

(g) The City's enactment or enforcement of this Chapter shall not be construed for the benefit of any individual person or group of persons other than the general public.

(2) Authority and Applicability.

(a) The SMP Administrator is given the authority to administer and enforce the provisions of this Chapter to accomplish the stated purpose.

(b) The City shall not approve any shoreline development permit or subdivision, 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 assuring compliance with the requirements of this Chapter.

(c) The provisions of this Chapter shall apply to all lands, all land uses and development activity, and all structures and facilities in the City's shoreline jurisdiction, whether or not a development permit or other 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 City's shoreline jurisdiction. No person, company, agency, or applicant shall alter a critical area or buffer in shoreline jurisdiction except as consistent with the purposes and requirements of this Chapter.

(d) Approval of a development permit pursuant to the provisions of this Chapter does not discharge the obligation of the applicant to comply with the provisions of this Chapter.

(3) Relationship to Other Regulations.

(a) These critical area regulations shall apply as an overlay to the City's zoning code (Title 17) and other applicable regulations adopted by the City,

including but not limited to design standards, building code, and State Environmental Policy Act (SEPA) procedures.

- (b) These critical area regulations shall apply concurrently with review conducted under SEPA, as locally adopted.
 - (c) Any individual critical area adjoined by another type of critical area shall meet the requirements that provide the most protection to the critical areas involved. When any provision of this Chapter or any existing regulation, easement, covenant, or deed restriction conflicts with this Chapter, that which provides more protection to the critical areas shall apply.
 - (d) 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, HPA permits, Army Corps of Engineers Section 404 permits). The applicant is responsible for complying with these requirements, apart from the process established in this Chapter. Where applicable the SMP Administrator 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.
- (4) Appeals. Any aggrieved party may appeal final decisions of the SMP Administrator regarding critical area reports required under Subsections 16.55.350(10), 16.55.360(4), and 16.55.400(2). An appeal of such decisions shall be heard by the Hearing Examiner in accordance with the procedures set forth in Sections 16.55.120 (Administrative Authority and Responsibility), 16.55.130 (Administration), and 16.39.170 (Appeals). Each appeal filed under Subsection 16.55.350(4) shall be accompanied by a filing fee in such sum as the City Council may set by resolution.

(5) Interpretation. The SMP Administrator may, acting on his or her own initiative or in response to an inquiry, issue interpretations of any provision of this Chapter. The SMP Administrator shall base his or her interpretations on the defined or common meaning of the words of the provision and the general purpose of the provision. 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.

(6) Jurisdiction.

(a) The City shall regulate all uses, activities, and developments within, adjacent to, or likely to affect, one or more critical areas within shoreline jurisdiction, consistent with the most current, accurate, and complete scientific information available, and the provisions contained within this Chapter.

(b) Critical areas regulated by this Chapter include:

(i) Wetlands (16.55.360);

(ii) Critical aquifer recharge areas (16.55.370);

(iii) Frequently flooded areas (16.55.380);

(iv) Geologically hazardous areas (16.55.390);
and

(v) Fish and wildlife habitat conservation areas (16.55.400).

(c) All areas within the City's shoreline jurisdiction 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.

(7) Protection of Critical Areas. Any action taken pursuant to this Chapter shall result in equivalent or greater functions and values of the critical areas associated with the proposed action, as determined by the most current, accurate, and complete scientific information available. All actions and developments shall be designed and constructed in accordance with the mitigation sequencing requirements in Subsection 16.55.250(2)(d) to avoid, minimize and restore all adverse impacts. Applicants must first demonstrate an inability to avoid or reduce impacts before restoration and compensation of impacts will be allowed. No activity or use shall be allowed that results in a net loss of the functions or values of critical areas.

(8) Allowed Activities.

(a) Process. The SMP Administrator shall allow activities that are verified to comply with this Chapter, provided the appropriate Shoreline Permit or Letter/Statement of Exemption is obtained, if required. Documentation of allowed activities shall be maintained on file at the department.

(b) Allowed Activities Shall Avoid Impacts to Critical Areas. All allowed activities shall use reasonable methods to avoid potential impacts to critical areas, using best management practices that result in the least amount of impact to the critical areas where practicable. Designation as an allowed activity does not give permission to degrade a critical area or ignore risk from natural hazards. Best management practices shall be used for tree and vegetation protection, construction management, erosion and sedimentation control, water quality protection, and regulation of chemical applications. The City shall observe the use of best management practices to ensure that the activity does not result in degradation to the critical area. Any incidental damage to, or alteration of, a

critical area that is not a necessary outcome of the exempted activity shall be restored, rehabilitated, or replaced at the responsible party's expense.

(c) The following activities shall be allowed in critical areas and their buffers without a critical areas report, provided they are otherwise consistent with applicable local, state, and federal laws; they are conducted using best management practices and at a time and in a manner designed to minimize adverse impacts to the critical area. If a proposed or unauthorized activity does not meet the qualifications specified for that activity in this Subsection, it shall be addressed through the general regulations set forth in Subsection 16.55.350(9) or the enforcement provisions set forth in Section 16.55.140, as applicable. Allowed activities are as follows:

(i) Emergencies. Emergency activities are those activities necessary to prevent an immediate threat to public health, safety, or welfare, or those that pose an immediate risk of damage to private property and that require remedial or preventative action in a time frame too short to allow for compliance with the requirements of this Chapter. Emergency actions in shoreline jurisdiction that create an impact to a critical area or its buffer shall use reasonable methods to address the emergency; in addition, they must have the least possible impact to the critical area or its buffer. The person or agency undertaking such action shall notify the SMP Administrator within one working day following commencement of the emergency activity. Within 30 days, the SMP Administrator shall determine if the action taken was within the scope of the emergency actions allowed in this Paragraph. If the SMP Administrator determines that the action

taken, or any part of the action taken, was beyond the scope of an allowed emergency action, then provisions of Section 16.55.140 (Enforcement, Violations and Penalties) and 16.55.350(17) (Unauthorized Critical Area Alterations and Enforcement) shall apply. After the emergency, the person or agency undertaking the action shall fully restore and/or mitigate any impacts to the critical area and buffers resulting from the emergency action in accordance with the critical area report and mitigation plan. The person or agency undertaking the action shall apply for review, and the critical area report and mitigation plan shall be reviewed by the SMP Administrator in accordance with the review procedures contained herein. Restoration and/or mitigation activities must be initiated within one year of the date of the emergency, and completed in a timely manner;

- (ii) Operation, Maintenance or Repair. Operation, normal and routine maintenance or repair of existing structures, infrastructure improvements, utilities, public or private roads, dikes, levees or drainage systems that do not require a development permit, if the activity does not further alter or increase the impact to, or encroach further within, the critical area or buffer and there is no increased risk to life or property as a result of the proposed operation, maintenance, or repair;
- (iii) Passive Outdoor Activities. Recreation, education, and scientific research activities that do not degrade the critical area, including fishing, hiking, and bird watching;
- (iv) Permit Requests Subsequent to Previous Critical Area Review. Development permits

that involve both discretionary land use approvals (such as subdivisions, rezones, or conditional use permits), and construction approvals (such as building permits) if all of the following conditions have been met:

- (aa) the provisions of this Chapter have been previously addressed as part of another approval;
 - (bb) there have been no material changes in the potential impact to the critical area or buffer since the prior review;
 - (cc) there is no new information available that is applicable to any critical area review of the site or particular critical area;
 - (dd) the permit or approval has not expired or, if no expiration date, no more than five years has elapsed since the issuance of that permit of approval; and
 - (ee) compliance with any standards or conditions placed upon the prior permit or approval has been achieved or secured;
- (v) Modification to Existing Structures. Structural modification of, addition to, or replacement of an existing legally constructed structure that does not further alter or increase the impact to the critical area or buffer and there is no increased risk to life or property as a result of the proposed modification or replacement, provided that restoration of structures substantially damaged by fire, flood, or act of nature must be initiated within one year of the date of such damage, as evidenced by the issuance of a valid building permit, and diligently pursued to completion;

- (vi) Activities within the Improved Right-of Way. Replacement, modification, installation, or construction of utility facilities, lines, pipes, mains, equipment, or appurtenances, not including substations, when such facilities are located within the improved portion of the public right-of-way or a City authorized private roadway, except those activities that alter a wetland or watercourse (such as culverts or bridges) or result in the transport of sediment or increased stormwater;
- (vii) Planting of Vegetation. Planting of vegetation within a critical area or its buffer, provided a landscaping plan for this activity has been approved by the City;
- (viii) Conservation Activities. Conservation, restoration, or preservation of soil, water, vegetation, fish, and other wildlife that does not entail changing the structure or functions of the existing critical area;
- (ix) Pedestrian/Bicycle Trails. Pedestrian/bicycle trails that are located in buffer areas but not within wetlands or habitat conservation areas, where the trail surface meets all other requirements including water quality standards set forth in the City's Design Standards;
- (x) Select Vegetation Removal Activities. Select vegetation removal activities are allowed. Accepted vegetation removal activities include: a) removing and controlling invasive or noxious weeds; b) harvesting 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 critical area by changing existing topography, water conditions, or water sources; c) removing trees that are

hazardous, posing a threat to public safety, or posing an imminent risk of damage to private property; or d) removing vegetation to control a fire or halt the spread of disease or damaging insects consistent with the State Forest Practices Act (Chapter 76.09 RCW). Unless otherwise provided or as a necessary part of an approved alteration, removal of any vegetation or woody debris from a habitat conservation area or wetland shall be prohibited;

(xi) Chemical Applications. The application of herbicides, pesticides, organic or mineral-derived fertilizers, or other hazardous substances, if necessary, provided that their use shall be conducted in accordance with applicable state and federal law;

(xii) Minor Site Investigative Work. Work necessary for land use submittals, such as surveys, soil logs, percolation tests, and other related activities, where such activities do not require construction of new roads or significant amounts of excavation. In every case, impacts to the critical area shall be minimized and disturbed areas shall be immediately restored; and

(xiii) Boundary Markers. Installation or modification of boundary markers.

(9) General Regulations. Shoreline permits or shoreline exemptions, and any other City-required permits, for activities within critical areas in shoreline jurisdiction, shall be subject to review under provisions of this Chapter.

(a) As part of this review, the City shall:

(i) Verify the information submitted by the applicant;

- (ii) Evaluate the project area and vicinity for critical areas;
 - (iii) For wetlands or habitat conservation areas, require that their boundaries be verified by a qualified professional, and require that a map of such boundaries be submitted to the SMP Administrator as part of the application for the applicable development permit if the project is within 200 feet of a wetland or habitat conservation area for which the boundaries have not been certified and depicted on the City critical area maps; and
 - (iv) Determine whether the proposed project is likely to impact the functions or values of critical areas.
- (b) If the SMP Administrator determines that the proposed project is likely to impact a critical area, the SMP Administrator shall:
- (i) Notify the applicant that a critical area report must be submitted prior to further review of the project, and indicate each of the critical area types that should be addressed;
 - (ii) Require a critical area report from the applicant that has been prepared by a qualified professional;
 - (iii) Review and evaluate the critical area report to determine whether the development proposal conforms to the purposes and standards of this Chapter;
 - (iv) Assess potential impacts to the critical area and determine if they are necessary and unavoidable;
 - (v) Determine if any mitigation proposed by the applicant is sufficient to protect the functions and values of the critical area and public health, safety, and welfare

concerns consistent with the purpose, intent, and requirements of this Chapter; and

- (vi) Prepare a written summary of the analysis and findings demanded within this Subsection prior to the City's decision on the applicable development permit. This summary may take the form of a letter to the applicant. Critical area review findings may result in: a) no adverse impacts to critical areas, b) a list of critical areas protection conditions for the applicable development permit, or c) denial of the applicable development permit based upon unavoidable impacts to critical areas functions and values.

(10) Critical Area Report Requirements.

- (a) For those projects determined by the SMP Administrator or designee likely to have an impact to the critical areas, the applicant shall submit a critical areas report identifying the precise limits of the critical area and its function and resource value as part of the application. The study report shall be prepared by experts with demonstrated qualifications in the area of concern and shall apply the most current, accurate, and complete scientific and technical information available as part of its analysis.
- (b) At a minimum, the critical area report shall contain the following:
 - (i) The name and contact information of the applicant, a description of the proposal, and identification of the development permit(s) requested;
 - (ii) A copy of the site plan for the development proposal showing:

- (aa) Identified critical areas, buffers, and the development proposal with dimensions;
- (bb) Limits of any areas to be cleared; and
- (cc) A proposed stormwater management plan for the development consistent with the current edition of the City's Design Standards;
- (iii) The names and professional qualifications of the persons preparing the critical area report and documentation of any fieldwork performed on the site;
- (iv) Identification and characterization of all critical areas, wetlands, water bodies, and buffers adjacent to the proposed project area;
- (v) A statement specifying the accuracy of the report, and all assumptions made and relied upon;
- (vi) An assessment of the probable cumulative impacts to critical areas resulting from development of the site and the proposed development;
- (vii) A description of reasonable efforts made to apply mitigation sequencing pursuant to Subsection 16.55.250(2)(d) to avoid, minimize, or mitigate impacts to critical areas;
- (viii) Plans for adequate mitigation, as needed, to offset any impacts, in accordance with Subsections 16.55.350(11) through 16.55.350(13);
- (ix) A discussion of the standards applicable to the critical area and proposed activity; and
- (x) Financial guarantees to ensure compliance, if applicable.

- (c) Additional Information. Additional information is required for critical area reports related to wetlands and habitat conservation areas pursuant to applicable wetlands standards (Section 16.55.360) and habitat conservation area standards (Section 16.55.400).
- (d) Limitations to Study Area. The SMP Administrator may limit the required geographic area of the critical area report as appropriate if:
 - (i) The applicant, with assistance from the City, cannot obtain permission to access properties adjacent to the project area; or
 - (ii) The proposed activity will affect only a limited part of the subject site.
- (e) Modifications to Required Contents. The applicant may consult with the SMP Administrator prior to or during preparation of the critical area report to obtain concurrence on modifications to the required contents of the critical area 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.
- (f) Reports Previously Prepared. A critical area 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 by the SMP Administrator.

(11) Mitigation Requirements.

- (a) The applicant shall avoid all 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 adverse impacts to or from critical areas and buffers resulting from a development proposal or alteration shall be

mitigated in accordance with the 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) Except as otherwise allowed by this Chapter, mitigation shall not be implemented until: a) the SMP Administrator has approved a critical area report that includes a mitigation plan, and b) the City has approved the applicable development permit.

(12) 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 as specified in Subsection 16.55.250(2)(d).

(13) Mitigation Plan Requirements. When mitigation is required, the applicant shall submit to the SMP Administrator a mitigation plan as part of the critical area report. The mitigation plan shall include:

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

(i) 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; the goals and

objectives shall be related to the functions and values of the impacted critical area;

- (ii) A review of the most current, accurate, and complete scientific and technical information available supporting the proposed mitigation and a description of the critical area report author's experience to date in restoring or creating the type of critical area proposed; and
 - (iii) An analysis of the likelihood of success of the compensation project.
- (b) Performance Standards. The mitigation plan shall establish performance standards to meet the environmental goals and objectives required in this Section.
- (c) Detailed Construction Plans. The mitigation plan shall include written specifications and descriptions of the mitigation proposed, such as:
- (i) The proposed construction sequence, timing, and duration;
 - (ii) Grading and excavation details;
 - (iii) Erosion and sediment control features;
 - (iv) A vegetation planting plan specifying plant species, quantities, locations, size, spacing, and density; and
 - (v) 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/or other drawings appropriate to show construction techniques or anticipated final outcomes.

- (d) Monitoring Program. The mitigation plan shall include a program for monitoring construction of the compensation project, and for assessing a

completed project. The plan shall provide for the preparation of a compliance report by a qualified professional indicating that the mitigation measures proposed in the mitigation plan have been effected. A protocol shall also be included outlining the schedule for site monitoring in years 1, 3, and 5 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.

- (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 standard 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 Subsection 16.55.350(18).

(14) Innovative Mitigation.

- (a) The City may encourage and facilitate innovative mitigation projects. Advance mitigation or mitigation banking are examples of alternative mitigation projects allowed under the provisions of this Section where one or more applicants, or an organization with demonstrated capability, may undertake a mitigation project together if it is demonstrated that all of the following circumstances exist:
 - (i) Creation or enhancement of a larger system of critical areas and open space is

preferable to the preservation of many individual habitat areas;

(ii) The group demonstrates the organizational and fiscal capability to act cooperatively;

(iii) The group demonstrates that long-term management of the habitat area will be provided; and

(iv) There is a clear potential for success of the proposed mitigation at the identified mitigation site.

(b) Conducting mitigation as part of a cooperative process does not reduce or eliminate the required replacement ratios.

(c) Innovative mitigation projects as described in this Section may, at the discretion of the SMP Administrator, be exempted from the timing requirements set forth in Subsection 16.55.350(11)(c).

(15) Critical Area Markers and Signs. The critical area or buffer shall be identified with temporary signs prior to any site alteration. Such temporary signs may be replaced with permanent signs, as determined appropriate by the SMP Administrator. The Administrator may also require that fencing be installed or native vegetation be planted or retained at a site to delineate and protect critical areas and/or their buffers.

(16) Building Setbacks. Unless otherwise provided by means of an approved critical area report or the provisions of this Chapter, buildings and other structures shall be set back a minimum of 15 feet from the edges of all critical area buffers or from the edges of all critical areas, if no buffers are required. The following may be allowed in the building setback area:

(a) Landscaping;

(b) Uncovered decks;

- (c) Building overhangs if such overhangs do not extend more than two feet into the setback area; and
 - (d) Impervious ground surfaces, such as driveways, parking areas, and patios, provided that such improvements are constructed in accordance with the City's Design Standards.
- (17) Unauthorized Critical Area Alterations and Enforcement.

- (a) Unauthorized Alteration. When a critical area or its buffer has been altered in violation of this Chapter, the City 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 SMP Administrator, mitigation measures at the owner's or other responsible party's expense to compensate for violation of provisions of this Chapter and other applicable Pullman City Code provisions governing the applicable development permit.
- (b) Restoration/Mitigation Plan Required. All development work shall remain stopped until a restoration/mitigation plan is prepared and approved by the SMP Administrator. Such a plan shall be prepared by a qualified professional and shall describe how the actions proposed meet the minimum standards described in Subsection 16.55.350(17)(c) and/or mitigation requirements outlined in Subsections 16.55.350(11) through 16.55.350(13), if mitigation is determined to be appropriate by the SMP Administrator. The Administrator 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 Standards for Restoration or Mitigation.

- (i) For alterations to critical aquifer recharge areas, frequently flooded areas, wetlands, and habitat conservation areas, the following minimum 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 SMP Administrator:
 - (aa) The historic structural and functional values shall be restored, including water quality and habitat functions;
 - (bb) The historic soil types and configuration shall be replicated;
 - (cc) 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
 - (dd) The historic functions and values should be replicated at the location of the alteration.
- (ii) For alterations to flood and geological hazards, the following minimum 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:
 - (aa) The hazard shall be reduced to a level equal to, or less than, the pre-development hazard;
 - (bb) Any risk of personal injury resulting from the alteration shall be eliminated or minimized; and

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

(d) Penalties. Any violation or failure to comply with any of the provisions of this Chapter, or any amendment thereto, shall be a civil infraction and shall be subject to a fine in an amount not to exceed \$500.00 for each violation. Each day in which a violation continues shall be deemed a separate offense. Any 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. Daily fines shall not be levied until after a violator has received a written notice of the violation and shall not be levied while a written notice of violation is under appeal through the applicable appeal process.

(18) Financial Guarantees to Ensure Mitigation and Maintenance

- (a) Mitigation required pursuant to a development proposal should be completed prior to final project approval. When the SMP Administrator determines it is not feasible for required mitigation to be completed prior to final project approval, the SMP Administrator shall require the applicant to post a financial guarantee in a form and amount deemed acceptable by the SMP Administrator. Acceptable financial guarantees include, but are not limited to, cash, bond, promissory note, or letter of credit.
- (b) Once mitigation measures have been completed, the SMP Administrator may require a financial guarantee for maintenance of said mitigation measures.
- (c) The financial guarantee shall be in the amount of one hundred twenty-five percent (125%) of the estimated cost of the improvements or the estimated cost of restoring the functions and

values of the critical area that are at risk, whichever is greater.

- (d) The financial guarantee shall remain in effect until the SMP Administrator determines, in writing, that the standards bonded for have been met. Financial guarantees for maintenance shall be held by the City 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 financial guarantee 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 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 30 days after it is due or the failure to comply with other provisions of a mitigation plan may be deemed by the SMP Administrator to constitute a default, and the SMP Administrator may demand payment of any financial guarantees or require other action authorized by the Pullman City Code or any other law.
 - (h) Any funds recovered pursuant to this Section shall be used to complete the required mitigation.
- (19) Critical Area Inspections. Reasonable access to the site shall be provided to the City, state, and federal agency review staff for the purposes of inspections during any proposal review, restoration, emergency

action, or monitoring period. Additionally, the City or its agent shall have reasonable access to the site for completing necessary remediation work in the event of noncompliance. Failure to provide access shall be deemed a violation and shall be subject to the penalties set forth in Subsection 16.55.350(17)(d).

Section 37: There is hereby added a new section 16.55.360 to the Pullman City Code that reads as follows:

16.55.360 Wetlands.

(1) Delineation. Identification of wetlands and delineation of their boundaries pursuant to this Chapter shall be determined by a qualified professional in accordance with the most current approved federal wetland delineation manual and applicable regional supplements. All areas within the City's shoreline jurisdiction meeting the wetland designation criteria in that procedure are hereby designated critical areas and are subject to the provisions of this Section, regardless of any formal identification.

(2) Rating.

(a) Wetlands shall be rated according to the Washington State Department of Ecology wetland rating system found in the Washington State Wetland Rating System for Eastern Washington (Ecology Publication #14-06-030, or as amended and approved by Ecology). This document contains definitions and methods for determining if the general criteria below are met.

(i) Category I wetlands are: 1) alkali wetlands; 2) wetlands with high conservation value that are identified by scientists of the Washington Natural Heritage Program/DNR; 3) bogs and calcareous fens; 4) mature and old-growth forested wetlands over one-quarter acre with slow-growing trees; 5) forests with stands of aspen; and 6) wetlands that perform many functions very well (scores between 22-27 points). These wetlands are

those that 1) present 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; or 4) provide a high level of function.

(ii) Category II wetlands are: 1) forested wetlands in the floodplains of rivers; 2) mature and old-growth forested wetlands over one-quarter acre with fast-growing trees; 3) vernal pools; and 4) wetlands that perform functions well (scores between 19-21 points). These wetlands are difficult, though not impossible, to replace, and provide high levels of some functions. These wetlands occur more commonly than Category I wetlands, but still need a relatively high level of protection.

(iii) Category III wetlands are wetlands with a moderate level of functions (scores between 16-18 points). Wetlands scoring between 16-18 points generally have been disturbed in some ways and are often less diverse or more isolated from other natural resources in the landscape than Category II wetlands.

(iv) Category IV wetlands have the lowest level of functions (scores fewer than 16 points) and are often heavily disturbed. These are wetlands should be able to be replaced, and in some cases be able to be improved. However, experience has shown that replacement cannot be guaranteed in any specific case. These wetlands may provide some important functions and also need to be protected.

(b) Date of Wetland Rating. Wetland rating categories shall be applied as the wetland exists on the date of adoption of the rating system by the local government, as the wetland naturally

changes thereafter, or as the wetland changes in accordance with permitted activities. Wetland rating categories shall not change due to illegal modifications.

(3) Mapping. The approximate location and extent of known wetlands are shown on the pertinent City critical area map. National Wetland Inventory Maps and the City critical area map regarding wetlands are to be used as a guide for the City, project applicants, and property owners, and will be periodically updated as new information becomes available. These maps are a reference and do not provide a final critical area designation. The exact location of a wetland's boundary shall be determined through the performance of a field investigation by a qualified professional applying delineation methods described in Subsection 16.55.360(1). Wetland boundaries shall be clearly demarcated with non-degradable survey flagging labeled "WETLAND BOUNDARY" or "WETLAND DELINEATION." Flagging shall be attached to existing vegetation or stakes at a maximum interval of 50 linear feet. Individual flags should be labeled with a wetland identifier and consecutive numbers (e.g., A-1 through A-8).

(4) Critical Area Report- Additional Requirements.

(a) Areas Addressed in Report. The following areas shall be addressed in a critical area report for wetlands:

(i) The project area of the proposed activity;

(ii) All wetlands and recommended buffers within 200 feet of the project area; and

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

(b) Wetland Analysis. In addition to the minimum required contents of critical area reports in Subsection 16.55.350(10), a critical area report for wetlands shall contain an analysis of the

wetlands including the following site- and proposal-related information at a minimum:

- (i) A written assessment and accompanying maps of the wetlands and buffers within 200 feet of the project area, including the following information at a minimum:
 - (aa) Wetland delineation and required buffers;
 - (bb) Existing wetland acreage;
 - (cc) Wetland category; vegetative, faunal, and hydrologic characteristics; and
 - (dd) Soil substrate conditions
- (ii) 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.
- (iii) Proposed mitigation, if needed, including a written assessment and accompanying maps of the mitigation area, including the following information at a minimum:
 - (aa) Existing wetland acreage and proposed impact area;
 - (bb) Vegetative, faunal, and hydrologic conditions;
 - (cc) Relationship within watershed and to existing waterbodies;
 - (dd) Soil and substrate conditions, topographic elevations;
 - (ee) Existing and proposed adjacent site conditions;
 - (ff) Proposed wetland buffers;
 - (gg) Property ownership; and

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

(c) Additional Information. When appropriate, the SMP Administrator 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.

(5) General Requirements.

(a) Activities in Wetland Areas. A proposed activity may only be permitted in a wetland or wetland buffer if the applicant can show that the activity, including associated mitigation measures, will not degrade the functions and values of the wetland and other critical areas.

(b) Wetland Buffers. Unless otherwise provided for in this Chapter, wetland buffers are required.

(i) Standard Buffer Widths. The standard buffer widths presume the existence of a relatively intact native vegetation community in the buffer zone adequate to protect the wetland functions and values at the time of the proposed activity. If the vegetation is inadequate then the buffer width shall be increased or the buffer should be planted to maintain the standard width.

(ii) Required standard wetland buffers, based on wetland category and land use intensity, are as follows:

Table 16.55.360-1. Standard Wetland Buffers

Category of Wetland	Land Use with Low Impact*	Land Use with Moderate Impact*	Land Use with High Impact*
IV	25 ft.	40 ft.	50 ft.
III	75 ft.	110 ft.	150 ft.
II	100 ft.	150 ft.	200 ft.
I	125 ft.	190 ft.	250 ft.

***Table 16.55.360-2. 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
High	<ul style="list-style-type: none"> • Commercial • Urban • Industrial • Institutional • Retail sales • Residential (more than 1 unit/acre) • Conversion to high-intensity agriculture (dairies, nurseries, greenhouses, growing and harvesting crops requiring annual tilling and raising and maintaining animals, etc.) • High-intensity recreation (golf courses, ball fields, etc.) • Hobby farms
Moderate	<ul style="list-style-type: none"> • Residential (1 unit/acre or less) • Moderate-intensity open space (parks with biking, jogging, etc.) • Conversion to moderate-intensity agriculture (orchards, hay fields, etc.) • Paved trails • Building of logging roads • Utility corridor or right-of-way shared by several utilities and including access/maintenance road
Low	<ul style="list-style-type: none"> • Forestry (cutting of trees only) • Low-intensity open space (hiking, bird-watching, preservation of natural resources, etc.) • Unpaved trails • Utility corridor without a maintenance road and little or no vegetation management.

(c) 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.

(d) Increased Wetland Buffer Width. The SMP Administrator may require increased buffer width in accordance with the critical area report and the most current, accurate, and complete scientific and technical information available on a case-by-case basis when a larger buffer is necessary to protect wetland functions and values based on site-specific characteristics. This determination shall be based on one or more of the following criteria:

(i) A larger buffer is needed to protect other critical areas;

- (ii) The buffer or adjacent uplands has an overall slope steeper than fifteen percent (15%) or is susceptible to erosion;
- (iii) And standard erosion control measures will not prevent adverse impacts to the wetland; or
- (iv) The buffer area has minimal vegetative cover, although implementation of a buffer planting plan may substitute for increasing the buffer width.

In no case shall wetland buffers be increased to a width two times that of the standard required buffer.

- (e) Wetland Buffer Width Averaging. The SMP Administrator may allow modification of the standard wetland buffer width in accordance with the critical area report and the most current, accurate, and complete scientific and technical information available on a case-by-case basis by averaging buffer widths. Averaging of buffer widths may only be allowed where a qualified wetlands professional demonstrates that:

- (i) It will not reduce wetland functions or values;
- (ii) The wetland contains variations in sensitivity due to existing physical characteristics or the character of the buffer varies in slope, soils, or vegetation, and the wetland would benefit from a wider buffer in places and would not be adversely impacted by a narrower buffer in other places;
- (iii) The total area contained in the buffer area after averaging is no less than that which would be contained within the standard buffer; and

- (iv) The buffer at its narrowest point is never less than either seventy-five percent (75%) of the required width or 75 feet for Category I and II, 50 feet for Category III and 25 feet for Category IV, whichever is greater.
- (f) Buffers for Mitigation Shall be Consistent. All mitigation sites shall have buffers consistent with the buffer requirements of this Chapter.
- (g) Buffer Conditions Shall be Maintained. Except as otherwise specified or allowed in accordance with this Chapter, wetland buffers shall be retained in their natural condition.
- (h) Functionally Isolated Buffer Areas. Areas that are functionally separated from a wetland and do not provide protection to the wetland from potential adverse impacts due to preexisting roads, facilities, or vertical separation, shall be excluded from buffers otherwise required by this chapter.
- (i) Allowed Buffer Uses. In addition to those uses identified in Subsection 16.55.350(8)(c), the following uses may be allowed within a wetland buffer in accordance with the review procedures of this Chapter, provided they are not prohibited by any other applicable law and they are conducted in a manner so as to minimize impacts to the buffer and adjacent wetland:
 - (i) Passive recreation facilities. Passive recreation facilities designed and in accordance with an approved critical area report, including:
 - (aa) Walkways and trails, provided that those pathways are limited to minor crossings having no adverse impact on water quality. They should be generally parallel to the perimeter of the wetland, located only in the outer twenty-five percent (25%) of the

wetland buffer area, and located to avoid removal of significant trees. They should be limited to pervious surfaces no more than five (5) feet in width for pedestrian use only. Raised boardwalks utilizing non-treated pilings may be acceptable.

(bb) Wildlife-viewing structures.

- (ii) Drilling for utilities/utility corridors under a buffer, with entrance/exit portals located completely outside of the wetland buffer boundary, provided that the drilling does not 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.
- (iii) Enhancement of a wetland buffer through the removal of non-native invasive plant species. Removal of invasive plant species shall be restricted to hand removal. All removed plant material shall be taken away from the site and appropriately disposed of. Plants that appear on the Washington State Noxious Weed Control Board list of noxious weeds must be handled and disposed of according to a noxious weed control plan appropriate to that species. Revegetation with appropriate native species at natural densities is allowed in conjunction with removal of invasive plant species.
- (iv) Stormwater management facilities. Stormwater management facilities are limited to stormwater dispersion outfalls and bioswales. They may be allowed within the outer twenty-five percent (25%) of the

buffer of Category III or IV wetlands only, provided that:

- (aa) No other location is feasible; and
 - (bb) The location of such facilities will not degrade the functions or values of the wetland; and
 - (cc) Stormwater management facilities are not allowed in buffers of Category I or II wetlands.
- (v) Non-Conforming Uses. Repair and maintenance of non-conforming uses or structures, where legally established within the buffer, provided they do not increase the degree of nonconformity.
- (j) Subdivisions. The subdivision and short subdivision of land in wetlands and associated buffers is subject to the following:
- (i) Land that is located wholly within a wetland or its buffer may not be subdivided.
 - (ii) 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:
 - (aa) Is located outside of the wetland and its buffer; and
 - (bb) Meets the minimum lot size requirements of the City zoning code (Title 17).
 - (iii) Access roads and utilities serving a proposed subdivision or other property may be permitted within the wetland and associated buffers only if the SMP Administrator determines that no other feasible alternative exists and these facilities are otherwise established consistent with the provisions of this Chapter.

(k) Signs and Fencing of Wetlands.

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

(ii) Permanent Signs. As a condition of any development permit, the SMP Administrator may require the applicant to install permanent signs along the boundary of a wetland and/or buffer. If required, 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 50 linear feet, whichever yields the greater amount of signs, and must be maintained by the property owner in perpetuity. The sign shall be worded as follows or with alternative language approved by the SMP Administrator:

*"Protected Wetland Area Do Not Disturb
Contact City of Pullman Regarding Uses and
Restrictions"*

(iii) Fencing.

(aa) As a condition of any development permit, the SMP Administrator may require the applicant to install a permanent fence at the edge of the wetland buffer, when fencing will prevent future impacts to the wetland.

(bb) The applicant shall be required to install a permanent fence around the

wetland or buffer when domestic grazing animals are present or may be introduced on site.

(cc) Fencing installed as part of a proposed activity or as required in this Paragraph 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.

(dd) At no time shall treated wood posts (e.g., creosote) be allowed in wetland areas or in adjacent uplands to prevent chemicals from migrating into the wetland.

(6) Compensatory Mitigation.

(a) Projects that propose compensation for wetland acreage and/or functions are subject to State and Federal regulations. Compensatory mitigation for alterations to wetlands shall provide for no net loss of wetland functions and values. Compensatory mitigation for alterations to wetlands shall be used only for impacts that cannot be avoided or minimized and shall achieve equivalent or greater biologic functions. Compensatory mitigation plans shall be consistent with the mitigation plan requirements of 16.55.350(13); Wetland Mitigation in Washington State - Part 2: Developing Mitigation Plans--Version 1, (Ecology Publication #06-06-011b, Olympia, WA, March 2006 or as amended); and Selecting Wetland Mitigation Sites Using a Watershed Approach (Eastern Washington) (Publication #10-06-07, November 2010).

(b) Mitigation for Lost Functions and Values. Mitigation actions shall address functions affected by the alteration to achieve functional equivalency or improvement, and shall provide

similar wetland functions as those lost except when:

- (i) The lost wetland provides minimal functions as determined by a site-specific function assessment and the proposed mitigation action(s) will provide equal or greater functions or will provide functions shown to be limiting within a watershed through a formal watershed assessment protocol; or
 - (ii) Out-of-kind replacement will best meet formally identified regional goals, such as replacement of historically diminished wetland types.
- (c) Preference of Mitigation Actions. Mitigation actions that require compensation by replacing, enhancing, or substitution, shall occur in the following order of preference:
- (i) Restoring wetlands on upland sites that were formerly wetlands;
 - (ii) Creating wetlands on disturbed upland sites such as those with vegetative cover consisting primarily of exotic introduced species;
 - (iii) Enhancing significantly degraded wetlands;
 - (iv) Preserving high-quality wetlands that are under imminent threat.
- (d) Location of Mitigation.
- (i) Mitigation actions shall be conducted on the same site as the alteration except when the following apply:
 - (aa) There are no reasonable on-site opportunities or on-site opportunities do not have a high likelihood of success due to development pressures, adjacent land uses, or on-site buffers or connectivity are inadequate;

- (bb) Off-site mitigation has a greater likelihood of providing equal or improved wetland functions than the impacted wetland.
- (ii) If the SMP Administrator authorizes off-site mitigation, the location of this mitigation shall be in the same drainage basin and the same Water Resource Inventory Area (WRIA) as the site of the alteration unless:
- (aa) Established regional or watershed goals for water quality, flood or conveyance, habitat, or other wetland functions have been established and strongly justify location of mitigation at another site; or
- (bb) Credits from a state certified wetland mitigation bank are used as mitigation and the use of these credits justifies location of mitigation at another site.
- (iii) Off-site locations for mitigation should be within the City limits if feasible opportunities for appropriate mitigation are available.
- (e) Mitigation Ratios.
- (i) Wetland mitigation ratios shall be consistent with Table 16.55.360-3.

Table 16.55.360-3. Wetland Mitigation Ratios

Category and Type of Wetland	Creation or Re-establishment	Rehabilitation	Enhancement
Category I: Bog, Wetlands with High Conservation Value	Not considered possible	Case by case	Case by case
Category I: Forested	6:1	12:1	24:1
Category I: Based on functions	4:1	8:1	16:1
Category II	3:1	6:1	12:1
Category III	2:1	4:1	8:1
Category IV	1.5:1	3:1	6:1

- (ii) To more fully protect functions and values, and as an alternative to the mitigation ratios in Table 16.55.360-3, the SMP

Administrator may allow mitigation based on the "credit/debit" method developed by the Department of Ecology in "Calculating Credits and Debits for Compensatory Mitigation in Wetlands of Eastern Washington: Final Report" (Ecology Publication #11-06-015, August 2012, or as amended).

- (iii) Impacts to wetland buffers shall be mitigated at a 1:1 ratio. Compensatory buffer mitigation shall replace those buffer functions lost from development.
- (f) Wetland Mitigation Banks.
- (i) Credits from a wetland mitigation bank may be approved for uses as compensation for unavoidable impacts to wetlands when:
 - (aa) The bank is certified through applicable provisions administered by the Department of Ecology and the Army Corps of Engineers;
 - (bb) The SMP Administrator determines that the wetland mitigation bank provides appropriate compensation for the authorized impacts; and
 - (cc) The proposed use of credits is consistent with the terms and conditions of the bank's certification.
 - (ii) Replacement ratios for projects using bank credits shall be consistent with replacement ratios specified in the bank's certification.
 - (iii) 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 WRIA for specific wetland functions.

- (g) Advance Mitigation. Mitigation for projects with pre-identified impacts to wetlands may be constructed in advance of the impacts if the mitigation is implemented according to federal rules, State policy on advance mitigation, and State water quality regulations.
- (h) Monitoring. Mitigation monitoring shall be required for a period necessary to establish that performance standards have been met, but not for a period less than five years. If a scrub-shrub or forested vegetation community is proposed, monitoring may be required for ten years or more. The project mitigation plan shall include monitoring elements that ensure certainty of success for the project's natural resource values and functions. If the mitigation goals are not obtained within the initial five-year period, the applicant remains responsible for restoration of the natural resource values and functions until the mitigation goals agreed to in the mitigation plan are achieved.
- (i) Wetland Preservation as Mitigation. Preservation of high-quality, at-risk wetlands as compensation is generally acceptable when done in combination with restoration, creation, or enhancement, provided that a minimum of 1:1 acreage replacement is provided by re-establishment or creation. Ratios for preservation in combination with other forms of mitigation generally range from 10:1 to 20:1, as determined on a case-by-case basis, depending on the quality of the wetlands being altered and the quality of the wetlands being preserved.

Preservation of high-quality, at-risk wetlands and habitat may be considered as the sole means of compensation for wetland impacts when the following criteria are met:

- (i) The area proposed for preservation is of high quality. The following features may be indicative of high-quality sites:
- (aa) Category I or II wetland rating (using the wetland rating system for eastern Washington).
 - (bb) Rare wetland type (for example, bogs, mature forested wetlands, estuarine wetlands).
 - (cc) The presence of habitat for priority or locally important wildlife species.
 - (dd) Priority sites in an adopted watershed plan.
- (ii) Wetland impacts will not have a significant adverse impact on habitat for listed fish, or other ESA-listed species.
- (iii) There is no net loss of habitat functions within the watershed or basin.
- (iv) Mitigation ratios for preservation as the sole means of mitigation shall generally start at 20:1. Specific ratios should depend upon the significance of the preservation project and the quality of the wetland resources lost.
- (v) Permanent preservation of the wetland and buffer will be provided through a conservation easement or tract held by a land trust.
- (vi) The impact area is small (generally less than half an acre) and/or impacts are occurring to a low-functioning system (Category III or IV wetland).

All preservation sites shall include buffer areas adequate to protect the habitat and its functions from encroachment and degradation.

Section 38: There is hereby added a new section 16.55.370 to the Pullman City Code that reads as follows:

16.55.370 Critical Aquifer Recharge Areas.

- (1) Designation. Critical aquifer recharge areas (CARA) are those areas with a critical recharging effect on aquifers used for potable water as defined by WAC 365-190-030(2). CARA have prevailing geologic conditions associated with infiltration rates that create a high potential for contamination of ground water resources or contribute significantly to the replenishment of ground water. The following areas have been identified based on local conditions:
 - (a) Wellhead Protection Areas. Wellhead protection areas shall be defined by the boundaries of the ten (10) year time of ground water travel, or boundaries established using alternate criteria approved by the Department of Health in those settings where ground water time of travel is not a reasonable delineation criterion, in accordance with WAC 246-290-13.
 - (b) Special Protection Areas. Special protection areas are those areas defined by WAC 173-200-090. For the City, special protection areas shall include all areas for which perennial surface water (i.e. Paradise Creek, and portions of the South Fork Palouse River and Missouri Flat Creek)) are in direct or near contact with outcroppings of either the Wanapum or Grand Ronde basalts.
- (2) Mapping. The approximate location and extent of critical aquifer recharge areas are shown on the pertinent city critical area map. This map is to be used as a guide for the City, project applicants, and property owners, and will be periodically updated as new information becomes available. This map is a reference and does not provide a final critical area designation.
- (3) Existing Regulations. The following provisions are in place to protect critical aquifer recharge areas and

regulate activities that might potentially impact these areas:

- (a) City of Pullman Design Standards.
 - (b) City of Pullman Wellhead Protection Plan.
 - (c) State and federal regulations applicable to specific uses including but not limited to those provided in Subsections 16.55.370(5) and 16.55.370(6).
- (4) General Requirements.
- (a) Activities may only be permitted in a critical aquifer recharge area if the applicant can demonstrate that the proposed activity will not adversely affect the recharging of the aquifer and 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 federal Environmental Protection Agency, state Department of Health, and the Whitman County Health Department, and as provided in the City's wellhead protection plan.
 - (c) The proposed activity must be designed and constructed in accordance with erosion control and surface/stormwater management requirements in the current edition of the City's Design Standards.
- (5) Development Standards for Specific Activities.
- (a) Storage Tanks. All storage tanks proposed to be located in a critical aquifer recharge area must comply with local building code requirements and must conform to the following requirements:
 - (b) Underground Tanks. All new underground storage facilities proposed for use in the storage of hazardous substances or hazardous wastes shall be designed and constructed so as to:

- (i) Prevent releases due to corrosion or structural failure for the operational life of the tank;
 - (ii) Be protected against corrosion, constructed of noncorrosive material, steel clad with a noncorrosive material, or designed to include a secondary containment system to prevent the release or threatened release of any stored substances; and
 - (iii) Use material in the construction or lining of the tank that is compatible with the substance to be stored.
- (c) Aboveground Tanks. All new aboveground storage facilities proposed for use in the storage of hazardous substances or hazardous wastes shall be designed and constructed so as to:
- (i) Not allow the release of a hazardous substance to the ground, ground waters, or surface waters;
 - (ii) Have a primary containment area enclosing or underlying the tank or part thereof; and
 - (iii) Have a secondary containment system either built into the tank structure or a dike system built outside the tank for all tanks.
- (d) Vehicle Repair and Servicing. Vehicle repair and servicing must be conducted over impermeable pads and within a covered structure capable of withstanding normally expected weather conditions. Chemicals used in the process of vehicle repair and servicing must be stored in a manner that protects them from weather and provides containment should leaks occur.
- (e) Spreading or Injection of Reclaimed Water. Water reuse projects for reclaimed water must be in accordance with the adopted water or sewer comprehensive plans that have been approved by the Departments of Ecology and Health.

- (i) Surface spreading must meet the ground water recharge criteria given in Chapters 90.46.080 and 90.46.010(10) RCW.
- (ii) Direct injection must be in accordance with the standards developed by authority of Chapter 90.46.042 RCW.
- (f) State and Federal Regulations. The uses listed below shall be conditioned as necessary to protect critical aquifer recharge areas in accordance with the applicable state and federal regulations.

Table 16.55.370-1. Statutes, Regulations, and Guidance Pertaining to Ground Water Impacting Activities

Activity	Statute - Regulation - Guidance
Above Ground Storage Tanks	Chapter 173-303 -640 WAC
Animal Feedlots	Chapter 173-216 WAC, Chapter 173-220 WAC
Automobile Washers	Chapter 173-216 WAC, Best Management Practices for Vehicle and Equipment Discharges (WDOE WQ- R-95-56)
Below Ground Storage Tanks	Chapter 173-360 WAC
Chemical Treatment Storage and Disposal Facilities	Chapter 173-303-182 WAC
Hazardous Waste Generator (Boat Repair Shops, Biological Research Facility, Dry Cleaners, Furniture Stripping, Motor Vehicle Service Garages, Photographic Processing, Printing and Publishing Shops, etc.)	Chapter 173-303 WAC
Injection Wells	Federal 40 CFR Parts 144 and 146, Chapter 173-218 WAC
Junk Yards and Salvage Yards	Chapter 173-304 WAC, Best Management Practices to Prevent Stormwater Pollution at Vehicles Recycler Facilities (WDOE 94-146)
Oil and Gas Drilling	Chapter 332-12-450 WAC, WAC, Chapter 173-218 WAC
On-Site Sewage Systems (Large Scale)	Chapter 173-240 WAC
On-Site Sewage Systems (< 14,500 gal/day)	Chapter 246-272 WAC, Local Health Ordinances
Pesticide Storage and Use	Chapter 15.54 RCW, Chapter 17.21 RCW
Sawmills	Chapter 173-303 WAC, 173-304 WAC, Best Management Practices to Prevent Stormwater Pollution at Log Yards (WDOE 95-53)
Solid Waste Handling and Recycling Facilities	Chapter 173-304 WAC
Surface Mining	Chapter 332-18-015 WAC
Waste Water Application to Land Surface	Chapter 173-216 WAC, Chapter 173-200 WAC, WDOE Land Application Guidelines, Best Management Practices for Irrigated Agriculture

(6) Uses Prohibited. The following activities and uses are prohibited in critical aquifer recharge areas in shoreline jurisdiction:

- (a) Landfills. Landfills, including hazardous or dangerous waste, municipal solid waste, special waste, wood waste, 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 (Chapter 173-218 WAC).

Section 39: There is hereby added a new section 16.55.380 to the Pullman City Code that reads as follows:

16.55.380 Frequently Flooded Areas.

- (1) Classification. The flood areas in the City are classified as either one of two types:

- (a) 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.

- (b) Flood 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.

- (2) Designation and Mapping. All areas within the City meeting the frequently flooded definition, regardless of any formal identification, are hereby designated critical areas and are subject to the provisions of this Chapter. The approximate location and extent of frequently flooded areas are shown on the pertinent City critical area map. This map is to be used as a guide for the City, project applicants, and property owners, and will be periodically updated as new information becomes available. This map is a reference and does not provide a final critical area designation. Frequently flooded areas have been accurately delineated based on hydrologic and hydraulic studies completed as part of the National Flood Insurance Program by the Federal Emergency Management Agency in May 1981, as amended. The methodology and detail of these studies is accepted as the most current, accurate, and complete scientific and technical information available.

- (3) Existing Regulations. Chapter 17.100 of the Pullman City Code regulates proposed activities adjacent to or within frequently flooded areas. If allowed, any

structures permitted in the designated flood areas are subject to strict flood-proofing regulations.

Section 40: There is hereby added a new section 16.55.390 to the Pullman City Code that reads as follows:

16.55.390 Geologically Hazardous Areas.

(1) General Designation. Geologically hazardous areas in shoreline jurisdiction include areas susceptible to erosion, sliding, earthquake, or other geological events. They pose a threat to the health and safety of citizens when incompatible development is sited in areas of significant hazard. Such incompatible development may not only place itself at risk, but also may increase the hazard to surrounding development and use. Areas susceptible to one or more of the following types of hazards shall be designated as a geologically hazardous area:

- (a) Erosion hazard;
- (b) Landslide hazard;
- (c) Seismic hazard;
- (d) Mine hazard;
- (e) Volcanic hazard; and
- (f) Other geological events including mass wasting, debris flows, rock falls, and differential settlement.

(2) Designation of Specific Hazard Areas.

- (a) Erosion Hazard Areas. Erosion hazard areas are those areas identified by the U.S. Department of Agriculture - Natural Resources Conservation Service (USDA-NRCS) as having a "moderate to severe," "severe," or "very severe" rill and inter-rill erosion hazard. Rill erosion tends to occur on slopes, particularly steep slopes with easily-erodible soils or poor vegetation. Erosion hazard areas also include those areas with a slope greater than fifteen percent (15%).

(b) Landslide Hazard Areas. Landslide hazard areas are areas potentially subject to landslides based on a combination of geologic, topographic, and hydrologic factors. They include areas susceptible because of any combination of bedrock, soil, slope (gradient), slope aspect, structure, hydrology, or other factors. Example of these may include, but are not limited to the following:

(i) Areas of historic failures, such as:

(aa) Those areas delineated by the USDA-NRCS as having a "severe" limitation for building site development for factors other than slope for one or more types of building development;

(bb) Those areas mapped by the Department of Natural Resources (slope stability mapping) as unstable ("U" or class 3), unstable old slides ("UOS" or class 4), or unstable recent slides ("URS" or class 5); or

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

(ii) Areas with all three of the following characteristics:

(aa) Slopes steeper than fifteen percent (15%);

(bb) Hillsides intersecting geologic contacts with a relatively permeable sediment overlying a relatively impermeable sediment or bedrock; and

(cc) Springs or ground water seepage;

(iii) Areas that have shown movement during the Holocene epoch (from 10,000 years ago to the

present) or that are underlain or covered by mass wastage debris of that epoch;

- (iv) Slopes that are parallel or subparallel to planes of weakness (such as bedding planes, joint systems, and fault planes) in subsurface materials;
 - (v) Slopes having gradients steeper than eighty percent (80%) subject to rock fall during seismic shaking;
 - (vi) Areas potentially unstable because of rapid stream incision, streambank erosion, and undercutting by wave action;
 - (vii) Areas that show evidence of, or are at risk from snow avalanches;
 - (viii) Areas located in a canyon or on an active alluvial fan, presently or potentially subject to inundation by debris flows or catastrophic flooding; and
 - (ix) Any area with a slope of forty percent (40%) or steeper and with a vertical relief of ten or more feet except areas composed of consolidated rock.
- (c) Seismic Hazard Areas. Seismic hazard areas are areas subject to severe risk of damage as a result of earthquake induced ground shaking, slope failure, settlement, soil liquefaction, lateral spreading, or surface faulting. One indicator of potential for future earthquake damage is a record of earthquake damage in the past. Ground shaking is the primary cause of earthquake damage in Washington. The strength of ground shaking is primarily affected by:
- (i) The magnitude of an earthquake;
 - (ii) The distance from the source of an earthquake;

(iii) The type or thickness of geologic materials at the surface; and

(iv) The type of subsurface geologic structure.

Settlement and soil liquefaction conditions occur in areas underlain by cohesionless, loose, or soft-saturated soils of low density, typically in association with a shallow ground water table.

(d) Mine Hazard Areas. Mine hazard areas are those areas underlain by, or affected by mine workings such as adits, gangways, tunnels, drifts, or airshafts, and those areas of probable sink holes, gas releases, or subsidence due to mine workings. Steep and unstable slopes may be created by open mines (e.g. open basalt rock pits, rock quarries, sand and gravel pits). Factors that should be considered include: proximity to development, depth from ground surface to the mine working, and geologic material.

(e) Volcanic Hazard Areas. Volcanic hazard areas are areas subject to pyroclastic flows, lava flows, debris avalanche, inundation by debris flows, lahars, mudflows, or related flooding resulting from volcanic activity.

(f) Other Hazard Areas. Geologically hazardous areas shall also include areas determined by the SMP Administrator to be susceptible to other geological events including mass wasting, debris flows, rock falls, and differential settlement.

(3) Classification. The level of risk for each geologic hazard type is described in this subsection. Documentation of specific areas in which a known or suspected risk exists for each of the following hazard areas is provided in the pertinent City critical area map. The provisions of this Section apply only to those areas for which a known or suspected risk exists in shoreline jurisdiction.

Table 16.55.390-1. Classification of Geologic Hazard Risk

Classification	Documentation and Data Sources
Known or Suspected Risk	Documentation or projection of the hazard by a qualified professional exists.
Low or No Risk	Documentation exists by a qualified professional regarding low hazard risk or lack of hazard.
Risk Unknown	Documentation, data, or projection of the hazard risk by a qualified professional are not available or sufficient to determine the presence or absence of a geologic hazard.

(a) Erosion Hazard Areas - Known or Suspected Risk. The Thatuna Soil Series within the City is identified as having a potentially severe erosion hazard. The Thatuna Series within the City consists of: the Thatuna Silt Loams on slopes of seven to twenty-five percent (7-25%) and twenty-five to forty percent (25-40%) and the Thatuna-Tilma Silt Loams on slopes of seven to twenty-five percent (7-25%).

Table 16.55.390-2. Erosion Hazard by Soil Type

Soil Series Name	Slope (%)	Erosion Hazard
Thatuna Silt Loam	7-25	Moderate to Severe
Thatuna Silt Loam	25-40	High to Severe
Thatuna-Tilma Silt Loams	7-25	Moderate to Severe

(b) Landslide Hazard Areas - Known or Suspected Risk. Areas of severe limitations to building development as identified by the USDA-NRCS for reasons other than slope for one or more types of building development include the soil series in the following table.

Table 16.55.390-3. Landslide Hazard by Soil Type

Soil Name	Risk Level: Reason		
	Dwellings w/o Basements:	Dwellings w/ Basements	Small Commercial Buildings
Caldwell	Severe: floods	Severe: floods, wetness	Severe: floods
Garfield	Severe: shrink-swell, low strength	Severe: shrink-swell, low strength	Severe: shrink-swell, low strength
Gwin-Tucannon	Severe: slope	Severe: depth to rock, slope	Severe: slope
Konert	Severe: floods, wetness, shrink-swell	Severe: floods, wetness, shrink-swell	Severe: floods, wetness, shrink-swell
Latah	Severe: floods, wetness, shrink-swell	Severe: floods, wetness, shrink-swell	Severe: floods, wetness, shrink-swell
Naff	Severe: slope, shrink-swell	Severe: slope, shrink-swell	Severe: slope, shrink-swell
Thatuna-Tilma	Severe: shrink-swell, slope, wetness	Severe: wetness, shrink-swell, slope	Severe: shrink-swell, wetness, slope
Tucannon	Severe: slope	Severe: depth to rock, slope	Severe: slope

- (c) Seismic Hazard Areas - Low or No Risk. There are no known specific faults that are likely to create a significant seismic hazard within the City.
- (d) Mine Hazard Areas - Known or Suspected Risk. No subsurface mines exist in the City. Open mines such as basalt rock pits and sand/gravel pits that exist within the City are mine hazard areas.
- (e) Volcanic Hazard Areas - Low or No Risk. Pullman is not located within a volcanic hazard zone. If a volcanic eruption were to occur in the western part of Washington, the only anticipated impact in Pullman would be ash deposition.
- (f) Other Hazard Areas. Other geologically hazardous areas may be designated by the City if documentation thereof is available.

(4) Mapping.

- (a) The approximate location and extent of potential geologically hazardous areas are shown in the pertinent City critical area map. The hazard areas outlined on this map are based on the following data:
 - (i) Department of Natural Resources slope stability maps (slope);
 - (ii) USGS 10-meter Digital Elevation Model (slope);
 - (iii) USDA-NRCS Soil Survey of Whitman County, Washington: WA075/Sheet 99/109 (soil type);
 - (iv) International Building Code (IBC) Ch. 16, Sec. 1613 (earthquake loads);
 - (v) Additional data as determined necessary by the City.
- (b) The City critical area map regarding geologically hazardous areas is to be used as a guide for the City, project applicants, and property owners, and will be periodically updated as new

information becomes available. This map provides a general reference and does not provide a final critical area designation.

- (5) Existing Regulations Pertaining to Geologically Hazardous Areas. The following regulations and procedures are in place for the City to minimize the undesirable impacts that could be associated with geologically hazardous areas:
 - (a) IBC Appendix J: Grading.
 - (b) IBC Section 1803: Excavation, Grading and Fill.
 - (c) IBC Section 1612: Flood Loads.
 - (d) City of Pullman Design Standards.
 - (e) Landslide Hazard Areas.
 - (i) IBC Chapter 18: Soils and Foundations.
 - (ii) IBC Appendix J: Grading.
 - (iii) City of Pullman Design Standards.
 - (iv) City of Pullman Policy Regarding Footings and Soil Types.
 - (v) City of Pullman Design Guidelines for Typical Residential Footings on Poor Soils.
 - (f) Seismic Hazard Areas.
 - (i) IBC Chapter 16, Section 1613: Earthquake Loads.
 - (ii) IBC Chapter 18: Soils and Foundations
 - (g) Mine Hazard Areas.
 - (i) Chapter 17.125 Pullman City Code: Conditional Use Permit.
 - (ii) Chapter 78.44 RCW - Surface Mining.
- (6) New development and lots. In any geologically hazardous area, new development and creation of new lots that would cause foreseeable risk from geological conditions after application of the provisions

referenced in Subsection 16.55.390(5) during the life of the development is prohibited.

Section 41: There is hereby added a new section 16.55.400 to the Pullman City Code that reads as follows:

16.55.400 Fish and Wildlife Habitat Conservation Areas.

(1) Designation.

(a) All areas within the shoreline jurisdiction of Pullman meeting one or more of the following criteria, regardless of any formal identification, are hereby designated critical areas and are subject to the provisions of this Section and shall be managed consistent with the most current, accurate, and complete scientific and technical information available, such as the Washington Department of Fish and Wildlife's Management Recommendations for Priority Habitat and Species. Fish and wildlife habitat conservation areas shall include the following:

(i) Areas with which State or Federally Designated Endangered, Threatened, and Sensitive Species Have a Primary Association.

(aa) Federally designated endangered and threatened species are those fish, wildlife and plant species identified by the U.S. Fish and Wildlife Service or 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.

(bb) State designated, endangered, threatened, and sensitive species are those fish and wildlife species native to the state of Washington identified

by the state Department of Fish and Wildlife, and those native plant species identified by the Department of Natural Resources, 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.

(cc) A combined list of federally and state identified species having the potential to exist within the City is maintained by the Pullman planning department.

(ii) State Priority Habitats and Areas Associated with State Priority Species. Priority habitats and species are considered to be 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 maintained by the Pullman planning department.

- (iii) Habitats and Species of Local Importance. Habitats and species of local importance are those identified by the City, including those that possess unusual or unique habitat warranting protection because of qualitative species diversity or habitat system health indicators, such as high quality native plant communities, and those with historical or cultural importance.
- (iv) Naturally Occurring Ponds Under 20 Acres. Naturally occurring ponds are those ponds under 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.
- (v) 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 222-16-030.
- (vi) Lakes, Ponds, Streams, and Rivers Planted with Game Fish by a Governmental or Tribal Entity.
- (vii) 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.

(viii) Land Essential for Preserving Connections between Habitat Blocks and Open Spaces.

(ix) All areas within the City meeting one or more of the above criteria, regardless of any formal identification, are hereby designated critical areas and are subject to the provisions of this Section. The SMP Administrator shall be responsible for making final habitat conservation area designations in shoreline jurisdiction within the City.

(b) Mapping. The approximate location and extent of habitat conservation areas are shown on the following maps, which are hereby adopted to provide geographic information about known or suspected habitat conservation areas:

(i) Department of Fish and Wildlife Priority Habitat and Species Maps;

(ii) Department of Natural Resources, Official Water Type Reference Maps, as amended;

(iii) Resident salmonid distribution maps contained in studies conducted by the local watershed planning unit or in the Habitat Limiting Factors Reports published by the Washington Conservation Commission;

(iv) Department of Natural Resources State Natural Area Preserves and Natural Resource Conservation Area Maps; and

(v) City habitat maps.

These maps are to be used as a guide for the City, project applicants, and property owners, and will be periodically updated as new information becomes

available. They are a reference and do not provide a final critical area designation.

(2) Critical Area Report - Additional Requirements. In addition to the general critical area report requirements, the following elements must be met:

(a) Preparation by a Qualified Professional. A critical areas report for a habitat conservation area shall be prepared by a qualified professional who is a biologist with experience preparing reports for the relevant type of habitat;

(b) Areas Addressed in Report. The following areas shall be addressed in a critical area report for habitat conservation areas:

(i) The project area of the proposed activity;

(ii) All habitat conservation areas and recommended buffers within 200 feet of the project area; and

(iii) Shoreline areas, floodplains, and other critical areas, and related buffers within 200 feet of the project area.

(c) Habitat Assessment. An investigation of the project area to evaluate the potential presence or absence of designated critical fish or wildlife species or habitat. An assessment of habitats shall include, at a minimum, the following information:

(i) A detailed description of vegetation on and adjacent to the project area;

(ii) Identification of any species of local importance, priority species, 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;

- (iii) A discussion of any federal, state, or local special management recommendations, including Washington Department of Fish and Wildlife habitat management recommendations, that have been developed for species or habitats located on or adjacent to the project area;
 - (iv) A discussion of measures, including avoidance, minimization, and mitigation, proposed to preserve existing habitats and restore any habitat that was degraded prior to the current proposed land use activity and to be conducted in accordance with Subsection 16.55.350(11) (Mitigation Requirements); and
 - (v) 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. When appropriate due to the type of habitat or species present or the project area conditions, the SMP Administrator may also require the critical area report to include:
- (i) An evaluation by the Washington Department of Fish and Wildlife or qualified expert regarding the applicant's analysis and the effectiveness of any proposed mitigating measures or programs, to include any recommendations as appropriate; and
 - (ii) Detailed surface and subsurface hydrologic features both on and adjacent to the site.

(3) General Requirements Pertaining to Habitat Conservation Areas.

- (a) Alterations Shall Not Degrade the Functions and Values of Habitat. A habitat conservation area may be altered only if the proposed activity, including associated mitigation measures, does

not degrade the quantitative and qualitative functions and values of the habitat and other critical areas.

- (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 local, state, or federal permit or approval.
- (c) Mitigation Shall Result in Contiguous Corridors. Mitigation sites shall be located to achieve contiguous wildlife 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 SMP Administrator 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 may include, but are not limited to, the following:
 - (i) Establishment of buffer zones;
 - (ii) Preservation of critically important vegetation;
 - (iii) Limitation of access to the habitat area, including fencing to deter unauthorized access;
 - (iv) Seasonal restriction of construction activities;
 - (v) Establishment of a duration and timetable for periodic review of mitigation activities; and

- (vi) Requirement of a financial guarantee, when necessary, to ensure completion and success of proposed mitigation.
- (e) Mitigation Shall Achieve Equivalent or Greater Biological Functions. Mitigation of alterations to habitat conservation areas shall achieve equivalent or greater biologic 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 shall be supported by the most current, accurate, and complete scientific and technical information available. Any approval of alterations or impacts to a habitat conservation area shall be supported by the most current, accurate, and complete scientific and technical information available.
- (g) Buffers.
 - (i) Establishment of Buffers. The SMP Administrator shall require the establishment of buffer areas for activities in, or adjacent to, habitat conservation areas in shoreline jurisdiction, 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 state Department of Fish and Wildlife.

- (ii) Increased habitat buffers. The SMP Administrator may require increased buffer widths in accordance with recommendations of a qualified professional biologist and the most current, accurate, and complete scientific and technical information available when it is determined that a larger buffer is necessary to protect habitat area functions and values due to site specific characteristics.
- (iii) Habitat buffer averaging. The SMP Administrator may allow the recommended habitat area buffer width to be reduced in accordance with a critical area report, the most current, accurate, and complete scientific and technical information available, and the management recommendations issued by the Washington Department of Fish and Wildlife, only if:
- (aa) It will not reduce stream or habitat functions;
 - (bb) It will not adversely affect salmonid habitat;
 - (cc) It will provide additional natural resource protection, such as buffer enhancement;
 - (dd) The total area contained in the buffer area after averaging is no less than that which would be contained within the standard buffer; and
 - (ee) The buffer area width is not reduced by more than twenty-five percent (25%) in any location.
- (iv) 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.

(i) Temporary Markers. The outer perimeter of the habitat conservation area or buffer and the limits of those areas to be disturbed pursuant to a development permit shall be marked in the field in such a way as to ensure that no unauthorized intrusion will occur, and verified by the SMP Administrator prior to the commencement of permitted activities. This temporary marking shall be maintained throughout construction, and shall not be removed until permanent signs, if required, are in place.

(ii) Permanent Signs. As a condition of any development permit issued pursuant to this Chapter, the SMP Administrator may require the applicant to install permanent signs along the boundary of a habitat conservation area or buffer. If required, 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 50 linear feet, whichever yields the greater amount of signs, and must be maintained by the property owner in perpetuity. The sign shall be worded as follows or with alternative language approved by the City:

*"Habitat Conservation Area Do Not Disturb
Contact City of Pullman Regarding Uses and
Restrictions"*

(iii) Fencing.

(aa) As a condition of any development permit, the SMP Administrator may 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.

(bb) The applicant shall be required to install a permanent fence around the habitat conservation area or buffer when domestic grazing animals are present or may be introduced on site.

(cc) Fencing installed as part of a proposed activity or as required in this Paragraph 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) Subdivisions. The subdivision and short subdivision of land in habitat conservation areas and associated buffers in shoreline jurisdiction is subject to the following:

(i) Land that is located wholly within a habitat conservation area or its buffer may not be subdivided.

(ii) Land that is located partially within a habitat conservation area or its buffer may be divided provided that an accessible and contiguous portion of each new lot:

(aa) Is located outside of the habitat conservation area and its buffer; and

(bb) Meets the minimum lot size requirements of City's zoning code (Title 17).

(iii) Access roads and utilities serving a proposed subdivision or other property may be permitted within the habitat conservation area and associated buffers only if the SMP Administrator determines that no other feasible alternative exists and these facilities are otherwise established

consistent with the provisions of this Chapter.

(4) Development Standards for Specific Species or Habitats.

(a) Endangered, Threatened, and Sensitive Species.

(i) No development shall be allowed within a habitat conservation area or buffer with which state or federally endangered, threatened, or sensitive species have a primary association.

(ii) Whenever activities are proposed adjacent to a habitat conservation area 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 SMP Administrator. Approval for alteration of land adjacent to the habitat conservation area or its buffer shall not occur prior to consultation with the Washington Department of Fish and Wildlife and the appropriate federal agency.

(iii) Bald eagle habitat shall be protected pursuant to the Washington State Bald Eagle Protection Rules (WAC 232-12-292). Whenever activities are proposed adjacent to a verified nest territory or communal roost, a habitat management plan shall be developed by a qualified professional. Activities are adjacent to bald eagle sites when they are within 800 feet, or within one-quarter mile (1,320 feet) and in a shoreline foraging area. The SMP Administrator shall verify the location of eagle management areas for each proposed activity. Approval of the activity shall not occur prior to approval of the

habitat management plan by the U.S. Fish and Wildlife Service.

(b) Wetland Habitats. All proposed activities within or adjacent to habitat conservation areas containing wetlands shall, at a minimum, conform to the wetland standards set forth in Section 16.55.360 (Wetlands), in addition to meeting the habitat conservation area standards in this Section.

(c) Riparian Habitat Areas.

(i) Activities Shall Not Degrade the Functions and Values of Riparian Habitat. Unless otherwise allowed in this Chapter, all structures and activities shall be located outside of the riparian habitat area. A proposed activity may only be permitted in a riparian habitat area if the applicant can show that the activity, including associated mitigation measures, will not degrade the functions and values of the riparian habitat area and other critical areas.

(ii) Establishment of riparian habitat areas. Riparian habitat areas shall be established for habitats that include aquatic and terrestrial ecosystems that mutually benefit each other and that are located adjacent to rivers, perennial or intermittent streams, seeps and springs.

(iii) Classification. Streams are classified using the Permanent Water Typing System described in WAC 222-16-030, and as follows:

(aa) Type S: Type S waters are shorelines of the state.

(bb) Type F: Type F waters are perennial or seasonal, fish bearing waters.

(cc) Type Np: Type Np waters are non-fish bearing perennial waters.

(dd) Type Ns: Type Ns waters are non-fish bearing seasonal waters.

(iv) Standard Riparian Habitat Area Widths.

(aa) Riparian habitat area buffer widths for waters in shoreline jurisdiction in each environment designation are shown in Table 16.55.400-1. A riparian habitat area shall have the required width, unless a greater width is required pursuant to Subsection 16.55.400(4)(c)(v), or a lesser width is allowed pursuant to Subsection 16.55.400(4)(c)(vi).

(bb) 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.

(cc) Where an action is proposed in an environment designation that is separated from the shoreline by a different environment designation, the only riparian habitat area that applies in the landward designation is that riparian habitat area which is specified for that designation. The applicable riparian habitat area width is always measured from the ordinary high water mark.

Table 16.55.400-1 Riparian Habitat Area Widths

Environment Designation	Shoreline Waters ¹ (Type S)	Other Waters ²
All Designations	<ul style="list-style-type: none"> For water-dependent developments, no minimum riparian habitat area width. Apply mitigation sequencing to avoid and minimize adverse impacts during development siting. For all developments, riparian habitat area widths are the lesser of the distance indicated below, or (if present) the waterward edge of an improved public road or railroad intersecting the riparian habitat area 	
Shoreline Residential	75 feet	Type F: 75 feet Type Np: 50 feet Type Ns: 50 feet
Shoreline Residential – Urban Growth Area	100 feet	Type F: 100 feet Type Np: 50 feet Type Ns: 50 feet
Shoreline Parks	50 feet	Type F: 50 feet Type Np: 50 feet Type Ns: 50 feet

Environment Designation	Shoreline Waters ¹ (Type S)	Other Waters ²
High Intensity	From the retaining wall east of NE Kamiaken Street on the south side of the Palouse River: no riparian habitat area Everywhere else: 30 feet	All: 30 feet

¹ Shoreline (Type S) riparian habitat area widths are based on existing conditions in each environment designation

² Non-shoreline waters are subject to the buffers and other critical area protections herein only when passing through shoreline jurisdiction

(v) Increased Riparian Habitat Area Width. The recommended riparian habitat area width shall be increased, as follows:

(aa) When the SMP Administrator determines that the recommended width is insufficient to prevent habitat degradation and to protect the structure and functions of the habitat area; or

(bb) When the SMP Administrator determines that the width is insufficient to protect human life and development from frequently flooded areas, geologically hazardous areas, or channel migration zones.

(vi) Riparian habitat area width averaging. The SMP Administrator may allow the width to be reduced in accordance with a critical area report only if:

(aa) The width reduction will not reduce stream habitat functions, including those of non-fish habitat;

(bb) The width reduction will not degrade the habitat;

(cc) The proposal will provide additional habitat protection;

(dd) The total riparian habitat area of each stream on the development proposal site is not decreased;

- (ee) The width is not reduced by more than twenty-five percent (25%) in any one location;
 - (ff) The width reduction will not be located within another critical area or associated buffer; and
 - (gg) The reduced width is supported by the most current, accurate, and complete scientific and technical information available.
- (vii) Riparian Habitat Mitigation. Mitigation of adverse impacts to riparian habitat areas shall result in equivalent functions and values on a per function basis, be located as near the alteration as feasible, and be located in the same sub-drainage basin as the habitat impacted.
- (viii) Alternative Mitigation for Riparian Habitat Areas. The requirements set forth in this Section may be modified at the SMP Administrator's discretion if the applicant demonstrates that greater habitat functions, on a per function basis, can be obtained in the affected sub-drainage basin as a result of alternative mitigation measures.
- (ix) Uses and modifications allowed in riparian habitat areas. The following uses are allowed in riparian habitat areas provided that mitigation sequencing (Subsection 16.55.230(2)(d)) is demonstrated, and any adverse impacts to ecological functions are mitigated.
- (aa) Water-dependent uses. Consistent with the use allowances for each environment designation, water-dependent uses, modifications and activities may be located in riparian habitat areas at the water's edge.

(bb) Accessories to water-dependent uses. Uses, developments and activities accessory to water-dependent uses should be located outside any applicable standard or reduced riparian habitat area unless at least one of the following is met:

(aaa) Proximity to the water-dependent project elements is critical to the successful implementation of the facility's purpose and the elements are supportive of the water-dependent use and have no other utility (e.g., a road to a boat launch facility, facilities that support aquaculture); or

(bbb) The proposed accessory would be located in a park or on other public lands where high-intensity recreational development is already legally established, and the accessory would not conflict with or limit opportunities for other water-oriented uses; or

(ccc) The accessory use, development or activity can be located upland of the water-dependent use; or

(ddd) The applicant's lot/site has topographical constraints where no other location of the development is feasible (e.g., the water-dependent use or activity is located on a parcel entirely or substantially encumbered by the required buffer).

In these circumstances, uses and modifications accessory to water-dependent uses must be designed and

located to minimize intrusion into the buffer. All other accessory uses, developments and activities proposed to be located in a shoreline buffer must obtain a Shoreline Variance unless otherwise allowed by other regulations in this section or in this SMP.

(cc) Water-oriented public access and recreation facilities. New development and redevelopment of water-oriented public access and recreation structures are allowed in riparian habitat areas provided the applicant can demonstrate that the design applies mitigation sequencing and appropriate mitigation is provided to ensure no net loss of ecological functions. Applicants shall submit a management plan that specifically addresses compliance with Sections 16.55.250 (Environmental Protection), 16.55.260 (Shoreline Vegetation Conservation), 16.55.270 (Water Quality, Stormwater, and Nonpoint Pollution), and Part VII (Shoreline Critical Areas Policies and Regulations). The City may review and condition the project to fully implement the policies of the Shoreline Management Act and this Master Program.

(dd) Temporary agricultural equipment and facilities. New agricultural equipment and facilities, excluding buildings, may be placed in a buffer if the following conditions are satisfied:

(aaa) Placement of the equipment and facilities must support an existing agricultural use.

(bbb) The equipment and facilities may only be in the buffer on a temporary or seasonal basis, a

maximum of eight (8) months in a running 12-month period.

(ccc) Placement outside of a buffer is not feasible because it would be located on a property owned by another landowner or it would interfere with another agricultural or authorized use.

(ddd) The location of the proposed equipment and facilities is on an already altered site, and would not result in harm to or removal of native vegetation.

(eee) Best management practices are utilized to prevent adverse impacts to water quality or other ecological functions.

(ee) Shoreline residential access. A private access pathway constructed of pervious materials may be installed, a maximum of four (4) feet wide, through the riparian habitat area to the OHWM. Impervious materials may be used as needed to construct a safe, tiered pathway down a slope. Raised boardwalks may also be constructed through wetland areas to reach the shoreline waterbody consistent with regulations in this article. A railing may be installed on one edge of the pathway, a maximum of 36 inches tall and of open construction. Pathways to the shoreline should take the most direct route feasible consistent with appropriate safety standards.

(d) Standards for Specific Activities in Riparian Habitat Areas. In addition to the general review procedures set forth in Subsection 16.55.350(9) and other applicable provisions of this SMP Part

VI, General Policies and Regulations; Part VIII, Shoreline Use Policies and Regulations; and Part IX, Shoreline Modification Policies and Regulations), the standards below apply to specific activities proposed to be located within a riparian habitat area in shoreline jurisdiction to ensure maintenance or enhancement of the functions and values of the affected habitat area.

(i) Clearing and Grading. Clearing and grading operations shall comply with the following standards:

(aa) Grading shall be conducted only when soil conditions are dry and the potential for erosion is low;

(bb) Tilling or modification of a wetland or wetland buffer is permitted only if it is conducted as part of an approved wetland alteration;

(cc) The soil duff layer shall remain undisturbed to the maximum extent possible, and where feasible, any soil disturbed shall be redistributed to the areas of the project area;

(dd) 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; and

(ee) Erosion and sediment control that meets or exceeds the standards set forth in the adopted stormwater management regulations shall be provided.

(ii) Stormwater Conveyance Facilities. Stormwater conveyance structures shall comply with the following standards:

- (aa) The applicant shall demonstrate that no feasible alternatives with less impact exist;
 - (bb) The structures shall incorporate fish habitat features; and
 - (cc) Vegetation shall be maintained and, if necessary, added adjacent to all open channels and ponds in order to retard erosion, filter out sediments, and shade the water.
- (iii) On-Site Sewage Systems and Wells. On-site sewage systems and wells shall comply with the following standards:
- (aa) New individual wells and on-site sewage systems may be allowed only if accessory to an approved residential structure for which it is not feasible to connect to a public water or sanitary sewer system; and
 - (bb) Repairs to failing on-site sewage systems associated with an existing structure shall be accomplished by one of the following methods that results in the least impact to the environment:
 - (aaa) Connection to an available public sanitary sewer system; or
 - (bbb) 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 the Whitman County Health Department; or

(ccc) Repair of the existing on-site septic system.

Section 42: Under Part VIII. SHORELINE USE POLICIES AND REGULATIONS, there is hereby added a new section 16.55.410 to the Pullman City Code that reads as follows:

16.55.410 Agriculture.

(1) Policies

- (a) Encourage erosion control measures in accordance with the United States Department of Agriculture Natural Resources Conservation Service agency guidelines.
- (b) Control irrigation runoff to minimize discharge of chemicals, fertilizer, sediment, and organic materials in aquatic areas in accordance with federal and state water quality standards.
- (c) Allow diversion of water for agricultural purposes consistent with water rights laws and rules.
- (d) Encourage maintenance of vegetative zones between tilled areas and aquatic areas to reduce stormwater runoff, reduce sedimentation, and promote fish and wildlife habitat.

(2) Regulations

- (a) Section 16.55.100 (Definitions), WAC 173-26-020 (Definitions) and WAC 173-26-241(3)(a) (Agriculture) shall determine the need for shoreline review for agricultural activities.
- (b) The provisions of this SMP do not limit or require modification of agricultural activities on agricultural lands as of the date of adoption of the SMP. In determining whether lands meet the definition of agricultural activities, the SMP Administrator shall consider laws and rules included in Subsection 16.55.410(1) and information regarding typical agricultural practices for the subject agricultural use,

current use taxation records, conservation easements, and other relevant information. Examples of agricultural practices that could vary by the type of agriculture include but are not limited to: rotations of fields for grazing, cultivation, production, and harvests; animal breeding, feeding, or forage activities; type and frequency of maintenance, repair and replacement of agricultural facilities; and other typical practices.

- (c) SMP provisions shall apply in the following cases:
 - (i) New agricultural activities on land not meeting the definition of agricultural land;
 - (ii) Expansion of agricultural activities on non-agricultural lands, or conversion of non-agricultural lands to agricultural activities;
 - (iii) Conversion of agricultural lands to other uses;
 - (iv) Other development on agricultural land that does not meet the definition of agricultural activities; and
 - (v) Agricultural development and uses not specifically exempted by the SMA.
- (d) Feed lots and stockyards are prohibited in shoreline jurisdiction.
- (e) In new cultivated areas, vegetative buffers consistent with Subsection 16.55.370(5), shall be maintained between the OHWM and cultivated ground for purposes of erosion control and riparian vegetation protection, and shall apply to uses and activities subject to the SMP in Subsection 16.55.410(2)(c).
- (f) Diversion of water for agricultural purposes shall be consistent with federal and state water rights laws and rules.

- (g) No equipment or material shall be abandoned or disposed of in shoreline jurisdiction.
- (h) Development in support of agricultural uses shall be consistent with the environment designation intent and management policies, located and designed to assure no net loss of ecological functions, and shall not have a significant adverse impact on other shoreline resources and values.

Section 43: There is hereby added a new section 16.55.420 to the Pullman City Code that reads as follows:

16.55.420 Aquaculture.

(1) Policies.

- (a) Encourage aquaculture that supports the recovery of endangered or threatened fish species.
- (b) Restrict aquaculture in areas where it would result in a net loss of ecological functions or significantly conflict with water-dependent uses.
- (c) Consider visual access and aesthetic quality of the shoreline in siting aquaculture facilities.

(2) Regulations.

- (a) Aquacultural facilities must be designed and located to avoid:
 - (i) The spreading of disease, especially to native aquatic life;
 - (ii) Introducing new non-native species which cause significant ecological impacts;
 - (iii) Significantly conflicting with water-dependent uses;
 - (iv) A net loss of ecological functions; or
 - (v) Significantly impacting the aesthetic qualities of and visual access to the shoreline.

- (b) Potential locations for aquaculture are relatively restricted due to specific requirements for water quality, temperature, flows, oxygen content, adjacent land uses, and wind protection. The technology associated with some forms of present-day aquaculture is still in its formative stages and experimental. Therefore, some latitude in the development of this use shall be given, while the potential impacts on existing uses and natural systems are recognized.
- (c) All facilities shall comply with the Environmental Protection regulations in Section 16.55.250.

Section 44: There is hereby added a new section 16.55.430 to the Pullman City Code that reads as follows:

16.55.430 Commercial Development.

(1) Policies.

- (a) Give preference to water-dependent commercial uses over nonwater-dependent commercial uses in shoreline jurisdiction. Water-related and water-enjoyment uses should be prioritized over nonwater-oriented commercial uses.
- (b) Encourage water-oriented commercial uses to locate near the water so as to provide opportunities for substantial numbers of people to enjoy shoreline amenities. Those developments that are nonwater-oriented or over-water uses should be encouraged to locate inland from the shoreline jurisdiction.
- (c) Encourage new commercial development to locate in areas where commercial development uses already exist, and ensure that it does not significantly reduce scenic views or result in net loss of shoreline ecological function.

(2) Regulations.

- (a) Water-dependent, water-related, and water-enjoyment uses are permitted where allowed by zoning and this SMP.
- (b) Preference shall be given to water-dependent commercial uses over nonwater-dependent commercial uses. Water-related uses and water-enjoyment uses shall be given priority over nonwater-oriented uses.
- (c) Commercial use that is not water-dependent shall not be allowed over water except where it is located within an existing building or where it is accessory to a water-dependent use.
- (d) Nonwater-oriented commercial development shall be prohibited unless it meets one of the following criteria and is otherwise allowed consistent with the Use and Modification Table (Table 16.55.320-1):
 - (i) The use is part of a mixed-use project that includes water-dependent uses and provides a significant public benefit with respect to provision of public access or ecological restoration;
 - (ii) The use is an existing or redeveloped structure in an area that has traditionally been used for nonwater-oriented uses. For example, retail uses in existing or redeveloped structures within the shoreline jurisdiction in the Downtown shall be allowed as a permitted use; or
 - (iii) Navigability is severely limited at the proposed site, and the commercial use provides a significant public benefit with respect to provision of public access or ecological restoration.
- (e) In areas of the shoreline designated for commercial uses, nonwater-oriented commercial

uses may be allowed on sites physically separated from the shoreline by another property or public right-of-way.

- (f) New commercial developments shall provide public access to the shoreline.
- (g) Commercial development shall comply with the Environmental Protection regulations of Section 16.55.250 and shall be located, designed, and constructed in a way that ensures no net loss of shoreline ecological functions and without significant adverse impacts to other preferred land uses and public access opportunities as provided for in RCW 90.58.020.

Section 45: There is hereby added a new section 16.55.440 to the Pullman City Code that reads as follows:

16.55.440 In-Stream Structural Uses.

(1) Policies.

- (a) Ensure the location, design, construction and maintenance of in-stream structures give due consideration to the full range of public interests, watershed functions and processes, and environmental concerns, with special emphasis on protecting and restoring priority habitats and species.
- (b) Encourage non-structural and non-regulatory approaches as an alternative to in-stream structures. Non-regulatory and non-structural approaches may include public facility and resource planning, land or easement acquisition, education, voluntary protection and enhancement projects, or incentive programs.

(2) Regulations.

- (a) In-stream structures may be allowed only as part of an approved watershed basin restoration project approved by the City and upon acquisition of any required state or federal permits.

- (b) In-stream structures must provide for the protection and preservation of ecosystem-wide processes, ecological functions, and cultural resources, including, but not limited to, fish and fish passage, priority habitats and species, other wildlife and water resources, shoreline critical areas, hydrogeological processes, and natural scenic vistas.
- (c) New in-stream structures shall not interfere with existing water-dependent uses, including recreation.
- (d) In-stream structures shall not be a safety hazard.
- (e) In-stream structures shall be designed by a qualified professional.
- (f) Natural in-stream features, such as snags, uprooted trees, or stumps, shall be left in place unless it can be demonstrated that they are actually causing bank erosion or higher flood stages or pose a hazard to human safety.
- (g) In-stream structures shall comply with the Environmental Protection regulations in Section 16.55.250 and shall ensure no net loss of ecological function. Consistent with requirements for mitigation sequencing (Subsection 16.55.250(2)(d)), all structures must be the minimum size necessary and be designed to avoid and then minimize potential adverse impacts. All unavoidable adverse impacts must be mitigated in accordance with a mitigation plan that meets the requirements of Subsection 16.55.250(2)(f).
- (h) The applicant must obtain all other local, state, and federal permits required for in-stream structures in addition to the requirements of this SMP.

Section 46: There is hereby added a new section 16.55.450 to the Pullman City Code that reads as follows:

16.55.450 Industrial Development.

(1) Policies.

- (a) Recognize the importance of industrial uses to the City and attract water-oriented uses for location in appropriate areas along the shoreline.
- (b) Allow for existing and new industrial uses that serve the local industries, provided they are developed and operated according to the State's Shoreline Master Program Guidelines and other State and City requirements.
- (c) Ensure that existing and new development of industrial facilities is consistent with all Master Program Guidelines and achieves no net loss of shoreline ecological function.

(2) Regulations.

- (a) Industrial facilities that are water-dependent or water-related are permitted where allowed by zoning and this SMP. The applicant shall demonstrate that proposed uses are water-dependent and/or water-related.
- (b) Industrial development shall be in accordance with the following regulations:
 - (i) Industrial development shall comply with the Environmental Protection regulations of Section 16.55.250 and shall be located, designed, constructed, and operated in a manner that minimizes impacts to the shoreline, provides for no net loss of shoreline ecological function, and avoids unnecessary interference with shoreline use by adjacent property owners.
 - (ii) In the review of shoreline developments, the City shall give preference to water-dependent uses and then water-oriented industrial uses.

- (iii) Regional and statewide needs for water-dependent and water-related industrial facilities shall be carefully considered. Lands designated for industrial development shall not include shoreline areas with severe environmental limitations, such as critical areas.
 - (iv) Unless public access cannot be provided in a manner that does not result in significant interference with operations or hazards to life or property, industrial development shall consider incorporating public access as mitigation.
 - (v) Where industrial land is proposed for use on land in public ownership, public access shall be required unless it meets an exception in accordance with Subsection 16.55.300(2)(f).
 - (vi) Industrial development and redevelopment shall be encouraged to locate where environmental cleanup and restoration of the shoreline area can be incorporated.
- (c) New nonwater-oriented industrial development shall be prohibited on shorelines except when:
- (i) The use is a part of a mixed-use project that includes water-dependent uses and provides a significant public benefit with respect to the Act's objectives, such as providing public access and ecological restoration.
 - (ii) Navigability is severely limited at the proposed site; and the industrial use provides a significant public benefit with respect to the Act's objectives, such as providing public access and ecological restoration.

- (iii) The site is physically separated from the shoreline by another property or public right of way.

Section 47: There is hereby added a new section 16.55.460 to the Pullman City Code that reads as follows:

16.55.460 Recreational Development.

(1) Policies.

- (a) Ensure consistency in shoreline policies, regulations, and long-term parks planning goals between local, state and federal parks departments.
- (b) Provide shoreline recreational development that is given priority and is primarily related to access to, enjoyment and use of the water and shorelines of the state.
- (c) Recreation facilities should be located, designed, and operated in a manner consistent with the purpose of the environment designation in which it is located and so as to assure that no net loss of shoreline ecological functions or ecosystem-wide processes results.
- (d) Where appropriate, provide shoreline recreation amenities at a capacity that is sufficient to the number of users and the expected future growth in users.

(2) Regulations.

- (a) Recreational development shall demonstrate achievement of no net loss of ecological functions and comply with the Environmental Protection regulations of Section 16.55.250.
- (b) Recreational uses and development must be compatible with existing or proposed uses in the area and must be consistent with City development standards.

- (c) The location, design, and operation of recreational facilities shall be consistent with the purpose of the environment designation.
- (d) Recreational uses and facilities located within shoreline jurisdiction shall include features that relate to access, enjoyment and use of the water and shorelines of the state. Access to recreational areas shall emphasize both consolidated park or open space areas and trail access.
- (e) Commercial components of the use that are not explicitly related to the recreational operation must also conform to the standards of Section 16.55.430 (Commercial Development).

Section 48: There is hereby added a new section 16.55.470 to the Pullman City Code that reads as follows:

16.55.470 Residential Development.

(1) Policies.

- (a) Aim for current and planned shoreline residential uses that have adequate provision of services and utilities while appropriately allowing for shoreline ecological protection.
- (b) Residential development in the City of Pullman should aim to control pollution and prevention of damage to the shoreline so as to ensure no net loss of ecological function.
- (c) Residential development should aim to minimize environmental impact through ecological restoration and other measures.
- (d) Recognize that single-family residences are a common form of shoreline development and are identified as a priority use when developed in a manner consistent with control of pollution and prevention of damage to the natural environment. Without proper management, single-family residential use can cause significant damage to the shoreline through cumulative impacts from

shoreline armoring, stormwater runoff, septic systems, introduction of pollutants, and vegetation modification and removal.

(e) Prohibit new floating homes.

(2) Regulations.

(a) New residential lots created through land division shall be in accordance with the following:

(i) Comply with all applicable subdivision and zoning regulations and be consistent with applicable SMP environment designations and standards.

(ii) Plats and subdivisions must be designed, configured and developed in a manner that assures that no net loss of ecological functions result from the plat or subdivision at full build-out of lots.

(iii) Prevent the need for new shoreline stabilization or flood hazard reduction measures that would cause significant impacts to other properties or public improvements or a net loss of shoreline ecological functions.

(b) Residential development, including accessory uses and appurtenant structures, shall:

(i) Meet all applicable critical area, vegetation, and water quality standards of this SMP.

(ii) Be sufficiently set back from steep slopes and shorelines vulnerable to erosion so that structural improvements, including bulkheads and other stabilization structures, are not required to protect such structures and uses.

- (iii) Be located, designed, and constructed in a manner that assures no net loss of shoreline ecological functions.
- (c) New floating homes shall be prohibited.
- (d) Residential accessory uses or appurtenances shall not be located in required shoreline buffers unless specifically authorized in this SMP. Residential accessory uses shall be prohibited over the water unless clearly water-dependent for recreational or personal use.
- (e) In accordance with Subsection 16.55.300(2)(e)(v) of this SMP, new multiple-unit residential development, including the subdivision of land for more than four parcels, should provide community and/or public access.
- (f) All new residential developments and subdivisions shall comply with the Environmental Protection regulations of Section 16.55.250 and with the Shoreline Stabilization regulations in Subsection 16.55.560(2)(a).

Section 49: There is hereby added a new section 16.55.480 to the Pullman City Code that reads as follows:

16.55.480 Transportation and Parking.

(1) Policies.

- (a) Provide for safe, reasonable, and adequate circulation systems to, and through or over shorelines where necessary.
- (b) Allow for maintenance and improvements to existing roads, railroads and parking areas and for necessary new roads and parking areas where alternative locations outside of the shoreline jurisdiction are not feasible.
- (c) Promote additional trail connections that are consistent with local and regional plans.
- (d) Plan circulation systems that include pedestrian, bicycle, and public transportation where

appropriate, and in support of existing proposed shoreline uses that are consistent with this SMP.

(2) Regulations.

(a) Where other options are available and feasible, new roads, road expansions, or railroads shall not be built within shoreline jurisdiction. When new roads, road expansions, or railroads are unavoidable, proposed transportation facilities shall be planned, located, and designed to achieve the following:

(i) Minimize possible adverse effects on unique or fragile shoreline.

(ii) Maintain no net loss of shoreline ecological functions and implement mitigation standards of this SMP.

(iii) Set back from the OHWM to the maximum distance feasible to allow for a usable shoreline area for vegetation conservation and planned shoreline uses unless infeasible, standards for ADA accessibility and functionality cannot be met, or the cost is disproportionate to the cost of the proposal (the shoreline buffer requirement would add more than twenty percent [20%] to the total project cost).

(b) Parking facilities shall be allowed only as necessary to support an authorized use and are not a preferred use. Parking that does not require a shoreline location to carry out its functions shall:

(i) Be sited outside of shoreline jurisdiction unless no feasible alternative location exists.

(ii) Be planted or landscaped, preferably with native vegetation, to provide a visual and noise buffer for adjoining dissimilar uses or scenic areas.

- (iii) Observe all regulations regarding critical areas and shoreline buffers.
 - (iv) Be designed to incorporate low-impact development practices, such as pervious surfaces and bioswales, to the extent feasible.
- (c) Public roads within the shoreline jurisdiction shall, where possible, provide and maintain visual access to scenic vistas, including, but not limited to, turnouts, rest areas, and picnic areas.
- (d) Use of impervious materials for trails and associated viewing platforms shall be minimized.
- (e) Shoreline crossings and culverts shall be designed to mitigate impact to riparian and aquatic habitat and shall allow for fish passage. Crossings shall occur as near to perpendicular with the waterbody as possible, unless an alternate path would minimize disturbance of native vegetation or result in avoidance of other critical areas such as wetlands.
- (f) Crossings that are to be used solely for access to private property shall be designed, located, and constructed to provide access to more than one lot or parcel of property, where feasible, to minimize the number of crossings.
- (g) Transportation proposals shall be consistent with circulation system plans for roads, railroads, pedestrian, bicycle, and public transportation. The SMP Administrator shall condition transportation proposals to be consistent with applicable City, state, or federal plans and construction standards, as appropriate.
- (h) The provisions of Section 16.55.380 (Frequently Flooded Areas) shall be addressed in the design of transportation facilities.

- (i) All transportation facilities shall comply with the Environmental Protection regulations of Section 16.55.250.
- (j) Public access standards in Section 16.55.300 shall be met.
- (k) If an applicant proposes to pave a roadway or parking area, the proposal shall comply with applicable water quality, landscaping, stormwater, and other applicable requirements of this SMP and the Pullman City Code or any locally applicable regulations.
- (l) When a new or expanded roadway or new or expanded parking facility is proposed, the City may condition the proposal to provide a maintenance plan that promotes best management practices to achieve no net loss of shoreline ecological function, including but not limited to restrictions on the use of herbicides, hazardous substances, sealants or other liquid oily substances, or de-icing practices adjacent to shoreline buffers or critical areas and their buffers.

Section 50: There is hereby added a new section 16.55.490 to the Pullman City Code that reads as follows:

16.55.490 Utilities.

- (1) Policies.
 - (a) Allow for new, expanded, and maintained utilities with criteria for location and vegetation restoration as appropriate.
 - (b) Minimize physical and aesthetic disturbance to the shoreline when siting utilities. When feasible, utilities should be placed underground or designed to do minimal damage to aesthetic qualities of the shoreline.

(2) Regulations.

- (a) Preference shall be given to utility systems contained within the footprint of an existing right-of-way or utility easement over new locations for utility systems.
- (b) Utility projects within shoreline jurisdiction shall be designed to achieve no net loss of shoreline ecological function, preserve the natural landscape, and minimize conflicts with present and planned land and shoreline uses while meeting the needs of future populations in areas planned to accommodate growth.
- (c) Utility projects within shoreline jurisdiction shall comply with the Environmental Protection regulations of Section 16.55.250.
- (d) Utility production and processing facilities, such as power plants and sewage treatment plants, or parts of those facilities, that are nonwater-oriented shall not be allowed in shoreline areas unless it can be demonstrated that no other feasible option is available.
- (e) Transmission facilities for the conveyance of services, such as power lines, cables, and pipelines, shall be located outside of the shoreline area where feasible and when necessarily located within the shoreline area shall assure no net loss of shoreline ecological functions.
- (f) Development of pipelines and cables in shoreline jurisdiction, particularly those running roughly parallel to the shoreline, and development of facilities that may require periodic maintenance which disrupt shoreline ecological functions should be discouraged except where no other feasible alternative exists. When permitted, provisions shall assure that the facilities do not result in net loss of shoreline ecological functions or significant impacts to other shoreline resources and values.

- (g) Installation of utilities across watercourses shall be accomplished by boring beneath the scour depth and hyporheic zone of the waterbody and channel migration zone, where feasible.
- (h) Utilities shall cross at an angle greater than 60 degrees to the centerline of the channel in streams or perpendicular to the channel centerline whenever boring under the channel is not feasible.
- (i) Utility installation shall not increase or decrease the natural rate of shore migration or channel migration.
- (j) Existing utility services routed through shoreline areas shall not be a sole justification for more intense development.

Section 51: There is hereby added a new section 16.55.500 to the Pullman City Code that reads as follows:

16.55.500 Redevelopment, Repair, and Maintenance. This section addresses how regulations apply to redevelopment, repair, or maintenance activities; clarifies how SMP standards proportionally apply to redevelopment activities; and provides a process for multi-year management plans for maintenance and repair.

(1) Policies. Allow all normal redevelopment, repair, and maintenance activities in the shoreline, as defined in Section 16.55.100 (Definitions), unless significant alterations or impacts to the shoreline ecological function will occur as a result of this activity.

(2) Regulations.

- (a) SMP provisions shall not apply retroactively to existing uses and developments.
- (b) Legally established uses and developments may be maintained, repaired, and operated within shoreline jurisdiction and within shoreline and critical area buffers established in this SMP. Normal maintenance and repair is exempt from a

Shoreline Substantial Development Permit, but not the standards of this SMP.

(c) SMP standards shall apply to expansions or alterations of uses or developments and to new development or redevelopment of a property as follows:

(i) The SMP Administrator shall determine the extent of compliance with SMP provisions.

(ii) The required provisions shall be related to and in proportion to the proposal. For example, if an upper story is added to a structure, requirements related to building heights and views may apply.

Section 52: Under Part IX. SHORELINE MODIFICATION POLICIES AND REGULATIONS, there is hereby added a new section 16.55.510 to the Pullman City Code that reads as follows:

16.55.510 General Requirements.

(1) Policies.

(a) Allow shoreline modifications if the use or activity is permitted under this Program or where it can be demonstrated that the proposed activities are necessary to support or protect an allowed use or development.

(b) Allow shoreline modifications if the use or activity is permitted under this Program and only when adverse individual and cumulative impacts are avoided, minimized, and mitigated resulting in no net loss of shoreline ecological functions, in accordance with the mitigation sequence of this Program.

(2) Regulations.

(a) Structural shoreline modifications are only allowed where they are demonstrated to be necessary to support or protect an allowed primary structure or a legally existing shoreline use that is in danger of loss or substantial

damage, or are necessary for reconfiguration of the shoreline for mitigation or enhancement purposes.

- (b) As much as possible, the number and extent of shoreline modifications shall be limited.
- (c) Shoreline modifications shall only be approved if they are appropriate to the specific type of shoreline and environmental conditions for which they are proposed.
- (d) Assure that shoreline modifications individually and cumulatively do not result in a net loss of ecological functions by giving preference to those types of shoreline modifications that have a lesser impact on ecological functions and requiring application of mitigation sequencing (See Subsection 16.55.250(2)(d)). As shoreline modifications occur, all feasible measures to protect ecological shoreline functions and ecosystem-wide processes shall be incorporated.
- (e) Those shoreline modifications that have a lesser impact on ecological functions shall be given preference.
- (f) As modifications occur, all feasible measures to protect ecological shoreline functions and ecosystem-wide processes shall be incorporated.

Section 53: There is hereby added a new section 16.55.520 to the Pullman City Code that reads as follows:

16.55.520 Breakwaters, Jetties, Weirs, and Groins.

(1) Policies.

- (a) Allow breakwaters, jetties, and groins to be located waterward of the OHWM only where necessary to support water-dependent uses, public access, shoreline stabilization, or other specific public purpose.

- (b) Consider alternative structures with less impact where physical conditions make such alternatives feasible.

(2) Regulations.

- (a) Breakwaters, jetties, weirs and groins may be allowed only as part of an approved watershed basin restoration project approved by the City and upon acquisition of any required state or federal permits.
- (b) Breakwaters, jetties, and groins shall be limited to the minimum size necessary.
- (c) Breakwaters, jetties, and groins must be designed to protect critical areas, and shall implement mitigation sequencing to achieve no net loss of ecological functions.
- (d) Proposed designs for new or expanded structures shall be designed by qualified professionals, including both an engineer and a biologist.
- (e) Permit requirements and the level of approval required is regulated by Table 16.55.320-1 in Section 16.55.320.

Section 54: There is hereby added a new section 16.55.530 to the Pullman City Code that reads as follows:

16.55.530 Dredging and Dredge Material Disposal.

(1) Policies.

- (a) Site and design new development to avoid or, if that is not possible, to minimize the need for new and maintenance dredging.
- (b) Ensure dredging and dredge material disposal is done in a manner that avoids or minimizes significant ecological impacts. Impacts that cannot be avoided should be mitigated in a manner that assures no net loss of shoreline ecological functions.

(c) Discourage the disposal of dredge material on shorelands or wetlands within a channel migration zone.

(2) Regulations.

(a) As regulated in this SMP, dredging is the removal of bed material from below the OHWM or wetlands using other than unpowered, hand-held tools for one of the allowed dredging activities listed in Subsection 16.55.530(2)(d). This Section is not intended to cover other removals of bed material waterward of the OHWM or wetlands that are incidental to the construction of an otherwise authorized use or modification (e.g. shoreline crossings, bulkhead replacements). These in-water substrate modifications should be conducted pursuant to applicable general and specific use and modification regulations of this SMP.

(b) New development must be sited and designed to avoid or, if that is not possible, to minimize the need for new and maintenance dredging.

(c) Dredging and dredge material disposal must be done in a manner that avoids or minimizes significant ecological impacts. Impacts that cannot be avoided must be mitigated in a manner that assures no net loss of shoreline ecological functions.

(d) Dredging may only be permitted for the following activities:

(i) Development of essential public facilities when there are no feasible alternatives.

(ii) Maintenance of irrigation reservoirs, drains, canals, or ditches for agricultural purposes.

(iii) Restoration or enhancement of shoreline ecological functions and processes benefiting water quality and/or fish and wildlife habitat.

- (iv) Trenching to allow the installation of necessary underground utilities if no alternative, including boring, is feasible; impacts to fish and wildlife habitat are avoided to the maximum extent possible; and the installation does not alter the natural rate, extent, or opportunity of channel migration.

- (e) Dredging for the primary purpose of obtaining fill material is prohibited, except when the material is necessary for the restoration of ecological functions. The site where the fill is to be placed must be located waterward of the OHWM. The project must be either associated with a Model Toxics Control Act or Comprehensive Environmental Response, Compensation, and Liability Act habitat restoration project or, if approved through a Shoreline Conditional Use Permit, any other significant habitat enhancement project.

- (f) Dredge material disposal within shoreline jurisdiction is permitted under the following conditions:
 - (i) Shoreline ecological functions and processes will be preserved, restored or enhanced, including protection of surface and groundwater; and
 - (ii) Erosion, sedimentation, floodwaters or runoff will not increase adverse impacts to shoreline ecological functions and processes or property.

- (g) Dredge material disposal in open waters may be approved only when authorized by applicable state and federal agencies, and when one of the following conditions apply:
 - (i) Land disposal is infeasible, less consistent with this SMP, or prohibited by law.

- (ii) Nearshore disposal as part of a program to restore or enhance shoreline ecological functions and processes is not feasible.
- (h) All applications for dredging or dredge material disposal shall include the following information, in addition to other application requirements:
 - (i) A description of the purpose of the proposed dredging activities.
 - (ii) A site plan outlining the perimeter of the area proposed to be dredged and the dredge material disposal area, if applicable.
 - (iii) A description of proposed dredging operations, including, but not limited to:
 - (aa) The method of removal.
 - (bb) The length of time required.
 - (cc) The quantity of material to be initially removed.
 - (dd) The frequency and quantity of projected maintenance dredging.
 - (iv) A description of proposed dredge material disposal, including, but not limited to:
 - (aa) Size and capacity of disposal site.
 - (bb) Means of transportation to the disposal site.
 - (cc) Future use of the site and conformance with land use policies and regulations, if applicable.
 - (v) Plans for the protection and restoration of the shoreline environment during and after dredging operations.
 - (vi) An assessment of potential impacts to ecological functions or processes from the proposal.

- (vii) A mitigation plan to address identified impacts, if necessary.

Section 55: There is hereby added a new section 16.55.540 to the Pullman City Code that reads as follows:

16.55.540 Fill and Excavation.

(1) Policies.

- (a) Allow fill when it is demonstrated to be the minimum extent necessary to accommodate an allowed shoreline use or development and with assurance of no net loss of shoreline ecological functions and processes.
- (b) Encourage fill when it is associated with restoration projects.

(2) Regulations.

- (a) All fills shall be located, designed and constructed to protect shoreline ecological functions and ecosystem-wide processes, including channel migration. Any adverse impacts to shoreline ecological functions must be mitigated (See Subsection 16.55.250(2)(d)).
- (b) Fills in wetlands, floodways, channel migration zones or waterward of the OHWM may be allowed only when necessary to support one or more of the following:
 - (i) Water-dependent uses.
 - (ii) Public access.
 - (iii) Cleanup and disposal of contaminated sediments as part of an interagency environmental clean-up plan.
 - (iv) Disposal of dredged material considered suitable under, and conducted in accordance with, the Dredged Material Management Program of the Department of Natural Resources and/or the Dredged Material

Management Office of the U.S. Army Corps of Engineers.

- (v) Expansion or alteration of transportation facilities of statewide significance currently located on the shoreline where alternatives to fill are infeasible.
 - (vi) Ecological restoration or enhancement when consistent with an approved restoration plan.
 - (vii) Maintenance or installation of flood hazard reduction measures consistent with a comprehensive flood hazard management plan and this SMP.
 - (viii) Protection of cultural resources when fill is the most feasible method to avoid continued degradation, disturbance or erosion of a site. Such fills must be coordinated with any affected Indian tribes.
- (c) Upland fills not located within wetlands, floodways, or channel migration zones may be allowed provided they are:
- (i) Part of an allowed shoreline use or modification, or necessary to provide protection to cultural resources.
 - (ii) Located outside applicable buffers, unless specifically allowed in buffers.
- (d) All fills, except fills for the purpose of shoreline restoration, must be designed:
- (i) To be the minimum size necessary to implement the allowed use or modification.
 - (ii) To fit the topography so that minimum alterations of natural conditions will be necessary.
 - (iii) To not adversely affect hydrologic conditions or increase the risk of slope failure, if applicable.

- (e) Unless site characteristics dictate otherwise, fill material within surface waters or wetlands shall be sand, gravel, rock, or other clean material with a minimum potential to degrade water quality and shall be obtained from a state-authorized source.
- (f) A temporary erosion and sediment control (TESC) plan, including BMPs, consistent with the latest edition of the City-adopted Stormwater Management Manual for Eastern Washington (2004) or approved equivalent, shall be provided for all proposed fill activities. Disturbed areas shall be immediately protected from erosion using mulches, hydroseed, or similar methods, and revegetated, as applicable.

Section 56: There is hereby added a new section 16.55.550 to the Pullman City Code that reads as follows:

16.55.550 Shoreline Restoration and Enhancement.

(1) Policies.

- (a) Promote restoration and enhancement actions that improve shoreline ecological functions and processes and target the needs of sensitive plant, fish and wildlife species as identified by Washington Department of Fish and Wildlife, Washington Department of Natural Resources, affected tribes, National Marine Fisheries Service, and/or U.S. Fish and Wildlife Service.
- (b) Ensure restoration and enhancement of shorelines is designed using principles of landscape and conservation ecology and restores or enhances chemical, physical, and biological watershed processes that create and sustain shoreline habitat structures and functions.
- (c) Seek funding to implement restoration and enhancement projects, particularly those that are identified in the Shoreline Restoration Plan of this SMP or in other pertinent plans. Funding may be sought by the City or other entities.

- (d) Develop application processing guidelines that will streamline the review of restoration-only projects.
- (e) Allow for the use of tax incentive programs, mitigation banking, grants, land swaps, or other programs, as they are developed, to encourage restoration and enhancement of shoreline ecological functions and to protect habitat for fish, wildlife and plants.

(2) Regulations.

- (a) Applicability. Shoreline habitat and natural systems enhancement projects include those activities proposed and conducted specifically for the purpose of establishing, restoring or enhancing habitat for priority species in shorelines. Such projects may include shoreline modification actions such as modification of vegetation, removal of non-native or invasive plants, shoreline stabilization, dredging, and filling, provided that the primary purpose of such actions is clearly restoration of the natural character and ecological functions of the shoreline. This Section does not apply to mitigation.
- (b) Shoreline restoration and enhancement projects must be designed using the best available scientific and technical information, and implemented using best management practices.
- (c) All shoreline restoration and enhancement projects must protect the integrity of adjacent natural resources, including aquatic habitats and water quality.
- (d) Shoreline restoration and enhancement shall not significantly interfere with the normal public use of the navigable waters of the state without appropriate mitigation.
- (e) Long-term maintenance and monitoring shall be included in restoration or enhancement proposals.

- (f) Relief for OHWM shifts. Applicants seeking to perform restoration projects are advised to work with the City to assess whether and how the proposed project is allowed relief under RCW 90.58.580, in the event that the project shifts the OHWM landward.

Section 57: There is hereby added a new section 16.55.560 to the Pullman City Code that reads as follows:

16.55.560 Shoreline Stabilization.

(1) Policies.

- (a) Locate and design new development to avoid the need for future shoreline stabilization to the extent feasible.
- (b) Use structural shoreline stabilization measures only when nonstructural methods are infeasible. Nonstructural methods include building setbacks, structure relocation, groundwater management, and other measures.
- (c) Ensure soft structural shoreline stabilization measures are used prior to hard stabilization measures unless demonstrated to be insufficient.
- (d) Allow new or expanded structural shoreline stabilization only where demonstrated to be necessary to support or protect an allowed primary structure or a legally existing shoreline use that is in danger of loss or substantial damage, or for reconfiguration of the shoreline for mitigation or enhancement purposes.
- (e) Ensure all proposals for structural shoreline stabilization, both individually and cumulatively, do not result in a net loss of ecological functions.

(2) Regulations.

- (a) New development must be located and designed to avoid the need for future shoreline stabilization, if feasible.

- (i) Land subdivisions must be designed based on a geotechnical report to assure that future development of the created lots will not require shore stabilization for reasonable development to occur.
 - (ii) New development adjacent to steep slopes or bluffs must be set back sufficiently to ensure that shoreline stabilization is unlikely to be necessary during the life of the structure, as demonstrated in a geotechnical report.
- (b) New development that would require shoreline stabilization that would cause significant impacts to adjacent or down-current properties and shoreline areas is prohibited.
 - (c) All proposals for shoreline stabilization structures, both individually and cumulatively, must not result in a net loss of ecological functions, and must be the minimum size necessary. Soft approaches shall be used unless demonstrated not to be sufficient to protect primary structures, dwellings, and businesses.
 - (d) New or enlarged structural shoreline stabilization measures shall not be allowed, except as follows:
 - (i) To protect an existing primary structure, including residences, when conclusive evidence, documented by a geotechnical analysis, is provided that the structure is in danger from shoreline erosion caused by currents or waves. Normal sloughing, erosion of steep bluffs, or shoreline erosion itself, without a scientific or geotechnical analysis, is not demonstration of need. The geotechnical analysis must evaluate on-site drainage issues and address drainage problems away from the shoreline edge before considering hard or soft structural shoreline stabilization.

- (ii) In support of new nonwater-dependent development, including single-family residences, when all of the conditions below apply:
 - (aa) The erosion is not being caused by upland conditions, such as loss of vegetation and drainage.
 - (bb) Nonstructural measures, such as placing the development farther from the shoreline, reducing the size or scope of the proposal, planting vegetation, or installing on-site drainage improvements, are not feasible or not sufficient.
 - (cc) The need to protect primary structures from damage due to erosion is demonstrated through a geotechnical report. The damage must be caused by natural processes, such as currents or waves.
- (iii) In support of water-dependent development when all of the conditions below apply:
 - (aa) The erosion is not being caused by upland conditions, such as loss of vegetation and drainage.
 - (bb) Nonstructural measures, such as planting vegetation, or installing on-site drainage improvements, are not feasible over time or sufficient.
 - (cc) The need to protect primary structures from damage due to erosion is demonstrated through a geotechnical report.
- (iv) To protect projects for the restoration of ecological functions or for hazardous substance remediation projects pursuant to Chapter 70.105D RCW when nonstructural

measures, planting vegetation, or installing on-site drainage improvements, are not feasible or not sufficient to adequately address erosion causes or impacts.

- (e) New hard structural shoreline stabilization measures shall not be authorized, except when a geotechnical report confirms that:
 - (i) There is a significant possibility that a primary structure will be damaged within three years as a result of shoreline erosion in the absence of such hard structural shoreline stabilization measures, or
 - (ii) Delaying installation of new hard structural shoreline stabilization would preclude use of measures that would avoid impacts on ecological functions.
- (f) New soft structural shoreline stabilization measures may be authorized when a geotechnical report confirms a need to prevent potential damage to a primary structure, but the need is not as immediate as three years.
- (g) An existing shoreline stabilization structure, hard or soft, may be replaced with a similar structure if there is a demonstrated need to protect principal uses or structures from erosion caused by currents or waves. While replacement of shoreline stabilization structures may meet the criteria for exemption from a Shoreline Substantial Development Permit, such activity is not exempt from the policies and regulations of this SMP.
 - (i) For purposes of this Section, "replacement" means the construction of new structure to perform a shoreline stabilization function of existing structure that can no longer adequately serve its purpose. Any additions to or increases in the size of existing shoreline stabilization measures shall be considered new structures.

- (ii) Replacement shall be regulated as a new shoreline stabilization measure, except for the requirement to prepare a geotechnical analysis. A geotechnical analysis is not required for replacements of existing hard or soft structural shoreline stabilization with a similar or softer measure if the applicant demonstrates need to protect principal uses or structures from erosion caused by waves or other natural processes operating at or waterward of the OHWM.
- (iii) Replacement hard structural shoreline stabilization measures shall not encroach waterward of the OHWM or waterward of the existing shoreline stabilization measure unless the residence was occupied prior to January 1, 1992, and there are overriding safety or environmental concerns. In such cases, the replacement structure shall abut the existing shoreline stabilization structure. All other replacement hard structural shoreline stabilization measures shall be located at or landward of the existing shoreline stabilization structure.
- (iv) Hard and soft shoreline stabilization measures may allow some fill waterward of the OHWM to provide enhancement of shoreline ecological functions through creation of nearshore shallow-water habitat and shoreline rearing habitat for salmonids.
- (h) Repair and maintenance of existing shoreline stabilization measures may be allowed, subject to the following standards. While repair and maintenance of shoreline stabilization structures may meet the criteria for exemption from a Shoreline Substantial Development Permit, such activity is not exempt from the policies and regulations of this SMP.
 - (i) Repair and maintenance includes modifications to an existing shoreline

stabilization measure that are designed to ensure the continued function of the measure by preventing failure of any part. Limitations on repair and maintenance include:

- (aa) If within a three-year time period, more than fifty percent (50%) of the length of an existing structure is removed, including its footing or bottom course of rock, prior to placement of new stabilization materials, such work will not be considered repair and maintenance and shall be considered replacement. Work that only involves the removal of material above the footing or bottom course of rock does not constitute replacement.
 - (bb) Any additions to or increases in the size of existing shoreline stabilization measures shall be considered new structures.
 - (cc) The placement of a new shoreline stabilization structure landward of a failing shoreline stabilization structure shall be considered a new structure, not maintenance or repair.
 - (dd) Areas of temporary disturbance within the shoreline buffer shall be expeditiously restored to their pre-project condition or better.
- (i) Structural shoreline stabilization design and construction standards:
- (i) Structural shoreline stabilization measures shall not extend waterward more than the minimum amount necessary to achieve effective stabilization, except for those elements that enhance shoreline ecological functions and minimize impacts.

- (ii) Stairs or other water access measures may be incorporated into shoreline stabilization measures, but shall not extend waterward of the measure or the OHWM.
 - (iii) All structural shoreline stabilization measures must minimize and mitigate any adverse impacts to ecological functions resulting from short-term construction activities. Techniques may include compliance with timing restrictions, use of best management practices, and stabilization of exposed soils following construction.
- (j) In addition to other submittal requirements, the applicant shall submit the following as part of a request to construct a new, enlarged, or replacement shoreline stabilization measure:
- (i) For a new or enlarged hard or soft structural shoreline stabilization measure, a geotechnical report prepared by a qualified professional with a Washington state engineering license. The report shall include the following:
 - (aa) An assessment of the necessity for structural shoreline stabilization by estimating time frames and rates of erosion and reporting on the urgency associated with the specific situation.
 - (bb) An assessment of the cause of erosion, looking at processes occurring both waterward and landward of the OHWM, and documentation of the OHWM field determination.
 - (cc) An assessment of alternative measures to shoreline stabilization.
 - (dd) Where structural shoreline stabilization is determined to be necessary, the assessment must evaluate the feasibility of using soft shoreline

stabilization measures in lieu of hard structural shoreline stabilization measures.

- (ee) Design recommendations for minimum sizing of hard structural or soft structural shoreline stabilization materials, including gravel and cobble beach substrates necessary to dissipate wave energy, eliminate scour, and provide long-term shoreline stability.
- (ii) For replacements of existing hard structural shoreline stabilization measures with a similar measure, the applicant shall submit a written narrative providing a demonstration of need. The narrative must be prepared by a qualified professional. The demonstration of need shall consist of the following:
 - (aa) An assessment of the necessity for continued structural shoreline stabilization, considering site-specific conditions such as water depth, orientation of the shoreline, wave fetch or flow velocities, and location of the nearest primary structure.
 - (bb) An assessment of erosion potential resulting from the action of waves or other natural processes operating at or waterward of the OHWM in the absence of the hard structural shoreline stabilization, and documentation of the OHWM field determination.
 - (cc) An assessment of alternative measures to shoreline stabilization.
 - (dd) An assessment of the feasibility of using soft shoreline stabilization measures in lieu of hard structural shoreline stabilization measures.

(ee) Design recommendations for minimizing impacts of any necessary hard structural shoreline stabilization.

The demonstration of need may be waived when an existing hard structural shoreline stabilization measure is proposed to be repaired or replaced using soft structural shoreline stabilization measures, resulting in significant restoration of shoreline ecological functions or processes.

(iii) For all structural shoreline stabilization measures, including soft structural shoreline stabilization, detailed construction plans, including, but not limited to, the following:

(aa) Plan and cross-section views of the existing and proposed shoreline configuration, showing accurate existing and proposed topography and OHWMs.

(bb) Detailed construction sequence and specifications for all materials, including gravels, cobbles, boulders, logs, and vegetation.

Section 58: Severability. If any provision of this Ordinance or its application to any person or circumstances is held invalid by a court of competent jurisdiction, the remainder of the Ordinance or the application of the provision to other persons or circumstances shall not be affected.

PASSED by the City Council of the city of Pullman at a regular meeting held on the 29th day of March, 2016.

SIGNED by the Mayor in Authentication and Approval Thereof on
the 30th day of March, 2016.



Glenn A. Johnson

Mayor Glenn A. Johnson

ATTEST:

Leann L. Hubbard

Finance Director Leann L. Hubbard

Approved as to Form:

Laura D. McAloon

City Attorney Laura D. McAloon

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