studies completed by the Federal Emergency Management Agency in 1983, and as subsequently revised and amended.

   The methodology and detail of these studies is accepted as the best available science.

18.08.410 Mapping of Frequently Flooded Areas

A. The approximate location and extent of frequently flooded areas are shown on the following adopted critical areas map: Walla Walla County Critical Area Map 3: Frequently Flooded Areas. This map is based on data obtained from the Federal Emergency Management Agency Flood Insurance rate Maps, December 1983, or as later revised.

B. These maps are to be used as a guide for the County, project applicants, and/or property owners and may be continuously updated as new critical areas are identified. They are a reference and do not provide a final critical area designation.

18.08.420 Frequently Flooded Areas - Regulation

"Frequently flooded areas" are those same areas regulated by the Flood Damage Prevention Ordinance, Chapter 18.12 of the Walla Walla County Code, and are protected through regulations provided in that Chapter. Title 15 (Buildings and Construction) and Chapter 18.12 (Flood Damage Protection) of the Walla Walla County Code regulate proposed activities adjacent to or within frequently flooded areas. If allowed, any structures permitted in the designated flood areas are subject to the flood-proofing regulations provided in Title 15 and Chapter 18.12.

18.08.500 Geologically Hazardous Areas – Designation

A. Geologically hazardous areas include areas susceptible to erosion, sliding, earthquake, or other geological events.[1] The following regulations, in combination with the performance standards for development, will guide development in these critical areas. The purpose of these regulations is to maintain the natural integrity of hazardous areas and their buffers in order to protect adjacent lands from the impacts of landslides, mudslides, subsidence, excessive erosion and seismic events, and to safeguard the public from these threats to life or property. Geologically hazardous areas: are designated as those areas that are susceptible to one or more of the following types of hazards:

1. Erosion hazard;
2. Landslide hazard;
3. Seismic hazard;
4. Other geological events including, mass wasting, debris flows, rock falls, and differential settlement.

B. Erosion Hazard Areas. Erosion hazard areas are those areas of Walla Walla County which:

1. Contain soils or soils complexes identified by the U.S. Department of Agriculture's Natural Resource Conservation Service or the Soil Survey for Walla Walla County as having "moderate to severe, "severe" or "very severe" erosion hazard potential; or
2. Are impacted by shore land and/or stream bank erosion; or
3. Areas with a slope greater than fifteen percent.

C. Landslide Hazard Areas. Landslide hazard areas are those areas susceptible to landslides because of any combination of bedrock, soil, slope (gradient), slope aspect, structure, hydrology, or other physical factors. Potential landslide hazard areas exhibit one or more of the following characteristics:

1. Sensitive Sloped Areas. Slopes exceeding thirty-five percent with a vertical relief of ten or more feet except areas composed of competent rock and properly engineered slopes designed and approved by a geotechnical engineer licensed in the state of Washington and experienced with the site;
2. Areas mapped by the Washington State Department of Natural Resources (slope stability mapping) as unstable ("U"), unstable old slides ("UOS"), or unstable recent slides ("URS");
3. Areas designated by the U.S. Department of Agriculture's Natural Resource Conservation Service as having "severe" limitation for building site development;
4. Areas that have shown evidence of historic 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; and areas that have toppling, leaning, or bowed trees caused by ground surface movement;

[1] See WWCC 18.08.015(A).

5. Slopes greater than fifteen percent that have a relatively permeable geologic unit overlying a relatively impermeable unit and having springs or groundwater seepage;

6. Areas potentially unstable as a result of rapid stream incision, stream bank erosion, and undercutting by wave action;

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

8. Areas designated as quaternary slumps, earthflows, mudflows, lahars, or landslides on maps published by the U.S. Geological Survey or Washington State Department of Natural Resources;

9. Areas that are at risk of mass wasting due to seismic forces; and

10. Slopes having gradients steeper than eighty percent subject to rock fall during seismic shaking.

D. Seismic hazard areas shall be as identified in Washington State Department of Natural Resources seismic hazard and liquefaction susceptibility maps for Eastern Washington and other geologic resources.

E. Other Hazard Areas. Geologically hazard areas shall also include areas determined by the Director those areas subject to severe risk of damage as a result of other geological events including mass wasting, debris flows, rock falls and differential settlement.

18.08.510 Mapping of Geologically Hazardous Areas

A. The approximate location and extent of geologically hazardous areas containing known or suspected risk are shown on the following adopted Critical Areas Maps: Walla Walla County Critical Area Map 4: Geologic Hazard Areas: Landslide, Liquefaction and Seismic; and Walla Walla County Critical Area Map 5: Geologic Hazard Areas: Erosion and Steep Slopes. The hazard areas outlined on these maps are based on the following data:

1. USGS ten meter Digital Elevation Model (slope);

2. USDA Soil Survey of Walla Walla County Area, Washington;

3. Washington State Department of Natural Resources Liquefaction Susceptibility Map of Walla Walla County, Washington;

4. Washington State Department of Natural Resources Site Class Map of Walla Walla County, Washington; and

5. Walla Walla County Landslide Hazards.

B. These maps are to be used as a guide for the County, project applicants and/or property owners, and may be updated as new information becomes available. They are a reference and do not provide a final critical area designation.

18.08.520 Activities Allowed in Geologically Hazardous Areas

In addition to those activities allowed in Section 18.08.085, the following are allowed in geologically hazardous areas, and do not require approval or submission of a critical area report:

A. Installation of fences.

B. Hazard Areas other than erosion and landslide hazard areas, and extreme slope hazard areas:

1. Construction of new buildings with less than three thousand five hundred square feet of floor area or roof area, whichever is greater, and which are not residential structures or used as places of employment or public assembly;

2. Additions that are two hundred fifty square feet or less to existing residences

18.08.530 Critical Area Report – Additional Requirements for Geologically Hazardous Areas

A. Prepared by a Qualified Professional.

B. Area Addressed in Critical Area Report. The following areas shall be addressed in a critical area report for geologically hazardous areas:

1. The project area of the proposed activity; and

2. All geologically hazardous areas within two hundred feet of the project area or that have potential to be affected by the proposal.

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

1. Site and construction plans. The report shall include a copy of the site plans for the proposal showing:

a. The type and extent of geologic hazard areas, and any other critical areas, and buffers on, adjacent to, within two hundred feet of, or that are likely to impact the proposal;

b. Proposed development, including the location of existing and proposed structures, fill, storage of materials, and drainage facilities, with dimensions indicating distances to the floodplain;

c. The topography, in at least ten-foot contours, of the project area and all hazard areas addressed in the report; and

d. Clearing limits.

2. Assessment of Geological Characteristics. The report shall include an assessment of the geologic characteristics and engineering properties of the soils, sediments, and/or rock of the project area and potentially affected adjacent properties, and a review of the site history regarding landslides, erosion, and prior grading. Soils analysis shall be accomplished in accordance with accepted taxonomic classification systems in use in the region. The assessment shall include, but not be limited to:

   a. A description of the surface and subsurface geology, hydrology, soils, and vegetation found in the project area and in all hazard areas addressed in the report;

   b. A detailed overview of the field investigations, published data and references; data and conclusions from past assessments of the site; and site specific measurements, test, investigations, or studies that support the identification of geologically hazardous areas; and

   c. A description of the vulnerability of the site to seismic and other geologic events.

3. Analysis of proposal. The report shall contain a geotechnical analysis including a detailed description of the project, its relationship to the geologic hazard(s), and its potential impact upon the hazard area, the subject property and affected adjacent properties; and

4. Minimum buffer and building setback. The report shall make a recommendation for the minimum no-disturbance buffer and minimum building setback from any geologic hazard based upon the geotechnical analysis.

D. Incorporation of previous study. Where a valid geotechnical report has been prepared within the last five years for a specific site, and where the proposed land use activity and surrounding site conditions are unchanged, said report may be incorporated into the required critical area report. The applicant shall submit a geotechnical assessment detailing any changed environmental conditions associated with the site.

E. Mitigation of long-term impacts. When hazard mitigation is required, the mitigation plan shall specifically address how the activity maintains or reduces the pre-existing level of risk to the site and adjacent properties on a long-term basis (equal to or exceeding the projected lifespan of the activity or occupation). Proposed mitigation techniques shall be considered to provide long-term hazard reduction only if they do not require regular maintenance or other actions to maintain their function. Mitigation may also be required to avoid any increase in risk above the pre-existing conditions following abandonment of the activity.

18.08.540 Critical Area Report – Additional Requirements for Specific Hazards

In addition to the general critical area report requirements of Section 18.08.095, critical area reports for geologically hazardous areas must meet the requirements of this Section. Critical

area reports for two or more types of critical areas must meet the report requirements for each relevant type of critical area.

A. Erosion, landslide and extreme slope hazard areas. In addition to the basic critical area report requirements, a critical area report for an erosion hazard or landslide hazard area shall include the following information at a minimum:

1. Site plan. The report shall include a copy of the site plan for the proposal showing:

   a. The height of slope, slope gradient, and cross section of the project area;

   b. The location of springs, seeps, or other surface expressions of ground water on or within two hundred feet of the project area or that have potential to be affected by the proposal; and

   c. The location and description of surface water runoff;

2. Geotechnical analysis. The geotechnical analysis shall specifically include:

   a. A description of the extent and type of vegetative cover;

   b. An estimate of load capacity including surface and ground water conditions, public and private sewage disposal systems, fills and excavations and all structural development;

   c. An estimate of slope stability and the effect construction and placement of structures will have on the slope over the estimated life of the structure;

   d. An estimate of the bluff retreat rate that recognizes and reflects potential catastrophic events such as seismic activity or a one hundred year storm event;

   e. Consideration of the run-out hazard of landslide debris and/or the impacts of landslide run-out on down slope properties.

   f. A study of slope stability including an analysis of proposed angles of cut and fill and site grading;

   g. Recommendations for building limitations, structural foundations, and an estimate of foundation settlement;

   h. An analysis of proposed surface and subsurface drainage, and the vulnerability of the site to erosion;

3. Hazards Analysis. The hazards analysis component of the critical areas report shall specifically include:

   a. A description of the extent and type of vegetative cover;

   b. A description of subsurface conditions based on data from site-specific explorations;

c. Descriptions of surface and ground water conditions, public and private sewage disposal systems, fills and excavations, and all structural improvements;

d. An estimate of slope stability and the effect construction and placement of structures will have on the slope over the estimated life of the structure;

e. An estimate of the bluff retreat rate that recognizes and reflects potential catastrophic events such as seismic activity or a one hundred-year storm event;

f. Consideration of the run-out hazard of landslide debris and/or the impacts of landslide run-out on down slope properties.

g. A study of slope stability including an analysis of proposed cuts, fills, and other site grading;

h. Recommendations for building siting limitations; and

i. An analysis of proposed surface and subsurface drainage, and the vulnerability of the site to erosion;

4. Geotechnical Engineering Report. The technical information for a project within a landslide hazard area shall include a geotechnical engineering report prepared by a licensed engineer that presents engineering recommendations for the following:

   a. Parameters for design of site improvements including appropriate foundations and retaining structures. These should include allowable load and resistance capacities for bearing and lateral loads, installation considerations, and estimates of settlement performance;

   b. Recommendations for drainage and subdrainage improvements;

   c. Earthwork recommendations including clearing and site preparation criteria, fill placement and compaction criteria, temporary and permanent slope inclinations and protection, and temporary excavation support, if necessary; and

   d. Mitigation of adverse site conditions including slope stabilization measures and seismically unstable soils, if appropriate;

5. Erosion and sediment control plan. For any development proposal on a site containing an erosion hazard area, an erosion and sediment control plan shall be required. The erosion and sediment control plan shall be prepared in compliance with requirements set forth in the County's Construction Standards;

6. Drainage plan. The report shall include a drainage plan for the collection, transport, treatment, discharge and/or recycle of water. The drainage plan should consider on-site septic system disposal volumes where the additional volume will affect the erosion or landslide hazard area.

7. Mitigation plans. Hazard and environmental mitigation plans for erosion and landslide hazard areas shall include the location and methods of drainage, surface water management, locations and methods of erosion control, a vegetation management and/or replanting plan and/or other means for maintaining long term soil stability.

8. Monitoring surface waters. If the Director determines that there is a significant risk of damage to downstream receiving waters due to potential erosion from the site, based on the size of the project, the proximity to the receiving waters, or the sensitivity of the receiving waters, the critical area report shall include a plan to monitor the surface water discharge from the site. The monitoring plan shall include a recommended schedule for submitting monitoring reports to the County.

B. Seismic Hazard Areas. In addition to the basic report requirements, a critical area report for a seismic hazard area shall also meet the following requirements:

1. The site map shall show all known and mapped faults within two hundred feet of the project area or that have potential to be affected by the proposal.

2. The hazards analysis shall include a complete discussion of the potential impacts of seismic activity on the site (for example, forces generated, fault displacement and liquefaction potential).

3. Where liquefaction risks of high, moderate to high or moderate exist, the report shall address soil and structural mitigation measures.

18.08.550 Performance Standards – General Requirements

A. Alterations of geologically hazardous areas or associated buffers may only occur for activities that:

1. Will not increase the threat of the geological hazard to adjacent properties beyond pre-development conditions;

2. Will not adversely impact other critical areas;

3. Are designed so that the hazard to the project is eliminated or mitigated to a level equal to or less than pre-development conditions; and

4. Are determined to be safe as designed and under anticipated conditions by a qualified engineer or geologist, licensed in the state of Washington.

B. Critical facilities shall not be sited within geologically hazardous areas unless there is no other practical alternative.

C. In addition to the provisions of this Chapter, alterations of geologically hazardous areas or associated buffers must conform to County Construction Standards and building codes.

D. Seismic hazard areas standards. Development may be allowed in seismic hazard areas when all of the following apply:

1. If evaluation of site-specific subsurface conditions by a qualified professional demonstrates that the proposed development site is not subject to the conditions indicating seismic risk, the provisions of this subsection shall not apply.

2. If a site is subject to seismic risk, the applicant shall implement appropriate engineering design based on analysis by a qualified professional of the best available engineering and geological practices that either eliminates or minimizes the risk of structural damage or injury resulting from seismically induced settlement or soil liquefaction, including compliance with the following criteria:

   a. Subdivision within a seismic hazard areas shall assure that each resulting lot has sufficient buildable area outside of the hazard area or that appropriate limitations on building and reference to appropriate standards are incorporated into subdivision approval and may be placed as restrictions on the face of the plat;

   b. Structures in seismic hazard areas shall conform to applicable analysis and design criteria and provisions of building and construction codes as currently adopted by the County.

   c. Public roads, bridges, utilities and trails shall be allowed when there are no feasible alternative locations and geotechnical analysis and design are provided that ensure the roadway, bridge and utility structures and facilities will not be susceptible to damage from seismic induced ground deformation. Mitigation measures shall be designed in accordance with the most recent version of the American Association of State Highway and Transportation Officials (AASHTO) Manual or other appropriate document.

3. The Director may waive or reduce engineering study and design requirements for alterations in seismic hazard areas for:

   a. Mobile homes;

   b. Additions or alterations to existing structures that do not increase occupancy or significantly affect the risk of structural damage or injury; and

   c. Buildings that are not dwelling units or used as places of employment or public assembly.

   Critical facilities shall not be located in seismic hazard areas unless mitigation is provided which renders the proposed development as a stable as if it were not located within a seismic hazard area.

18.08.560 Performance Standards – Specific Hazards

A. Erosion and Landslide Hazard Areas. Activities on sites containing erosion or landslide hazards shall meet the following requirements:

1. Buffer Required. A buffer shall be established from all edges of erosion or landslide hazard areas. The size of the buffer shall be determined by the Director to eliminate or

minimize the risk of property damage, death or injury resulting from erosion and landslides caused in whole or part by the development, based upon review of and concurrence with a critical area report prepared by a qualified professional.

a. Minimum Buffer. The minimum buffer shall be equal to the height of the slope or fifty feet, whichever is greater.

b. Buffer Reduction. The buffer may be reduced to a minimum of ten feet when a qualified professional demonstrates to the Director's satisfaction that the reduction will adequately protect the proposed development, adjacent developments and uses and the subject critical area.

c. Increased Buffer. The buffer may be increased where the Director determines a larger buffer is necessary to prevent risk of damage to proposed and existing development.

2. Alterations. Alterations of an erosion or landslide hazard area and/or buffer may only occur for activities for which a geotechnical analysis is submitted and determines that:

a. The development will not increase surface water discharge or sedimentation to adjacent properties beyond pre-development conditions;

b. The development will not decrease slope stability on adjacent properties; and

c. Such alterations will not adversely impact other critical areas.

3. Construction Standards. Development within an erosion or landslide hazard area and/or buffer shall be designed to meet the following basic requirements unless it can be demonstrated that an alternative design that deviates from one or more of these standards provides greater long-term slope stability while meeting all other provisions of this Chapter. The requirement for long-term slope stability shall exclude designs that require regular and periodic maintenance to maintain their level of function. In addition to those requirements outlined in Section 18.08.550, the basic development Construction Standards within geologically hazardous areas are:

a. The proposed development shall not decrease the factor of safety for landslide occurrences below the limits of 1.5 for static conditions and 1.2 for dynamic conditions. Analysis of dynamic conditions shall be based on a minimum horizontal acceleration as established by the current version of the International Building Code.

b. Structures and improvements shall be clustered to avoid geologically hazardous areas and other critical areas.

c. Structures and improvements shall minimize alterations to the natural contour of the slope and foundations shall be tiered where possible to conform to existing topography.

d. Structures and improvements shall be located to preserve the most critical portion of the site and its natural landforms and vegetation.

e. The proposed development shall not result in greater risk or a need for increased buffers on neighboring properties.

f. The use of retaining walls that allow the maintenance of existing natural slope area is preferred over graded artificial slopes.

g. Development shall be designed to minimize impervious lot coverage.

4. Vegetation shall be Retained. Unless otherwise provided or as part of an approved alteration, removal of vegetation from an erosion or landslide hazard area or related buffer shall be prohibited;

5. Utility Lines and Pipes. Utility lines and pipes shall be permitted in erosion and landslide hazard areas only when the applicant demonstrates that no other practical alternative is available. 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. Stormwater conveyance shall be allowed consistent with local design and construction standards.

6. Point Discharges. Point discharges from surface water facilities and roof drains onto or upstream from an erosion or landslide hazard area shall be prohibited except as follows:

   a. Conveyed via continuous storm pipe downslope to a point where there are no erosion hazards areas downstream from the discharge;

   b. Discharged at flow durations matching predeveloped conditions, with adequate energy dissipation, into existing channels that previously conveyed stormwater runoff in the predeveloped state; or

   c. Dispersed discharge upslope of the steep slope onto a low-gradient undisturbed buffer demonstrated to be adequate to infiltrate all surface and stormwater runoff, and where it can be demonstrated that such discharge will not increase the saturation of the slope;

7. Subdivisions. The division of land in erosion and landslide hazard areas and associated buffers is subject to the following:

   a. Land that is located wholly within an erosion or landslide hazard area or its buffer may not be subdivided. Land that is located partially within an erosion or landslide hazard area or its buffer may be divided provided that each resulting lot has sufficient buildable area outside of, and will not affect, the erosion or landslide hazard or its buffer.

   b. Access roads and utilities may be permitted within the erosion or landslide hazard area and associated buffers if the County determines that no other feasible alternative exists.

8. Prohibited Development. On-site sewage disposal systems, including drain fields, shall be prohibited within erosion and landslide hazard areas and related buffers.

B. Extreme Slope Hazard Areas. Activities on sites containing extreme slope hazards shall be considered unbuildable. This includes, but is not limited to, construction of buildings, sewage disposal systems and roads. Construction of facilities shall not be permitted in extreme slope hazard areas unless under an exception provided consistent with Section 18.08.090 of this Chapter. If an exception is granted, the provisions of Sections 18.08.550 must be satisfied.

18.08.600 Fish and Wildlife Habitat Conservation Areas - Designation

A. Fish and wildlife habitat conservation areas include:

1. Areas where state or federal designated endangered, threatened, and sensitive species have a primary association.

   a. Federal designated endangered and threatened species are those fish, wildlife, and plant species identified by the U.S. Fish and Wildlife Service and the National Marine Fisheries Service that are in danger of extinction or threatened to become endangered. The U.S. Fish and Wildlife Service and the National Marine Fisheries Service should be consulted as necessary for current listing status.

   b. State designated endangered, threatened, and sensitive species are those fish, wildlife and plant species native to the state of Washington identified by the state Department of Fish and Wildlife, that are in danger of extinction, threatened to become endangered, vulnerable, or declining and are likely to become endangered or threatened in a significant portion of their range within the state without cooperative management or removal of threats. State designated endangered, threatened, and sensitive species are periodically recorded in WAC 232-12-014 (state endangered species), and WAC 232-12-011 (state threatened and sensitive species). The state Department of Fish and Wildlife maintains the most current listing and should be consulted as necessary for current listing status.

   A combined list of federal and state identified species having the potential to be within Walla Walla County area is included in Appendix A (under development).

2. State priority habitats and areas associated with state priority species. Priority habitats and species are considered priorities for conservation and management. Priority species require protective measures for their perpetuation due to their population status, sensitivity to habitat alteration, and/or recreational, commercial, or tribal importance. Priority habitats are those habitat types or elements with unique or significant value to a diverse assemblage of species. A priority habitat may consist of a unique vegetation type or dominant plant species, a described successional stage, or a specific structural element. Priority habitats and species are identified by the state Department of Fish and Wildlife. A state list of priority habitats is included in Appendix A.

3. Habitats and species of local importance. Habitats and species of local importance are those identified by the County, including those that possess unusual or unique habitat warranting protection because of species diversity or habitat system health indicators (see Exhibits 5 and 6, or the latest revision of these maps and Appendix A).

4. Naturally occurring ponds under twenty (20) acres. Naturally occurring ponds are those ponds under twenty (20) acres and their submerged aquatic beds that provide fish or wildlife habitat, including those artificial ponds intentionally created from dry areas in order to mitigate impacts to ponds. Naturally occurring ponds do not include ponds deliberately designed and created from dry sites, such as canals, detention facilities, wastewater treatment facilities, farm ponds, temporary construction ponds, and

landscape amenities, unless such artificial ponds were intentionally created for mitigation.

5. Waters of the state. Waters of the state includes lakes, rivers, ponds, streams, inland waters, underground waters, salt waters, and all other surface waters and watercourses within the jurisdiction of the state of Washington, as classified in WAC 222-16-031.

6. Lakes, ponds, streams, and rivers planted with game fish by a governmental or tribal entity.

7. State natural area preserves and natural resource conservation areas. Natural area preserves and natural resource conservation areas are defined, established, and managed by the state Department of Natural Resources.

8. Streams shall be designated in accordance with the Washington State Department of Natural Resources (DNR) stream type as provided in WAC 222-16-030. Streams are further categorized according to Ecosystem Diagnosis and Treatment (EDT)/Walla Walla Subbasin Plan priority protection reaches.

9. Areas of Rare Plant Species and High Quality Ecosystems that are identified by the Washington State Department of Natural Resources through the Natural Heritage Program.

B. All areas within the County meeting one or more of these criteria, regardless of any formal identification, are hereby designated critical areas and are subject to the provisions of this Title.

C. The following area of local importance: Hawk habitat identified on Critical Area Map 7.

18.08.610 Fish and Wildlife Habitat Conservation Areas – Mapping

The approximate location and extent of conservation areas are shown on the critical area maps adopted by the County (Critical Area Map 5: Fish Habitat Conservation Areas and Critical Area Map 6: Terrestrial Wildlife Habitat Conservation Areas 6: or latest version of these maps), and as most recently updated and the following critical area maps hereby adopted:

A. Department of Fish and Wildlife Priority Habitat and Species Maps;

B. Resident salmonid distribution maps contained in the Habitat Limiting Factors Reports published by the Washington Conservation Commission;

C. Department of Natural Resources State Natural Area Preserves and Natural Resource Conservation Area Maps; and

D. Additional data as determined necessary by the County.

The Walla Walla County Critical Areas Maps are to be used as a guide for the County, project applicants and/or property owners, and may be continuously updated as new critical areas are

identified. In some instances, they are a reference and do not provide a final critical area designation.

18.08.620 Fish and Wildlife Habitat Conservation Areas—Water bodies—Allowed Uses

In addition to those activities allowed in Section 18.08.085, the following are allowed in fish and wildlife habitat conservation areas, and do not require approval or submission of a critical area report:.

A. Restoration of streams previously piped or channeled into a new or relocation streambed when part of a restoration plan that will result in equal or better habitat and water quality and quantity, and that will not diminish the flow capacity of the stream or other natural stream processes; provided, that the relocation has a state hydraulic project approval and all other applicable permits.

B. Road, trail, bridge, and right-of-way crossings, provided they meet the following criteria:

1. There is no other feasible alternative route with less impact on critical areas.

2. The crossing minimizes interruption of natural processes such as the downstream movement of wood and gravel and the movement of all fish and wildlife. Bridges are preferred for all stream crossings and should be designed to maintain the existing stream gradient and substrate, provide adequate horizontal clearance on each side of the ordinary high water mark and adequate vertical clearance above ordinary high water mark for animal passage. If a bridge crossing is not feasible, culverts shall be designed according to applicable state and federal guidance criteria for fish passage as identified in Fish Passage Design at Road Culverts, WDFW 2003, and/or the National Marine Fisheries Service Guidelines for Salmonid Passage at Stream Crossings, 2000 (and subsequent revisions), and in accordance with a state hydraulic project approval. The applicant or property owner shall maintain fish passage through bridge or culvert.

3. The County may require that existing culverts be removed, repaired, or modified as a condition of approval if the culvert is detrimental to fish habitat or water quality, and a feasible alternative exists.

4. Crossings shall be limited to the minimum width necessary. Common crossings are the preferred approach where multiple properties can be accessed by one crossing.

5. Access to private development sites may be permitted to cross streams, if there are no feasible alternative alignments. Alternative access shall be pursued to the maximum extent feasible, including through the provisions of Chapter 8.24 RCW. Exceptions or deviations from technical standards for width or other dimensions, and specific construction standards to minimize impacts may be specified, including placement on elevated structures as an alternative to fill, if feasible.

C. Utility lines and facilities providing local delivery service, not including facilities such as electrical substations, water and sewage pumping stations, water storage tanks, petroleum

products pipelines and transformers or other facilities containing hazardous substances, may cross water bodies or be located in buffers, if the following criteria are met:

1. There is no reasonable location or route that does not cross the water body or outside the buffer based on analysis of system needs, available technology and alternative routes. Location within a buffer shall be preferred over a location within a water body. Crossings shall be contained within the footprint of an existing road or utility crossing where possible.

2. Impacts to fish and wildlife habitat shall be avoided to the maximum extent possible and mitigated when avoidance is not feasible.

3. Utilities that cross water bodies shall be as close to perpendicular to the channel as possible to minimize disturbance. Boring under the water body may be required.

4. If not a crossing, the utility line shall be located as far from the water body as possible.

5. The utility installation shall maintain the existing stream gradient and substrate.

6. Clearing, grading, and excavation activities shall be limited to the minimum necessary to install the utility line, and the area is restored following utility installation.

D. Stormwater conveyance or discharge facilities such as infiltration systems, dispersion trenches, level spreaders, and outfalls may be permitted in a fish and wildlife habitat conservation area buffer on a case-by-case basis when all of the following are met:

1. Due to topographic or other physical constraints there are no feasible locations for these facilities outside the buffer.

2. The discharge is located as far from the ordinary high water mark as possible and in a manner that minimizes disturbance of soils and vegetation.

3. The discharge outlet is in an appropriate location and is designed to prevent erosion and promote infiltration.

4. The discharge meets stormwater flow and water quality standard as provided in the 2004 Ecology Stormwater Manual for Eastern Washington, as amended, or the equivalent.

E. Stream bank stabilization, shoreline protection, and public or private launching ramps may be permitted subject to all of the following standards:

1. Natural shoreline processes will be maintained to the maximum extent practicable. The activity will not result in increased erosion and will not alter the size or distribution of shoreline or stream substrate, or eliminate or reduce sediment supply from feeder bluffs;

2. Adverse impact to fish or wildlife habitat conservation areas, specifically juvenile and adult fish migration corridors, or associated wetlands will be mitigated;

3. Nonstructural measures, such as placing or relocating the development further from the shoreline, planting vegetation, or installing on-site drainage improvements, are not feasible or not sufficient;

4. Stabilization is achieved through bioengineering or soft armoring techniques in accordance with an applicable hydraulic project approval is issued by the Washington Department of Fish and Wildlife;

5. Hard bank armoring may occur only when the property contains an existing permanent structure(s) that is in danger from shoreline erosion caused by riverine processes and not erosion caused by upland conditions, such as the alteration of natural vegetation or drainage, and the armoring shall not increase erosion on adjacent properties and shall not eliminate or reduce sediment supply.

F. New public flood protection measures and expansion of existing measures may be permitted; provided, that bioengineering or soft armoring techniques shall be used where feasible. Hard bank armoring may occur only in situations where soft approaches do not provide adequate protection, and shall be subject to requirement of the shoreline master program, where applicable, hydraulic project approval and other permits.

G. New docks shall be permitted only for public access, as an accessory to water-dependent uses or associated with a single-family residence, or as otherwise allowed by the SMP.

1. To limit the effects on ecological functions, the number of docks should be limited and new subdivisions should employ shared moorage whenever feasible. Docks on shorelines of the state must comply with policies and regulations of the Walla Walla County shoreline master program.

2. Docks shall be located and designed to minimize adverse effects on ecological processes through location where they will interfere with fluvial and limnal processes including gradient and substrate; recruitment of woody debris; and fish habitat, including that related to anadromous fish.

3. Docks shall minimize reduction in ambient light level by limiting width to the minimum necessary and shall not exceed four feet in width, except where specific information on use patterns justifies a greater width. Materials that will allow light to pass through the deck may be required including grating on walkways or gangplanks in nearshore areas.

4. Approaches shall utilize piers or other structures to span the entire upper foreshore to the point of intersection with stable upland soils and shall be designed to avoid interfering with stream processes.

5. Pile spacing shall be the maximum feasible to minimize shading and avoid a wall effect that would block or baffle currents, sediment movement or movement of aquatic life forms, or result in structure damage from driftwood impact or entrapment.

6. Docks should be constructed of materials that will not adversely affect water quality or aquatic plants and animals in the long term.

H. Launch ramps may be permitted for access to the water for the public or for residents of a development or for water dependent use subject to the following criteria:

1. Launch ramps shall be located and designed to minimize adverse effects on fluvial and limnal processes including stream gradient and substrate; recruitment of woody debris; and fish habitat, including that related to anadromous fish.

2. Ramps shall be placed and maintained near flush with the bank slope. Preferred ramp designs, in order of priority, are:

   a. Open grid designs with minimum coverage of beach substrate;

   b. Seasonal ramps that can be removed and stored upland;

   c. Structures with segmented pads and flexible connections that leave space for natural shoreline substrate and can adapt to changes in shoreline profile.

I. In-stream structures, such as, but not limited to, high flow bypasses, dams, and weirs, other than those regulated exclusively by the Federal Energy Regulatory Commission (FERC) shall be permitted only when the multiple public benefits are provided and ecological impacts are fully mitigated. Dams on shorelines of the state shall be regulated in accordance with the shoreline master program.

1. In-stream facilities locations shall avoid areas of high habitat value for aquatic organisms, specifically anadromous fish.

2. In-stream facilities shall be designed to produce the least feasible effect on fluvial processes and shall minimize change in gradient.

3. In-stream facilities shall provide mitigation of all impacts on aquatic species and habitat.

4. In-stream facilities shall provide fish passage, in accordance with Chapter 77.57 RCW.

5. A construction bond for one hundred fifty percent of the cost of the structure and all mitigation measures shall be filed prior to construction and a maintenance agreement shall specify responsibility for maintenance, shall incorporate the maintenance schedule specified by the design engineer, shall require annual inspections by a civil engineer licensed in the state of Washington and shall stipulate abandonment procedures which shall include, where appropriate, provisions for site restoration.

J. Facilities permitted as shoreline dependent or shoreline oriented uses in accordance with the County shoreline master program may be located in water bodies and buffers; provided, that only those facilities that are water dependent or water oriented and facilities for necessary access may be located in water bodies and buffers; and provided, that the facility is located, designed, constructed and operated to minimize and, where possible, avoid critical area disturbance to the maximum extent feasible.

K. Clearing and grading, when allowed as part of an authorized use or activity or as otherwise allowed in these standards, may be permitted; provided, that the following shall apply:

1. Appropriate erosion and sediment control measures shall be used at all times. The soil duff layer shall remain undisturbed to the maximum extent possible. Where feasible, disturbed topsoil shall be redistributed to other areas of the site.

2. The moisture-holding capacity of the topsoil layer shall be maintained by minimizing soil compaction or reestablishing natural soil structure and infiltrative capacity on all areas of the project area not covered by impervious surfaces.

L. Repairs to Existing On-Site Sewage Systems. Repairs to failing on-site sewage systems associated with an existing structure shall be accomplished by utilizing one of the following methods that result in the least impact:

1. Connection to an available public sanitary sewer system;

2. Replacement with a new on-site sewage system located in a portion of the site that has already been disturbed by development and is located landward as far as possible, provided the proposed sewage system is in compliance with Walla Walla County Environmental Health Department; or

3. Repair to the existing on-site septic system.

18.08.630 Critical area report – Additional requirements for habitat conservation areas

A. Prepared by a qualified professional.

B. Area addressed in critical area report. The following topics shall be addressed in a critical area report for habitat conservation areas:

1. The project area of the proposed activity;

2. All habitat conservation areas and recommended buffers within 200 feet of the project area; and

3. All shoreline areas, flood plains, and other critical areas, and related buffers within 200 feet of the project area.

C. Habitat assessment. A habitat assessment is an investigation of the project area to evaluate the presence or absence of a potential critical fish, wildlife, or plant species or habitat. A critical area report for a habitat conservation area shall contain an assessment of habitats including the following site- and proposal-related information at a minimum:

1. Detailed description of vegetation on and adjacent to the project area;

2. Identification of any species of local importance, priority species and habitats (PHS), or endangered, threatened, sensitive or candidate species that have a primary association with habitat on or adjacent to the project area, and assessment of potential project impacts to the use of the site by the species;

3. A discussion of any federal, state, or local special management recommendations, including Department of Fish and Wildlife habitat management recommendations, that have been developed for species or habitats located on or adjacent to the project area;

4. A discussion of measures, including avoidance, minimization and mitigation, proposed to preserve existing habitats or restore any habitat that was degraded prior to the current proposed land use activity and to be conducted in accordance with Section 18.08.110; and

5. A discussion of ongoing management practices that will protect habitat after the project site has been developed, including proposed monitoring and maintenance programs.

D. Additional information may be required. When appropriate due to the type of habitat or species present or the project area conditions, the County may also require the habitat management plan to include:

1. An evaluation by a qualified expert regarding the applicant's analysis and the effectiveness of any proposed mitigating measures or programs, to include any recommendations as appropriate; and

2. Detailed surface and subsurface hydrologic features both on and adjacent to the site.

18.08.640 Performance standards – General requirements

A. Alterations shall not degrade the functions and values of habitat. A habitat conservation area may be altered only if the proposed alteration of the habitat or the mitigation proposed does not degrade the quantitative and qualitative functions and values of the habitat. All new structures and land alterations shall be prohibited from habitat conservation areas, except in accordance with this Chapter.

B. Non-indigenous species shall not be introduced. No plant, wildlife, or fish species not indigenous to the region shall be introduced into a habitat conservation area unless authorized by a state or federal permit or approval.

C. Mitigation shall result in contiguous corridors. Mitigation sites shall try to achieve contiguous functioning habitat corridors in accordance with a mitigation plan that is part of the critical area report to minimize the isolating effects of development on habitat areas, so long as mitigation of aquatic habitat is located within the same aquatic ecosystem as the area disturbed.

D. Approvals of activities may be conditioned. The Director shall condition approvals of activities allowed within or adjacent to a habitat conservation area or its buffers, as necessary to minimize or mitigate any potential adverse impacts. Conditions shall be based on the best available science and may include, but are not limited to, the following:

1. Establishment of buffer zones;

2. Preservation of critically important vegetation and/or habitat features such as snags and downed wood;

3. Limitation of access to the habitat area, including fencing to deter unauthorized access;

4. Seasonal restriction of construction activities;

5. Establishment of a duration and timetable for periodic review of mitigation activities; and

6. Requirement of a performance bond, when necessary, to ensure completion and success of proposed mitigation.

E. Mitigation and Equivalent or Greater Biological Functions. Mitigation of alterations to habitat conservation areas shall achieve equivalent or greater biologic and hydrologic functions and shall include mitigation for adverse impacts upstream or downstream of the development proposal site. Mitigation shall address each function affected by the alteration to achieve functional equivalency or improvement on a per function basis.

F. Approvals and the Best Available Science. Any approval of alterations or impacts to a habitat conservation area shall be supported by the best available science.

G. Buffers.

1. Establishment of Buffers. The Director shall require the establishment of buffer areas for activities adjacent to habitat conservation areas when needed to protect habitat conservation areas. Buffers shall consist of an undisturbed area of native vegetation or areas identified for restoration established to protect the integrity, functions, and values of the affected habitat. Required buffer widths shall reflect the sensitivity of the habitat and the type and intensity of human activity proposed to be conducted nearby and shall be consistent with the management recommendations issued by the Washington Department of Fish and Wildlife.

2. Seasonal Restrictions. When a species is more susceptible to adverse impacts during specific periods of the year, seasonal restrictions may apply. Larger buffers may be required and activities may be further restricted during the specified season.

H. Signs and Fencing of Habitat Conservation Areas.

1. Temporary Markers. The outer perimeter of the habitat conservation area or buffer and the limits of those areas to be disturbed pursuant to an approved permit or authorization shall be marked in the field in such a way as to ensure that no unauthorized intrusion will occur and verified by the Director 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.

2. Permanent Signs. As a condition of any permit or authorization issued pursuant to this Chapter, the Director may require that the applicant to install permanent signs along the boundary of a habitat conservation area or buffer.

a. Permanent signs shall be made of a metal face and attached to a metal post or another material of equal durability. Signs must be posted at an interval of one per lot or every fifty feet, whichever is less and must be maintained by the property owner in

perpetuity. The sign shall be worded as follows or with alternative language approved by the Director:

Habitat Conservation Area
Do Not Disturb
Contact Walla Walla County
Regarding Uses and Restriction

b. The provisions of subsection (a) may be modified by the Director as necessary to assure protection of sensitive features or wildlife.

3. Fencing.

a. The Director shall determine if fencing is necessary to protect the functions and values of the critical area. If found to be necessary, the Director shall condition any permit or authorization issued pursuant to this Chapter to require the applicant to install a permanent fence at the edge of the habitat conservation area or buffer, when fencing will prevent future impacts to the habitat conservation area.

b. The applicant shall be required to install a permanent fence around the habitat conservation area or buffer when domestic grazing animals not connected to an agricultural use are present or may be introduced on site.

c. 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 habitat impacts.

I. In areas designated as High Density of Wintering Birds of Prey, tree and perch removal connected with a development permit other than a single-family dwelling, shall be limited to hazard tree removals unless otherwise approved by the department, after review of a critical area report.

J. In areas designated as Ferruginous Hawk Habitat tree removal connected with a development permit will be restricted to the non-nesting season August through January, and limited to hazard tree removal unless otherwise approved by the department after review of a critical area report.

K. Between March 1st and May 31st, clearing and grading activities connected with a development permit are not allowed within 820 feet of an active Ferruginous Hawk nest. The applicant may use a species specific survey to demonstrate that a potential nest tree does not contain an active nest.

18.08.650 Performance standards – Specific habitats

A. Endangered, threatened, and sensitive species.

1. No development shall be allowed within a habitat conservation area or buffer established as part of a habitat conservation plan with which state or federal endangered, threatened, or sensitive species have a primary association, unless provided for through a federal or state permit, or other approval.

2. Whenever activities are proposed adjacent to a habitat conservation area within a habitat conservation plan with which state or federally endangered, threatened, or sensitive species have a primary association, such area shall be protected through the application of protection measures in accordance with a critical area report prepared by a qualified professional and submitted to the County. Approval for alteration of land adjacent to the habitat conservation area or its buffer shall not occur prior to consultation with the Department of Fish and Wildlife and the appropriate federal agency.

3. Bald eagle habitat shall be protected pursuant to the Washington State Bald Eagle Protection Rules (WAC 232-12-292).

B. Riparian habitat areas. Unless otherwise allowed in this Chapter, all structures and activities shall be located outside of the riparian habitat buffers.

1. Establishment of riparian habitat buffers. Buffers shall be established for habitats that include aquatic systems.

2. Buffer widths. Recommended buffer widths are identified in the critical areas designation map. A riparian habitat shall have at least the buffer width recommended in Table 8 below, unless a greater width is required pursuant to 18.08.674, or a lesser width is allowed pursuant to 18.08.675. Widths shall be measured outward, on the horizontal plane, from the ordinary high water mark or from the top of bank if the ordinary high water mark cannot be identified.

3. The required buffer shall be extended to include any adjacent regulated wetland(s), landslide hazard areas and/or erosion hazard areas and required buffers, but shall not be extended across roads or other lawfully established structures or hardened surfaces that are functionally and effectively disconnected from the stream.

4. Buffers in conjunction with other critical areas. Where other critical areas defined in this chapter fall within the water body buffer, the buffer area shall be the most expansive of the buffers applicable to any applicable critical area.

Table 8 Recommended Minimum Streamside Buffer Widths for Six Categories of Waterways within Walla Walla County			
Waterway Category	**River Reach Included**	**Existing Conditions/Targeted Functions**	**Minimum Streamside Buffer Width (per side)[1,2]**
1	-Columbia River (including Lake Wallula) within County limits [A] -Snake River within County limits [A]	-DNR Type S Stream -Provides limited rearing and migration habitat for anadromous fish species -1 SPTH for LWD recruitment[3] (limited effect) and shade (limited effect) -Control sediment, nutrients, and stormwater runoff[4] - Burbank stormwater addressed through Phase II NPDES - Wildlife migration corridor[4]	100 feet
2	Touchet River mainstem from Coppei Creek to County limits [A]	-Summer steelhead spawning and rearing habitat -EDT priority protection reach -1 SPTH for LWD recruitment[3] and shade -Control sediment, nutrients, and stormwater runoff[4] -Wildlife migration corridor[4]	100 feet
	Touchet River Mainstem from Whetstone Creek to Coppei [A]	-Summer steelhead rearing habitat -1 SPTH for LWD recruitment[3] and shade -Control sediment, nutrients, and stormwater runoff[4]	100 feet
	Coppei Creek	-Summer steelhead spawning and rearing habitat -EDT priority protection reach -1 SPTH for LWD recruitment[3] and shade -Controls for sediment, nutrients, and stormwater runoff[4] in higher gradient and steep slopes in upper segments -Wildlife migration corridor[4]	100[(5)] feet

	Walla Walla River mainstem from confluence with Dry Creek to confluence with Yellowhawk Creek [A]	-EDT priority protection reach -LWD recruitment -1 SPTH for LWD recruitment[3] and shade -Control sediment, nutrients, and stormwater runoff[4] -Wildlife migration corridor	100 feet
	Walla Walla River mainstem from Yellowhawk Creek to County limits/state line [A]	-Summer steelhead rearing habitat -EDT priority protection reach -1 SPTH for LWD recruitment[3] and shade -Control sediment, nutrients, and stormwater runoff[4] -Wildlife migration corridor	100 feet
	Mill Creek from Walla Walla River to Gose Street [A]	-Summer steelhead spawning and rearing habitat and/or SRSRP protection reach -Control sediment, nutrients, and stormwater runoff[4] -Wildlife migration corridor	100 feet
	Mill Creek from Bennington Diversion to County Line and upper headwaters [A]	-Bull trout spawning and rearing habitat -Summer steelhead spawning and rearing habitat and/or SRSRP protection/restoration reach -Control sediment, nutrients, and stormwater runoff[4] -Wildlife migration corridor	100 feet
	Blue Creek	-Summer steelhead spawning and rearing habitat -SRSRP priority protection reach -1 SPTH for LWD recruitment[3] and shade -Controls for sediment, nutrients, and stormwater runoff[4] in higher gradient and steep slopes in upper segments - Wildlife migration corridor	100[(5)] feet
	Cottonwood Creek (tributary to Yellowhawk Creek)	-Summer steelhead spawning and rearing habitat -1 SPTH for LWD recruitment[3] and shade -Control sediment, nutrients, and stormwater runoff[4]	75 feet

	Upper Dry Creek above Highway 125 Bridge [A]	-Summer steelhead spawning and rearing habitat -1 SPTH for LWD recruitment[3] and shade -Controls for sediment, nutrients, and stormwater runoff[4] in higher gradient and steep slopes in upper segments	100 feet
3a	Touchet River mainstem from mouth to confluence with Whetstone Creek [A]	-Summer steelhead migration habitat -1 SPTH for LWD recruitment[3] and shade -Control sediment, nutrients, and stormwater runoff[4] -Wildlife migration corridor	100 feet
	Dry Creek mainstem from mouth to Highway 125 Bridge [A]	-Summer steelhead migration -Control sediment, nutrients, and stormwater runoff	75 feet
	Walla Walla mainstem from mouth to Dry Creek [A]	-Summer steelhead migration -1 SPTH for LWD recruitment[3] and shade -Control sediment, nutrients, and stormwater runoff[4] -Wildlife migration corridor	100 feet
	East Little Walla Walla River	-Salmonid limited rearing habitat (future restoration potential) -1 SPTH for LWD recruitment[3] and shade -Control sediment, nutrients, and stormwater runoff[4]	75 feet
	Pine Creek	-Summer steelhead limited rearing habitat (see SRSRP) -1 SPTH for LWD recruitment[3] and shade -Control sediment, nutrients, and stormwater runoff[4]	75 feet
	Yellowhawk Creek – Confluence with Walla Walla River to confluence with Cottonwood Creek	-Summer steelhead migration, limited rearing habitat and/or EDT priority protection reach -1 SPTH for LWD recruitment[3] and shade -Control sediment, nutrients, and stormwater runoff[4] -Wildlife migration corridor	50 feet
	Lower Garrison Creek – College Place WWTP outfall to confluence with Walla Walla River	-Summer steelhead migration, limited rearing habitat and/or EDT priority protection reach -1 SPTH for LWD recruitment[3] and shade -Control sediment, nutrients, and stormwater runoff[4]	50 feet

	Lower Doan Creek – Confluence (future) to Last Chance Road	-Steelhead rearing habitat (future) -1 SPTH for LWD recruitment[3] and shade -Control sediment, nutrients, and stormwater runoff[4] -Wildlife habitat	75 feet
3b	Birch Creek (Walla Walla tributary)	-Resident fish habitat primarily -Influence on downstream listed species habitat -Control sediment, nutrients, and stormwater runoff[4]	50 feet
	W. Little Walla Walla (Walla Walla tributary		50 feet
	Mud Creek (1) (Walla Walla tributary)		50 feet
	Mudd Creek (2) (lower Dry Creek tributary)		75 feet
	Mud Creek (3) (upper Dry Creek tributary)		75 feet
	Stone Creek		50 feet
	Whetstone Creek (Touchet tributary)		50 feet
4	Bergevin Spring Branch (Dry Creek tributary) Gardena Creek (Walla Walla tributary) Grandview Spring Branch (Walla Walla tributary) Spring Valley Creek (1) (lower Dry Creek tributary) Spring Creek (2) (upper Dry Creek tributary) Warm Springs (Walla Walla tributary)	-Influence on downstream listed species habitat -Control sediment, nutrients, and stormwater runoff[4]	50 feet
5	Little Mud Creek (Pine Creek tributary)	-Influence on downstream listed species habitat -Control sediment, nutrients, and stormwater runoff[4]	50 feet
	Wilson Creek (Touchet tributary)		
6a	Mill Creek from Gose Street to Bennington Lake dam diversion	-Flood channel -No riparian vegetation allowed within the channel -Trees outside the concrete channel section with potential to shade the channel should remain	35 feet (Also 35 foot tree removal restriction for concrete channel sections)

6b	Yellowhawk Creek – Russell Creek to Mill Creek	-Summer steelhead migration, limited rearing habitat and/or EDT priority protection reach -LWD recruitment -Shade -Existing riparian average = 31ft -Meet CREP minimum -Control sediment, nutrients, and stormwater runoff[4]	50 feet
	Russell Creek – Depping Road to Yellowhawk	-Influence on downstream habitat -Existing riparian average = 21 ft -Meet CREP minimum -Control sediment, nutrients, and stormwater runoff[4]	35 feet
	Russell Creek – Headwaters to Depping Road	-Influence on downstream habitat -Existing riparian average = 32 ft -Meet CREP minimum -Control sediment, nutrients, and stormwater runoff[4]	35 feet
	Reser Creek – Wilbur Avenue to Russell Creek	-Influence on downstream habitat -Existing riparian average = 23 ft -Meet CREP minimum -Control sediment, nutrients, and stormwater runoff[4]	35 feet
	Reser Creek – Headwaters to Wilbur Avenue	-Influence on downstream habitat -Existing riparian average = 22 ft -Meet CREP minimum -Control sediment, nutrients, and stormwater runoff[4]	35 feet
	Caldwell Creek – Headwaters to Yellowhawk	-Influence on downstream habitat -Meet CREP minimum -Control sediment, nutrients, and stormwater runoff[4]	35 feet
	Stone Creek – Headwaters to Teal Street	-Influence on downstream habitat -Existing riparian average = 20 ft -Meet CREP minimum -Control sediment, nutrients, and stormwater runoff[4]	35 feet
	Doan Creek – Headwaters to Last Chance Road	-Influence on downstream habitat -Existing riparian average = 48 ft (with wetlands and CREP) -Meet CREP minimum -Control sediment, nutrients, and stormwater runoff[4]	75 feet
	Garrison Creek – Lions Park in College Place to College Place WWTP outfall	-Summer steelhead rearing opportunity -Existing riparian average = 24 ft -Meet CREP minimum -Control sediment, nutrients, and stormwater runoff[4]	35 feet

	Garrison Creek – Yellowhawk to Lions Park (excluding wetland)	-Influence on downstream habitat -Existing riparian average = 24 ft -Meet CREP minimum -Control sediment, nutrients, and stormwater runoff[4] -Wildlife habitat	35 feet
	Bryant Creek – Sprague Avenue to Fort Walla Walla park	-Influence on downstream habitat -Existing riparian average = 14 ft -Meet CREP minimum -Control sediment, nutrients, and stormwater runoff[4]	35 feet
	Titus Creek – Blackberry Lane to Mill Creek by community college	-Influence on downstream habitat -Existing riparian average = 25 ft -Meet CREP minimum -Control sediment, nutrients, and stormwater runoff[4]	35 feet
	Titus Creek – Mill Creek diversion to Blackberry Lane	-Influence on downstream habitat -Existing riparian average = 81 ft -Meet CREP minimum -Control sediment, nutrients, and stormwater runoff[4]	35 feet
	All Other Creeks within city limits/UGA – Intermittent open channels with piped sections	-Influence on downstream habitat -Meet CREP minimum -Control sediment, nutrients, and stormwater runoff[4]	35 feet

[1]In stream segments where CREP buffers are established, and are larger than the minimum buffer listed in Table 2.7-1, then CREP buffers become the minimum streamside buffer width.
[2]Buffer width is measured for the ordinary high water mark.
[3]1 SPTH = 100 ft. Based on NRCS program in Walla Walla County (personal comm. with Larry Hooker, July 2008)
[4] Source: Table 5-8 from Sheldon et al. 2005
[5]As a higher gradient stream with steeper upland slopes in many areas and in a higher precipitation area, additional performance measures are recommended to ensure sediment is controlled during and post-construction.
[A] See WWCC 18.08.015(A).

C. Anadromous Fish.

1. All activities, uses, and alterations proposed to be located in water bodies used by anadromous fish or in areas that affect such water bodies shall give special consideration to the preservation and enhancement of anadromous fish habitat, including, but not limited to, adhering to the following standards:

   a. Activities shall be timed to occur only during the allowable work window as designated by the Washington Department of Fish and Wildlife for the applicable species;

   b. An alternative alignment or location for the activity is not feasible;

   c. The activity is designed so that it will not degrade the functions or values of the fish habitat or other critical areas;

d. Shoreline erosion control measures shall be designed to use bioengineering methods or soft armoring techniques, according to an approved critical area report, and

e. Any impacts to the functions or values of the habitat conservation area are mitigated in accordance with an approved critical area report.

2. Structures that prevent the migration of salmonids shall not be allowed in the portion of water bodies currently or historically used by anadromous fish. Fish bypass facilities shall be provided that allow the upstream migration of adult fish and shall prevent fry and juveniles migrating downstream from being trapped or harmed.

3. Fills, when authorized by the [locally adopted shoreline management program], shall not adversely impact anadromous fish or their habitat or shall mitigate any unavoidable impacts and shall only be allowed for a water-dependent use.

18.08.660 Performance Standards – Subdivisions

The subdivision and short subdivision of land in fish and wildlife habitat conservation areas and associated buffers is subject to the following:

A. Land that is located wholly within a habitat conservation area or its buffer may not be subdivided.

B. Land that is located partially within a habitat conservation area or its buffer may be divided provided that the developable portion of each new lot and its access is located outside of the habitat conservation area or its buffer.

C. Access roads and utilities serving the proposed may be permitted within the habitat conservation area and associated buffers only if the County determines that no other feasible alternative exists and when consistent with this Chapter.

18.08.670 Fish and Wildlife Habitat Conservation Areas – Piped Streams

A. Building over a natural stream that is located in an underground pipe or culvert, except as allowed in Section 18.08.085 for transportation or utility crossings, is prohibited. Relocation of the piped stream system around structures is allowed. The relocated system shall be sized to convey the one hundred-year future land use condition runoff from the total upstream tributary area as determined from a hydrologic and hydraulic analysis performed in accordance with standards determined by the County.

B. No riparian buffers are required along segments of piped or culverted streams unless designated by the County for removal. Any easements or setbacks from pipes or culverts shall be consistent with adopted County regulations or design standards as administered by the County Public Works Department. Setback requirements will include an easement over the piped stream system and a building setback from the edge of the easement. The County will determine the setback requirement during the permit review process. The setback size will be dependent upon the required amount of space that would be needed for maintenance, operation and future replacement of the piped stream system.

18.08.671 Fish and Wildlife Habitat Conservation Areas – Mitigation Standards

A. Activities that adversely affect fish and wildlife habitat conservation areas and/or their buffers should generally be avoided through site design, including clustering. Unavoidable impacts to designated species or habitats shall be compensated for through habitat creation, restoration and/or enhancement to achieve no net loss of habitat functions and values in accordance with the purpose and goals of this chapter.

B. When compensatory mitigation is required, the applicant shall submit a compensatory mitigation plan with sufficient information to demonstrate that the proposed activities are logistically feasible, constructible, ecologically sustainable, and likely to succeed. In addition to the requirements of Section 18.08.115, specific information to be provided in the plan shall include, but not be limited to:

   1. General description and scaled drawings of the activities proposed including, but not limited to, clearing, grading/excavation, drainage alterations, planting, invasive plant management, installation of habitat structures, irrigation, and other site treatments associated with the development activities and proposed mitigation action(s);

   2. A description of the functions and values that the proposed mitigation area(s) shall provide, together with a description of required and an assessment of factors that may affect the success of the mitigation program; and

   3. A description of known management objectives for the species or habitat.

C. Required mitigation shall be completed as soon as possible following activities that will disturb fish and wildlife habitat conservation areas and during the appropriate season. Mitigation shall be completed prior to use or occupancy of the activity or development. Construction of mitigation projects shall be timed to reduce impacts to existing wildlife and flora.

D. The Director shall have authority to require monitoring of mitigation activities and submittal of annual monitoring reports to ensure and document that the goals and objectives of the mitigation are met. The frequency and duration of the monitoring shall be based on the specific needs of the project as determined by the Director.

18.08.672 Fish and Wildlife Habitat Conservation Areas – Wind-farm Mitigation Standards

A. No on site mitigation allowed, unless area is sufficient distance from power generation facilities to avoid impacts as demonstrated through critical areas report. Offsite habitat easements or wildlife (birds and bats) habitat replacement and/or enhancement are preferred.

B. Mortality monitoring is required during the life of the wind farm. One season every 3 years throughout the service life of the farm. Seasons should alternate between fall (1 August to 15 October) and spring migration (1 March to 5 June).

18.08.673 Fish and Wildlife Habitat Conservation Areas – Water Bodies – Buffer Averaging

The Director shall have the authority to average standard stream Buffer widths on a case-by-case basis when the applicant demonstrates to the satisfaction of the Director that all the following criteria are met.

A. Averaging to improve habitat protection may be permitted when all of the following conditions are met as demonstrated by critical area report pursuant to Sections 18.08.060, 18.08.095, and 18.08.630:

1. The water body or buffer area has significant differences in characteristics that affect its habitat functions;

2. The buffer is increased adjacent to the higher-functioning area of habitat or more sensitive portion of the water body and decreased adjacent to the lower-functioning or less sensitive portion;

3. The buffer averaging does not reduce the functions or values of the stream or riparian habitat, or the buffer averaging, in conjunction with vegetation enhancement, increases the habitat function;

4. The total area of the buffer after averaging is equal to the area required without averaging and all increases in buffer dimension for averaging are generally parallel to the wetland edge;

5. The buffer at its narrowest point is never less than seventy-five percent of the standard buffer width;

6. The slopes adjacent to the stream within the buffer area are stable and the gradient does not exceed thirty percent.

B. Averaging to allow reasonable use of a parcel may be permitted when all of the following are met as demonstrated by a critical areas report pursuant to Sections 18.08.095 and 18.08.630:

1. There are no feasible alternatives to the site design that could be accomplished without buffer averaging;

2. The buffer averaging does not reduce the functions or values of the stream or riparian habitat, or the buffer averaging, in conjunction with vegetation enhancement, increases the habitat function;

3. The total area of the buffer after averaging is equal to the area required without averaging and all increases in buffer dimension for averaging are generally parallel to the wetland edge or Ordinary High Water Mark, as applicable;

4. The buffer at its narrowest point is never less than seventy-five percent of the standard buffer width except where the Director finds that there is an existing feature such as a

roadway that limits buffer dimension, or an essential element of a proposed development such as access that must be accommodated for reasonable use and requires a smaller buffer.

C. The applicant implements all reasonable measures to reduce the adverse effects of adjacent land uses and ensure no net loss of functions and values in conjunction with a critical area mitigation plan.

18.08.674 Fish and Wildlife Habitat Conservation Areas – Water Bodies – Buffer Increase

The Director shall have the authority to increase the width of a stream buffer on a case-by-case basis when such increase is necessary to achieve any of the following:

A. Protect fish and wildlife habitat, maintain water quality, ensure adequate flow conveyance; provide adequate recruitment for large woody debris, maintain adequate stream temperatures, or maintain in-stream conditions.

B. Compensate for degraded vegetation communities or steep slopes adjacent to the stream.

C. Maintain areas for channel migration.

D. Protect adjacent or downstream areas from erosion, landslides, or other hazards.

18.08.675 Fish and Wildlife Habitat Conservation Areas – Water Bodies – Buffer Decrease

The Director shall have the authority to reduce buffer widths on a case-by-case basis, provided that the general standards for avoidance and minimization per 18.08.110A and B shall apply, and when the applicant demonstrates to the satisfaction of the Director that all of the following criteria are met:

A. The buffer reduction shall not adversely affect the habitat functions and values of the adjacent habitat conservation area or other critical area.

B. The slopes adjacent to the habitat conservation area within the buffer area are stable and the gradient does not exceed thirty percent.

C. The buffer shall not be reduced to less than seventy-five percent of the standard buffer as defined in Section 18.08.650. A 35' buffer cannot be decreased. Table 9 identifies potential buffer reductions with accompanying riparian habitat enhancement.

Table 9 Modified Buffer Widths with Approved Habitat Enhancement/Water Quality Treatment	
No Habitat Enhancement	Modified Buffer Width with Approved

	Enhancement/Treatment
100'	75'
75'	56'
50'	38'
35'	35'

D. Habitat enhancement plans prepared by a qualified professional must be provided to the County identifying existing conditions, and how the enhancement plan will improve riparian functions over existing conditions. A five year monitoring plan must be included. The plan must also address how land outside a reduced buffer would protect surface water quality. Habitat enhancement plans must be consistent with riparian native vegetation planting guides developed by the Walla Walla County Conservation District, as provided in Table 10.

References: See Walla Walla County Best Available Science document

Table 10 Walla Walla County Conservation District Suggested Native Plants by Precipitation and Riparian Zone			
County Area	**Zone #1 – Generally 0'-35'**	**Zone #2 – Generally 35'-75'**	**Zone #3 – Generally 75' and greater**
Western Walla Walla County: Wallula-Lowden.	**Black Cottonwood –** moist soils, silts, slightly alkaline soils (5'-20' from shoreline) **Water Birch –** moist soils, silts, ph neutral soils (3'-12' from shoreline) **Black Hawthorn –** moist to well drained soils, silts and gravel loess (5'- 45' from the shoreline) **Coyote Willow –** moist soils-ph neutral silts and clays (3'-15' off shoreline) **Red-osier Dogwood –** moist silts and soils, also seasonally dry sites, pH neutral to slightly alkaline soils (2'-25' off the shoreline)	**Great Basin sage –** deep well drained soils **Big Wyoming Sage –** deep well drained soils **Western juniper –** sandy, pH neutral loess, rocky soils **Green rabbit brush –** sandy well drained soils **Black Hawthorn –** moist to well drained soils, silts and gravel loess (5'- 45' from the shoreline) **Common Snowberry –** well drained, slightly acidic soils (10'-20' off the shoreline) **Choke Cherry –** moist-dry well drained soils, pH neutral to slightly acidic soils (5'- 25') **Coyote Willow –** moist soils, pH neutral to slightly alkaline soils (3'-15' off the shoreline). This plant needs space to expand from the base. **Golden Current –** well drained pH neutral to slightly alkaline soils, (10'-25' off the shoreline). This plant needs room to expand and grow at the base. Can take moderate shade. **Blue Elderberry –** well drained soils, loess and silts, seasonally moist soils pH neutral to moderately alkaline soils (10'-45' off the shoreline). This plant needs room to expand and grow at the base.	**Western Juniper –** sandy/silt-pH neutral loess, rocky soils (45'-100' from shoreline) **Choke Cherry –** moist soils, seasonally dry soils, seasonally wet **Ponderosa Pine –** well drained soils, dry sites (25'-50' from shoreline) **Great Basin sage –** deep well drained soils **Creosote Bush –** alkaline soils **Big Wyoming Sage –** deep well drained soils **Alkaline Sage –** thin alkaline soils **Hop Sage –** sandy loess well drained soils **Green rabbit brush –** sandy well drained soils **Blue elderberry –** moist soils, loose sandy soils **Gray rabbit brush –** slightly alkaline well drained soils

Table 10 Walla Walla County Conservation District Suggested Native Plants by Precipitation and Riparian Zone			
County Area	**Zone #1 – Generally 0'-35'**	**Zone #2 – Generally 35'-75'**	**Zone #3 – Generally 75' and greater**
Central Walla Walla County: Lowden-College Place-10"-15" precipitation zone	**Black Cottonwood –** moist soils, silts, slightly alkaline soils (5'-20' from shoreline) **Water Birch** – moist soils, silts, pH neutral soils (3'-12' from shoreline) **Thin-leaf Alder** – moist soils- neutral-slightly acidic silts and loess (3'- 15' off shoreline) **White Alder** – moist soils-ph neutral to slightly acidic silts, cobble (1'-15' off shoreline) **Coyote Willow** – moist soils-ph neutral silts and clays (3'-15' off shoreline) **Peach-leaf Willow** – moist soils- ph neutral-slightly alkaline (5'-25' off the shoreline) **Red-osier Dogwood –** moist-well drained soils, ph neutral to slightly alkaline (2'-25' off the shoreline) **Antelope-brush (Bitterbrush)** – well drained soils, pH neutral to slightly acidic	**Black Hawthorn** – pH neutral to slightly alkaline silts and soils (25'-40' off shoreline) **Ponderosa Pine** – well drained soils, dry sites (25'-50' from shoreline) **Mock-orange** – well drained soils, slightly acidic (15'-35' off shoreline) **Choke Cherry** – moist-dry well drained soils, pH neutral to slightly acidic soils (5'- 25' off shoreline) **Peach-leaf Willow** – moist soils, pH neutral-slightly alkaline (5'-25' off the shoreline) **Smooth Sumac** – well drained soils, silts & loess, pH neutral to slightly alkaline (25'-100' off shoreline) **Blue Elderberry** – well drained soils, pH neutral-slightly alkaline (15'-50' off the shoreline) **Buffalo Berry** – well drained soils, slightly alkaline (25'-100'+ off the shoreline) **Antelope-brush (Bitterbrush)** – well drained soils, pH neutral to slightly acidic	**Smooth Sumac** – well drained soils, silts & loess pH neutral to slightly alkaline (25'-100' off shoreline) **Buffalo Berry** – well drained soils, slightly alkaline (25'-100'+ off the shoreline) **Antelope-brush (Bitterbrush)** – well drained soils, ph neutral to slightly acidic

Table 10 Walla Walla County Conservation District Suggested Native Plants by Precipitation and Riparian Zone			
County Area	**Zone #1 – Generally 0'-35'**	**Zone #2 – Generally 35'-75'**	**Zone #3 – Generally 75' and greater**
Eastern Walla Walla County: Walla Walla to Waitsburg and east to the Coppei and Mill Creek Drainages-17"-28" precipitation zone	**Black Cottonwood –** moist soils, silts, slightly alkaline soils (5'-20' from shoreline) **Water Birch** – moist soils, silts, ph neutral soils (5'-12' from the shoreline) **Black Hawthorn** – moist to well drained soils, silts and gravel loess (5'- 45' from the shoreline) **Thin-leaf Alder** – moist soils (5'-25' off the shoreline) **Choke-cherry** – moist soils, dry well drained loess, ph neutral to slightly acidic soils (5'-35' off the shoreline). This plant needs room to expand from the base. **Bitter Cherry** – moist soils, well drained loess, slightly acidic to pH neutral soils (5'- 40' off the shoreline). This plant needs room to expand from the base. **Cascara** – moist to well drained ph neutral silts and sandy loess, can take slightly acidic soils. Shade tolerant (5'-25' off the shoreline).	**Ponderosa Pine** – Well drained silts, sandy loess, and slightly acidic soils (35'-100' from shoreline) **Douglas-Fir** – loess, sandy soils, well drained silts, slightly acidic soils (25'-50') from the shoreline **Black Hawthorn** – moist to well drained soils, silts and gravel loess (5'- 45' from the shoreline) **Thin-leaf Alder** – moist soils (5'-25' off the shoreline) **Choke-cherry** – moist soils, dry well drained loess, pH neutral to slightly acidic soils (5'-35' off the shoreline). This plant needs room to expand from the base. **Bitter Cherry** – moist soils, well drained loess, slightly acidic to pH neutral soils (5'- 40' off the shoreline). This plant needs room to expand from the base. Cascara – moist to well drained pH neutral silts and sandy loess, can take slightly acidic soils. Shade tolerant (5'-25' off the shoreline).	**Ponderosa Pine – Well drained** silts, sandy loess, and slightly acidic soils (35'-100' from shoreline) **Douglas-Fir** – loess, sandy soils, well drained silts, slightly acidic soils (25'-50' from the shoreline) **Smooth Sumac** – well drained loess, to slightly alkaline silts (12'-30' off the shoreline). This plant needs space at the base to expand as it grows.

Table 10 Walla Walla County Conservation District Suggested Native Plants by Precipitation and Riparian Zone			
County Area	**Zone #1 – Generally 0'-35'**	**Zone #2 – Generally 35'-75'**	**Zone #3 – Generally 75' and greater**
Eastern Walla Walla County: Walla Walla to Waitsburg and east to the Coppei and Mill Creek Drainages-17"-28" precipitation zone	**Pacific Willow** – moist soils, ph neutral to slightly alkaline soils (5'-12' off the shoreline). This plant needs to have room to expand at the base. **Coyote Willow** – moist soils-ph neutral to slightly alkaline soils. (3'-15' off the shoreline). This plant needs space to expand from the base. **Red-osier Dogwood** – moist silts and soils, also seasonally dry sites, ph neutral to slightly alkaline soils (2'-25' off the shoreline) **White Alder** – moist soils (3'-12' off the shoreline)	**Coyote Willow** – moist soils, pH neutral to slightly alkaline soils (3'-15' off the shoreline). This plant needs space to expand from the base. **Smooth Sumac** – well drained loess, to slightly alkaline silts (12'-30' off the shoreline). This plant needs space at the base to expand as it grows. **Red-osier Dogwood** – moist silts and soils, also seasonally dry sites, pH neutral to slightly alkaline soils (2'-25' off the shoreline) **Blue Elderberry** – well drained soils, loess and silts, seasonally moist soils, pH neutral to moderately alkaline soils (10'-45' off the shoreline). This plant needs space to grow from the base, to expand out. **Mock-orange** – well drained silts-rocky soils, seasonally moist sites (8'-20' off the shoreline). This plant will take moderate shade. It also needs space at the base to expand and grow. **Oceanspray** – well drained pH neutral soils, can grow in slightly acidic soils (10'-35' off the shoreline). This plant needs space at the base to expand and grow. **Golden Current** – well drained, pH neutral to slightly alkaline soils (10'-25' off the shoreline). This plant needs space to	

Table 10 Walla Walla County Conservation District Suggested Native Plants by Precipitation and Riparian Zone			
County Area	**Zone #1 – Generally 0'-35'**	**Zone #2 – Generally 35'-75'**	**Zone #3 – Generally 75' and greater**
		expand and grow at the base. Can take moderate shade. **Pacific Ninebark** – well drained, slightly acidic to ph neutral soils, (10'-20' off the shoreline). This plant needs space at the base to expand. **Common Snowberry** – well drained, slightly acidic soils (10'-20' off the shoreline)	

Planting Densities
Trees: 1 tree/8 feet
Shrubs: 1 plant/4 feet
Grasses: 6 pounds/acre