

ORDINANCE 440

AN ORDINANCE RELATING TO THE PROTECTION OF PUBLIC HEALTH, SAFETY, AND WELFARE BY PROTECTING RESOURCE LANDS AND CRITICAL AREAS.

WHEREAS: The Town Council of Yacolt, Washington, is in regular session this 17<sup>th</sup> day of April, 2006; and

WHEREAS: All members of the Town Council have had notice of time, place, and purpose of said meeting; and

WHEREAS: The adoption of the new Critical Areas Ordinance (CAO) is mandated by the Washington State Growth Management Act (GMA) as administered by the Washington State Department of Community, Trade, and Economic Development (CTED); and

WHEREAS: It is understood that the Town of Yacolt is unable to increase residential densities until which time that a regional sewage treatment facility to service the Town is constructed; and

WHEREAS: The Draft CAO was submitted to CTED for review and the required public involvement process for the residents of the Town of Yacolt was implemented; and

WHEREAS: The Town of Yacolt received written comments from the Washington State Department of Ecology and Clark Public Utilities; and

WHEREAS: The Town of Yacolt designed the CAO in accordance with the existing sensitive areas within the Town with a focus on incentives for restoration and enhancement of these sensitive areas and their buffers; and

WHEREAS: Best Available Science (BAS) was used in the creation of the standards found within the ordinance. A list of pertinent literature is included in Appendix of this ordinance; and

WHEREAS: The CAO represents a balance between future development and growth needs while ensuring the protection of sensitive areas within the Town; and

WHEREAS: The Town Council members having considered all of the foregoing; and

NOW, THEREFORE, BE IT ORDAINED BY THE TOWN COUNCIL OF YACOLT, WASHINGTON, as follows:

CRITICAL AREAS ORDINANCE #440

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**440.00.10 AUTHORITY**

This ordinance is adopted pursuant to the authority of the Town of Yacolt under RCW 35.63 and in accordance with RCW 36.70A, implementing Substitute House Bill No. 2929, known as the Growth Management Act, and its amending legislation.

- I. Interpretation. In the interpretation and application of this ordinance, all provisions shall be:
  - A. Considered as minimum requirements;
  - B. Liberally construed in favor of the governing body; and
  - C. Deemed neither to limit nor repeal any other powers granted under state statutes.

**440.00.20 PURPOSE**

The purpose of this ordinance is to protect the public health, safety, and welfare by protecting resource lands and critical areas. The Town of Yacolt finds that development in resource lands and critical areas poses threats to the public health, safety, and welfare, to clean water, and to wildlife habitats. This ordinance aims to protect critical areas by diverting development to less ecologically sensitive areas or regulating development in close proximity to sensitive areas to minimize detrimental impacts.

This Critical Areas Ordinance has been designed to balance the requirements of sensitive area protection using best available science while also allowing for the potential for future growth as outlined in the Growth Management Act.

**440.00.30 CRITICAL LANDS**

The following critical lands are covered under this ordinance:

- I. Critical Aquifer Recharge Areas (CARAs)
- II. Geologic Hazard Areas
- III. Priority Habitat Areas
- IV. Wetlands
- V. Frequently Flooded Areas

**440.00.40 DEFINITIONS**

- I. "Anadromous" means fish that migrate up rivers and streams from the ocean to breed in fresh water.
- II. "Aquifer recharge areas" means areas having a critical recharging effect on aquifers used for potable water where an aquifer that is a source of drinking water is vulnerable to contamination that would affect the certifiable potability of water (WAC 365.190.030). These areas are identified on the Yacolt Critical Lands Water Features Map, adopted herein.
- III. "Best Management Practices (BMPs)" means a practice, or combination of practices, determined by a state or other agency to be the most effective and practical means of reducing the amount of pollution from non-point sources to a level compatible with water quality goals.
- IV. "Buffer zone" means an areas required by this ordinance that provides a natural vegetated zone surrounding a natural, restored, or newly created critical area, which protects the sensitive area from adverse impacts and is an integral part of the habitat ecosystem.
- V. "Conservation covenant" means an instrument recorded with the Town that places certain restrictions or limitations on the affected parcel.
- VI. "Critical areas" means the following areas and ecosystems:
  - A. Wetlands;
  - B. Areas within a Category I Recharge Area as defined by Clark County's CARA ordinance, CCC 13.70, and the Yacolt Critical Lands Water Features Map adopted herein;
  - C. Habitat conservation areas;
  - D. Frequently flooded areas;
  - E. Geologic hazard areas.
- VII. "Enhancement" means actions performed to improve the condition and overall functions of a particular sensitive area or its corresponding buffer.
- VIII. "Exotic" means any species of plants or animals that are not native to the watershed. Exotic plant species are listed in Appendix A.

- IX. "Frequently flooded areas" means those flooded areas in the 100-year floodplain designations of the Federal Emergency Management Agency and the National Flood Insurance Program and other frequently flooded areas. This shall mean the same as "area of special flood hazard" as defined in Section 2 of the Town of Yacolt Zoning Ordinance.
- X. "Functions" means the beneficial roles served by a particular sensitive area.
- XI. "Geologically hazardous areas" means areas that are susceptible to erosion, sliding, earthquake or other geologic events and are therefore not suited to the development or siting of commercial, residential or industrial development consistent with public health or safety concerns (RCW 36.70A). For purposes of this ordinance the areas are as delineated on Yacolt Critical Lands Geologic Hazards Map adopted herein. The maps are based upon information developed and obtained from Clark County Departments of Community Development and Assessment and GIS. The maps are intended to meet the designation listed by WAC 365-190-080 and are based on the best available information.
- XII. "Grading" means any movement, removal or placement of earth, rock, or ground cover by hand, mechanical or other means which equals or exceeds twenty (20) cubic yards in quantity.
- XIII. "Intermittent stream" means surface streams with no measurable flow during thirty (30) consecutive days in a normal water year.
- XIV. "Mitigation" means a negotiated action involving the avoidance, reduction, or compensation for possible adverse impacts. In the following order of preference this includes:
  - A. Avoiding the impacts altogether by not taking action;
  - B. Reducing or eliminating impacts by preservation or maintenance;
  - C. Minimizing impacts by limiting degree or magnitude of development;
  - D. Rectifying impacts by repairing, rehabilitating or restoring;
  - E. Compensating for impacts through enhancement of existing sensitive areas;
  - F. Compensating for impacts through creation of new sensitive areas with similar functions as those impacted;
  - G. Monitoring impacts by a planned evaluation process.
- XV. "Normal water year" means a twelve (12) month period (October 1<sup>st</sup> through September 30<sup>th</sup>) with average precipitation based upon data from the past fifty (50) years.
- XVI. "Ordinary high water mark (OHWM)" means the point on the bank of a stream where the water is present often enough to leave a distinct wear mark. More specifically, the OHWM is the point on the bank or shore up to which the water, by its presence and action or flow, leaves a distinct mark indicated by erosion, destruction of or changes in vegetation or other easily recognizable characteristic.
- XVII. "Steep slopes" means slopes that are, or exceed, twenty-five percent (25%) in a direction greater than forty-five (45) degrees east or west of true south, or severe topographic relief.
- XVIII. "Streams" means those areas where surface water produces a defined channel or bed at least two feet (2') in width between the ordinary high water marks.
- XIX. "Watershed" mean an area of topographic relief that drains to a single surface water system.
- XX. "Wetland" or "wetlands" means areas that are inundated or saturated by surface water or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas. Wetlands do not include those artificial wetlands intentionally created from non-wetland sites, including, but not limited to, irrigation and drainage ditches, grass-lined swales, canals, retention facilities, wastewater treatment facilities, farm ponds, and landscape amenities, or those wetlands created after July 1, 1990, that were unintentionally created as a result of the construction of a road, street, or highway. Wetlands may include those artificial wetlands intentionally created from non-wetland areas created to mitigate conversion of wetlands.

**440.10.00 CRITICAL AQUIFER RECHARGE AREAS (CARAs)**

440.10.010 Introduction.

- I. Purpose. This ordinance is intended to protect public health, safety, and welfare by preventing degradation, and where possible, enhance the quality of groundwater which will be, or might likely be, used in the future for drinking water of business purposes. This will be accomplished by limiting potential contaminants within designated CARAs. The

requirements of this ordinance are intended to fulfill obligations of state law under Chapter 36.70A RCW, Growth Management—Planning By Selected Counties And Cities; Chapter 70.119A RCW, Public Water Systems—Penalties And Compliance; Chapter 246-290 WAC, Public Water Supplies; Chapter 173-303 WAC, Dangerous Waste Regulations; and Chapter 173-200 WAC, Water Quality Standards For Ground Waters Of The State Of Washington.

- II. Definition. Critical Aquifer Recharge Areas (CARAs) are defined in WAC 365-190-030 as the geographical areas "where an aquifer that is a source of drinking water is vulnerable to contamination that would affect the potability of the water". While all groundwater can potentially be negatively affected by contamination, special protection measures are necessary in areas designated as CARAs due to their critical role in protecting the drinking water supplies.
  - III. Classification of Critical Aquifer Recharge Areas.
    - A. Category I is the highest priority critical aquifer recharge area. Category I is the one (1) year time of travel for Group A water wells, shown on the Town of Yacolt Critical Aquifer Recharge Areas Map.
    - B. Category II is the primary critical aquifer recharge area. This area consists of the unconsolidated sedimentary aquifer and the Troutdale gravel aquifer, both shown on Clark County's Critical Aquifer Recharge Areas Map.
    - C. Parcels that are partly within Category I and Category II shall be subject to the Category I provisions in this ordinance.
    - D. Parcels that are partly inside Category II, but outside Category I, shall be subject to the Category II provisions in this ordinance.
  - IV. Map. The Yacolt Critical Lands Water Features Map identifies CARAs within the Town's municipal boundaries.
- 440.10.020 Standards.
- I. Exempt activities in Categories I and II. The following activities do not require a CARA permit:
    - A. Currently existing activities that legally existed on July 31, 1997;
    - B. All residential uses other than those having activities covered by Section 440.10.020(II);
    - C. Other uses not listed in Sections 440.10.020(II) or (III);
    - D. Activities already permitted and regulated by the state and the Clark County Health Department to incorporate best management practices; and
    - E. Other Exemptions. The following Underground Storage Tank (UST) systems, including any piping connected thereto, are exempt from the requirements of this ordinance:
      - 1. Any UST system holding hazardous wastes subject to Subtitle C of the Federal Solid Waste Disposal Act, or a mixture of such hazardous waste and other regulated substances;
      - 2. Any wastewater treatment tank system that is part of a wastewater treatment facility regulated under Section 402 or 307(b) of the Clean Water Act;
      - 3. Equipment or machinery that contains regulated substances for operational purposes such as hydraulic lift tanks and electrical equipment tanks;
      - 4. Any UST system whose capacity is one hundred ten (110) gallons or less;
      - 5. Any UST system that contains a de minimis concentration of regulated substances;
      - 6. Any emergency spill or overflow containment UST system that is expeditiously emptied after use;
      - 7. Farm or residential UST systems of one thousand one hundred (1,100) gallons or less capacity used for storing motor fuel for noncommercial purposes (i.e., not for resale);

8. UST systems used for storing heating oil for consumptive use on the premises where stored; except that such systems which store in excess of one thousand one hundred (1,100) gallons are subject to the release reporting requirements of WAC 173-360-372;
  9. Septic tanks;
  10. Any pipeline facility (including gathering lines) regulated under:
    - a. The Natural Gas Pipeline Safety Act of 1968 (49 U.S.C. App. 1671, et seq.);
    - b. The Hazardous Liquid Pipeline Safety Act of 1979 (49 U.S.C. App. 2001, et seq.);
    - c. Which is an intrastate pipeline facility regulated under state laws comparable to the provisions of the law referred to in subsection (10)(a) or (b) of this definition.
  11. Surface impoundments, pits, ponds, or lagoons;
  12. Stormwater or wastewater collection systems;
  13. Flow-through process tanks;
  14. Liquid traps or associated gathering lines directly related to oil or gas production and gathering operations; or
  15. Storage tanks situated in an underground area (such as a basement, cellar, vault, mineworking drift, shaft, or tunnel) if the storage tank is situated upon or above the surface of the floor.
- II. Permitted Activities in Categories I and II. The following activities require a CARA permit in both Categories I and II:
- A. Above- and below-ground storage tanks (tanks and pipes used to contain an accumulation of regulated substances);
  - B. Facilities that conduct biological research;
  - C. Boat repair shops;
  - D. Chemical research facilities;
  - E. Dry cleaners;
  - F. Gasoline service stations;
  - G. Pipelines;
  - H. Printing and publishing shops (that use printing liquids);
  - I. Below-ground transformers and capacitors;
  - J. Sawmills [producing over ten thousand (10,000) board feet per day];
  - K. Solid waste handling and processing;
  - L. Vehicle repair, automotive recycling and recyclable materials;
  - M. Funeral services;
  - N. Furniture stripping;
  - O. Motor vehicle service garages (both private and government);
  - P. Photographic processing;
  - Q. Chemical manufacturing and reprocessing;
  - R. Creosote and asphalt manufacturing and treatment;
  - S. Electroplating activities;
  - T. Petroleum and petroleum products refining, including reprocessing;
  - U. Wood products preserving;
  - V. Golf course;
  - W. Regulated waste treatment, storage, disposal facilities that handle hazardous material;
  - X. Medium quantity generators (dangerous, acutely hazardous, and toxic extremely hazardous waste); and
  - Y. Large quantity generators (dangerous, acutely hazardous, and toxic extremely hazardous waste).
- III. Prohibited Activities in Category I. The following activities are considered high-impact uses due to the probability and/or potential magnitude of their adverse effects on groundwater and shall be prohibited within Category I. These activities are permitted in Category II, but require a CARA permit:

- A. Landfills;
  - B. Class V injection wells;
  - C. Agricultural drainage wells;
  - D. Untreated sewage waste disposal wells;
  - E. Cesspools;
  - F. Industrial process water and disposal wells;
  - G. Radioactive waste disposal;
  - H. Radioactive disposal sites; and
  - I. Surface mining operations.
- 440.10.030 Administration.
- I. CARA Permit Requirements.
    - A. To receive a CARA permit, the applicant must demonstrate, through a Level 1 site evaluation report, how they will integrate necessary and appropriate best management practices to prevent degradation of groundwater. The applicant must also meet existing local, state, and federal laws and regulations.
    - B. If an applicant wants to avoid implementation of best management practices, they must submit a Level 2 site evaluation report and develop and implement a monitoring program that:
      - 1. Demonstrates how the applicant will prevent degradation to groundwater. The applicant must also meet existing local, state, and federal laws and regulations; and
      - 2. Includes quarterly reporting to the department. The department will evaluate the monitoring program and may require periodic changes based on the monitoring results, new technology, and/or BMPs.
  - II. Level 1 Site Evaluation Report/Approval Criteria.
    - A. The site evaluation report shall be done by, or under the direction of, and signed by a qualified groundwater professional. The report will identify appropriate BMPs and show how they will prevent degradation of groundwater. Examples of BMPs are described in the guidance documents in Section 440.10.040(I)(D).
    - B. The report will identify how the applicant will follow the requirements of the Dangerous Waste Regulations, WAC 173-303, in the event hazardous material is released onto the ground or into groundwater.
    - C. The report will include site specific hydrogeologic information to support a conclusion of no degradation to groundwater. Hydrogeologic information is available from existing U.S. Geological Survey reports. (A Description of Hydrogeologic Units in the Portland Basin, Oregon and Washington, Water-Resources Investigation Report 90-4196); U.S. Department of Agriculture, Natural Resources Conservation Service (Soil Survey of Clark County, Washington, 1972); Clark County; the Clark County Health Department; and from local purveyors.
    - D. The report will be reviewed by the department in the same process as the primary development permit. If approved, the applicant will receive a CARA permit allowing the activity on the subject property.
    - E. The department may waive the requirement for a qualified groundwater professional. This would be done when the site conditions or project mitigations have been, or can be, adequately addressed in the site evaluation report.
  - III. Level 2 Site Evaluation Report/Approval Criteria.
    - A. A qualified groundwater professional will determine whether the proposed activity will have any adverse impacts on groundwater in CARAs. This determination must be based upon the requirements of the Safe Drinking Water Act and the Wellhead Protection Area Program, Public Water Supplies, WAC 246-290; Water Quality Standards for Ground Waters of the State of Washington, WAC 173-200; and Dangerous Waste Regulations, WAC 173-303. By this reference, WACs 173-200, 173-303, and 246-290, as written and hereafter updated, will be part of this ordinance. WACs 173-200, 173-303, and 246-290 shall be available for review at Town Hall. Copies shall be available for a fee at Town Hall.

- B. The Level 2 site evaluation report will include the following:
1. Identification of the proposed development plan, along with potential impacts (e.g., on-site septic systems and other on-site activities) that may adversely impact groundwater quality underlying or down gradient of the project or project area;
  2. Site plans or diagrams at an appropriate scale [one to two thousand four hundred (1:2,400) or one inch (1") to two hundred feet (200')] showing the location of abandoned and active wells, springs, and surface water bodies within one thousand feet (1,000') of the project or project area; and
  3. A description of the geologic and hydrogeologic characteristics of the subject property including the following:
    - a. Lithologic characteristics and stratigraphic relationships;
    - b. Aquifer characteristics including recharge and discharge areas, depth to and static water-flow patterns, and an estimate of groundwater-flow velocity;
    - c. Contaminant fate and transport including probable migration pathways and travel time of a potential contaminant release from the site through the unsaturated zone to the aquifer(s) and through the aquifer(s), and how the contaminant(s) may be attenuated within the unsaturated zone and the aquifer(s);
    - d. Appropriate hydrogeologic cross-sections which depict lithology, stratigraphy, aquifer, units, potential or probable contaminant pathways from a chemical release, and rate of groundwater flow;
    - e. Existing groundwater quality; and
    - f. A proposal for quarterly monitoring of groundwater quality to detect changes and a description of corrective actions that will be taken if monitoring results indicate contaminants from the site have entered the underlying aquifer(s).
- C. The report will be reviewed by the department, in consultation with the Clark County Health Department and/or the local water purveyor, in conjunction with the same process as the primary development permit. If approved, the applicant will receive a CARA permit allowing the activity on the subject property.
- D. Penalties. Any person, firm, or corporation who violates, disobeys, omits, neglects, or refuses to comply with any of the provisions of this ordinance shall be subject to penalties as defined in RCW 70.119A; WACs 173-200 and 246-290.

440.10.040 Incentives, Education, and Technical Assistance.

I. Incentives.

- A. Best Management Practices (BMPs). Individuals who implement BMPs to safeguard groundwater may not be required to provide additional geologic and hydrogeologic characteristics of the subject property, pursuant to Sections 440.00.030(B) (3) and (5). Individuals shall implement the Washington State Department of Ecology's Stormwater, Water Quality, Hazardous Waste, Wetland, and Solid Waste Program BMPs; and BMPs from the Departments of Health, Agriculture, Transportation, and State Conservation District Office.
- B. Maintain Open Spaces. An individual may receive a tax reduction for not creating impervious surface within Category I. Open space may allow recharge to replenish the groundwater supply.
- C. Land Exchange. The purpose of land exchange is to locate high-use impacts outside Category I. State agencies and local government may convey, sell, lease, or trade existing public lands in order to obtain public ownership over all or part of a CARA. Such exchanges may occur only upon agreement between the recorded landowner and state and local agencies authorized to exchange the subject land.



- D. The following documents can be used to assist applicants in obtaining a CARA permit:
1. A Guide for Prospective Well Owners (WDOE, 75-011);
  2. Guidelines for the Development of Groundwater (WDOE, 86-002);
  3. Ground Water Resource Protection: A Handbook for Local Planners and Decision Makers (WDOE, 87-003);
  4. Dry Cleaning Hazardous Waste Do's and Don'ts (WDOE, 91-012c);
  5. Electroplating (WDOE, 91-0129)'
  6. Guidance for Remediation of Petroleum Contaminated Soils (WDOE, 91-030);
  7. Protecting Ground Water: A Strategy for Managing Agricultural Pesticides and Nutrients (WDOE, 91-042);
  8. Empty Pesticide Container Disposal (WDOE, 92-br-008);
  9. Managing Hazardous Waste for Radiator Shops (WDOE, 92-br-009);
  10. Managing Hazardous Waste for Transmission Shops (WDOE, 93-br-010);
  11. Managing Hazardous Waste for Service Stations (WDOE, 93-br-013);
  12. Managing Hazardous Waste for Tire Dealers (WDOE, 93-br-015);
  13. Surface and Ground Water on Coastal Bluffs: A Manual of Practices for Coastal Property Owners (WDOE, 93-009);
  14. Tank Owners and Operators Guide to Using Ground Water Monitoring for UST Release Detection (WDOE, 93-012);
  15. A Guide for Lithographic Printers (WDOE, 94-139);
  16. A Guide for Photo Processors (WDOE, 94-138);
  17. A Guide for Screen Printers (WDOE, 94-137);
  18. Best Management Practices to Prevent Stormwater Pollution at Vehicle Recycling Facilities (WDOE, 94-146);
  19. Prevention of Stormwater Pollution at Log Yards—Best Management Practices (WDOE, 95-053);
  20. Vehicle and Equipment Washwater Discharges—Best Management Practices (WDOE, 95-056);
  21. Best Management Practices for Auto Dealerships—Auto Wastes and Containers (WDOE, 95-405A);
  22. Best Management Practices for Auto Dealerships—Waste Processes (WDOE, 95-405B);
  23. Irrigation Best Management Practices to Protect Ground Water and Surface Water Quality (WDOE, 96-013);
  24. Frequently Asked Questions Concerning Solvent and Cleaner Disposal (WDOE, 96-422);
  25. Management Requirements for Special Waste (WDOE, 96-1254);
  26. Drycleaners (WDOE, F-HWTR-93-541); and
  27. Selecting Best Management Practices for Stormwater Management (WDOE, WQ-R-93-011).

**440.20.00 GEOLOGIC HAZARD AREAS**

440.20.010 Introduction.

- I. Purpose. The purpose of this ordinance is to safeguard public health, safety, and welfare by placing limitations on development in geologically hazardous areas consistent with the requirements of the Growth Management Act and WAC 365-190-080.
- II. Applicability and Exemptions.
  - A. Applicability. This ordinance applies to all construction, development, earth movement, clearing, or other site disturbance which requires a permit, approval or authorization from the Town in or within one hundred feet (100') of a geologic hazard area except for exempt activities listed in subsection (II)(B). Regulated geologic hazards include steep slope hazard areas, landslide hazard areas, and seismic hazard areas.

B. Exempt Activities and Uses. The following activities and uses are exempt from the provisions of this ordinance:

1. Emergency activities which require immediate action to prevent an imminent threat to health, safety, or property. As soon as practical, the responsible party shall provide written notification to the responsible official and obtain all applicable permits;
2. The expansion, remodel, reconstruction, or replacement of any structures which will be set back from the geologic hazard area a distance which is greater than or equal to the setback of the original structure and which will not increase the building footprint by more than one thousand (1,000) square feet inside a steep slope hazard area, landslide area, or their buffers;
3. Any replacement, operation, repair, modification, installation, or construction by a state or locally franchised utility company in an improved right-of-way or utility corridor;
4. Normal and routine maintenance and repair of existing utility facilities, equipment, and appurtenances;
5. Any development activity on or within one hundred feet (100') of steep slopes that have been created through previous, legal grading activities is exempt from steep slope hazard regulations; and
6. All forest practices other than Class IV G (conversions).

C. This ordinance applies to Class IV G forest practices (conversions).

III. Geologic Hazard Area Maps and Designation Criteria.

A. Maps.

1. Adopted Maps. The following maps are adopted by reference and are on file with the Clark County Auditor:
  - a. Severe erosion hazard areas.
  - b. Relative earthquake hazard map—Vancouver urban area.
  - c. Steep Slopes and Landslide Hazards.
2. Identification. Geologic hazards are usually localized individual occurrences that may affect only small, separate areas. In addition, activities such as grading and clearing can create or increase slope instability where none was previously identified. Because of this, geologic hazard areas have not been identified on a site-specific basis.
3. Source Data. The approximate location and extent of geologic hazard areas are shown on the geologic hazard area maps adopted herein. Clark County will adopt updated mapping as more detailed information becomes available. The maps are intended to meet the designation criteria listed in WAC 365-190-080 and are based on the best available information, including:
  - a. Slope Areas Mapping for Clark County, Clark County Department of Assessment and GIS, and the Town of Yacolt;
  - b. Slope Stability of Clark County, Washington State Department of Natural Resources, 1975 and landslides mapped in Geologic Map of the Vancouver Quadrangle, Washington and Oregon, Washington State Department of Natural Resources, 1987; and
  - c. Relative Earthquake Hazard Map for the Vancouver, Washington Urban Region, Washington State Department of Natural Resources, 1994.
4. Map Updates. Results of binding pre-determinations and other site investigations required under this ordinance and the building code will be compiled by the department and incorporated into future geologic hazard area map revisions. The Town will adopt updated maps as more detailed information becomes available. The review of such new information shall include local geologists and engineers familiar with the requirements of this ordinance and how it is applied to new development.

- B. Designation Criteria. Along with geologic hazard area mapping, designation criteria for steep slope hazard areas, landslide areas, and seismic hazard areas are listed below. Where the geologic hazard area maps and designation criteria conflict, the designation criteria shall prevail.
1. Steep slope hazard areas are areas where there is not a mapped or designated landslide hazard, but there are steep slopes equal to or greater than forty percent (40%) slope. Steep slopes which are less than ten feet (10') in vertical height and not part of a larger steep slope system, and steep slopes created through previous legal grading activity are not regulated steep slope hazard areas. The presence of steep slope suggests that slope stability problems are possible.
  2. Landslide hazard areas are areas that, due to a combination of slope inclination, soil type, and presence of water are susceptible to landsliding in accordance with the following criteria:
    - a. Areas of previous slope failures including areas of unstable old or recent landslides;
    - b. Areas with all three (3) of the following characteristics:
      - 1) Slopes steeper than fifteen percent (15%);
      - 2) Hillside intersecting geologic contacts with permeable sediment overlying a low permeability sediment or bedrock; and
      - 3) Any springs or groundwater seepage.
    - c. Areas mapped by:
      - 1) Washington State Department of Natural Resources Open File Report: Slope Stability of Clark County, as having potential instability, historical, or active landslides, or as older landslide debris, and
      - 2) The Washington State Department of Natural Resources Open File Report Geologic Map of the Vancouver Quadrangle, Washington and Oregon, as landslides.

IV. Reasonable Use Assurance. Nothing in this section shall preclude the issuance of a single-family building permit on a lawfully created lot.

440.20.020 Standards.

- I. General. The following requirements for development activities in geologic hazard areas list prohibited activities, buffer requirements, and setback requirements. The following section describes required buffers and setbacks, and general requirements for development activities in geologic hazard areas.
  - A. Development on steep slope hazard areas is regulated to prevent potential landslide damage by placing improvements away from steep slopes and leaving steep slopes in natural vegetation.
  - B. Development in landslide hazard areas is generally not allowed, and requires buffers that keep vegetation in a natural state on and around the landslide hazard area.
  - C. Seismic hazards due to liquefaction, ground shaking amplification, and landslides exist for large areas of Clark County. Only detailed site analysis can determine how soils and structures will respond at a particular site. Site investigation requirements of the Uniform Building Code are used to ensure that structures are built to minimum safety standards based on existing knowledge of earthquake hazard.

- D. If an applicant wishes to perform development activities not allowed by Sections 440.20.020(IV) and (V), a geologic hazard area study meeting the requirements of Section 440.20.030(III) must be completed. The development proposal may be approved, approved with conditions, or denied based on the responsible official's evaluation of the suitability of the mitigation measures proposed by the geologic hazard area study to protect life, safety, and slope stability on abutting properties.
- II. Erosion Requirements. All activities on hillsides subject to severe erosion hazard must minimize erosion by following up to date BMPs.
- III. Stormwater Requirements. For projects within one hundred feet (100') of steep slope hazard areas or landslide hazard areas, runoff shall not be infiltrated into the ground. Runoff should be directed through a water-tight pipe beyond the base of the slope or landslide area and discharged to a suitable drainage way. An energy dissipating device shall be placed at the discharge point.
- IV. Steep Slope Hazard Areas.
  - A. Except for mineral extraction practices, development activity on or within one hundred feet (100') of slopes steeper than forty percent (40%) that do not have a mapped or designated landslide hazard shall comply with the requirements of this section.
  - B. Buffer and Setback Distances.
    - 1. For slopes greater than or equal to forty percent (40%) and less than one hundred percent (100%), buffers shall extend a distance away from the toes of the slope that is equal to the vertical height of the slope divided by two (2), but not to exceed fifteen feet (15') (Figure 40.430.020-1). For slopes less than one hundred percent (100%), the toe of the slope is defined as a distinct break in slope at the base of a steep slope.
    - 2. For slopes greater than one hundred percent (100%), the buffer shall extend a distance back from the toe of the slope equal to the height of the slope divided by two (2), not to exceed fifteen feet (15'). The buffer shall be measured horizontally from a plane, drawn tangent to the top of the slope at an angle of forty-five (45) degrees to the proposed structure (Figure 40.430.020-3).
    - 3. The setback shall be eight feet (8') beyond the buffer.
  - C. The responsible official may approve buffers and setbacks which differ from those required by subsection (A) of this section if the applicant submits a geologic hazard area study described in Section 440.20.030(III), which technically demonstrates and illustrates that the alternative buffer provides protection which is greater than or equal to that provided by the buffer required in subsection (IV)(A) of this section.
  - D. The responsible official may increase buffers or setbacks where necessary to meet requirement of the Uniform Building Code.
  - E. All portions of steep slope hazard areas and steep slope buffers on the site which area planned to be undisturbed by permitted development activities shall be designated as landslide protection areas in accordance with this section.
  - F. Other than for exemptions listed in Sections 440.20.010(II) and 440.20.030(II), vegetation removal is not allowed on slopes over forty percent (40%) without an approved geologic hazard area study described in Section 440.20.030(III).
  - G. Buffers, landslide protection areas, and setbacks for steep slopes on projects having approved grading shall be based on regulated steep slopes that remain after that grading.
- V. Landslide Hazard Areas.
  - A. A development proposal on a site containing a landslide hazard area shall meet the following requirements:

1. A minimum buffer of fifty feet (50') shall be established from all edges of the landslide hazard area. The buffer shall be extended as required to mitigate a steep slope or erosion hazard or as otherwise necessary to protect the public health, safety, and welfare; and
  2. All portions of landslide hazard areas and buffers shall be designated as landslide protection areas in accordance with Section 440.20.030(II).
- B. Other than exempt activities, clearing or alteration of a landslide is allowed only if the following are met:
1. A development proposal does not decrease slope stability on contiguous properties;
  2. Mitigation is based on best available engineering and geological practice and is described in an approved geologic hazard area study as specified in Section 440.020.030(III).
- C. Neither buffers nor a landslide protection area will be required if the activity meets the requirements of subsection (V)(B) of this section.

Figure 40.430.020-1 through Figure 40.430.020-3

Slope Setback Diagrams

Figure 40.430.020-1

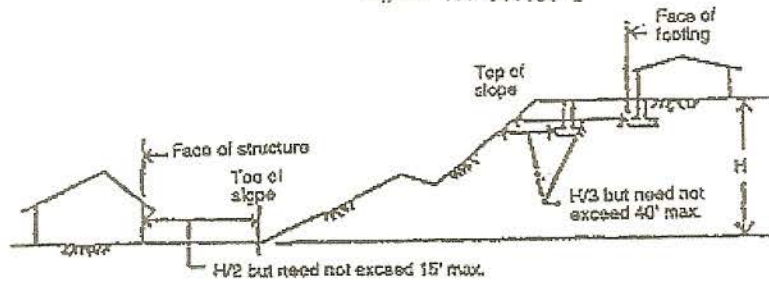


Figure 40.430.020-2

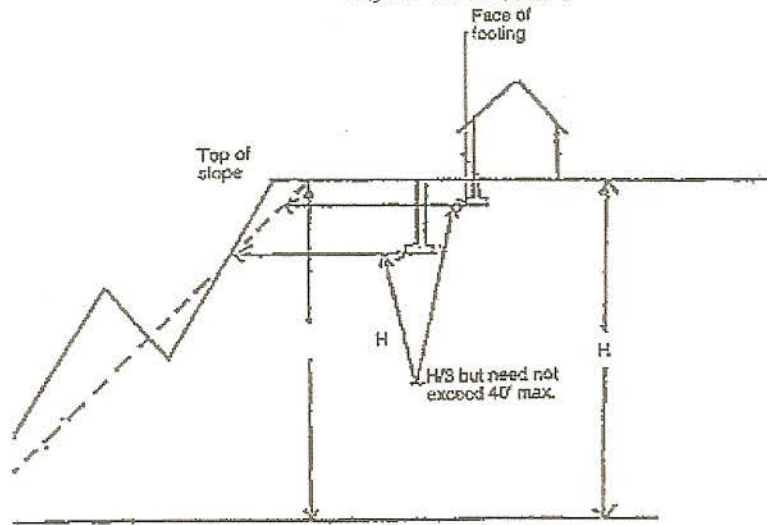
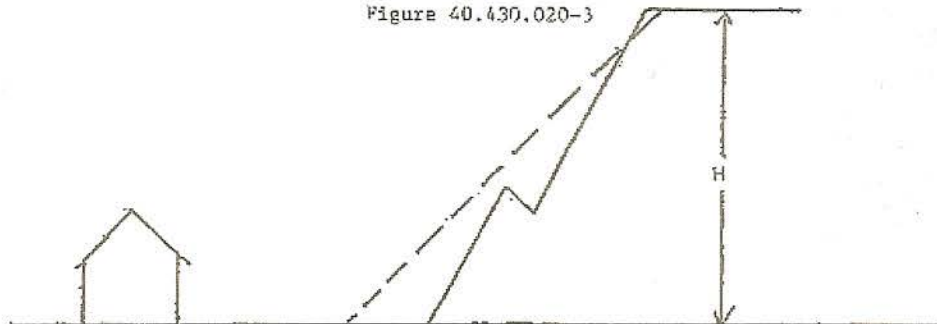


Figure 40.430.020-3



<b>Site Specific Seismic Hazard Investigation Requirements Based on a Relative Earthquake Hazard Map</b>					
<b>4=</b>	<b>Site investigation with panel peer review required.</b>				
<b>3=</b>	<b>Site investigation required unless data suggest otherwise.</b>				
<b>2=</b>	<b>Site investigation not required unless data suggest otherwise.</b>				
<b>1=</b>	<b>Site investigation not required.</b>				
<b>(a)</b>	<b>Discretion should be applied so that unnecessary site investigations are not required for smaller buildings within these categories. Guidelines to determine when investigations are needed should be established.</b>				
<b>(b)</b>	<b>Site investigation required if stipulated in a subdivision approval or other development approval of the planning agency. (Confirm definition.)</b>				
<b>Land Use Group</b>	<b>Land Uses</b>	<b>Relative Earthquake Hazard Zone</b>			
		<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>
<b>Earthquake Performance Objective is Fully Functional (Acceptable risk is near zero)</b>					
<b>Potential Catastrophe if Damaged</b>	<b>Large dams</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>4</b>
	<b>Nuclear plants</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>4</b>
	<b>Facilities using/storing large quantities of hazardous materials</b>	<b>4</b>	<b>3</b>	<b>3</b>	<b>3</b>

<b>Site Specific Seismic Hazard Investigation Requirements Based on a Relative Earthquake Hazard Map</b>					
<b>4=</b>	<b>Site investigation with panel peer review required.</b>				
<b>3=</b>	<b>Site investigation required unless data suggest otherwise.</b>				
<b>2=</b>	<b>Site investigation not required unless data suggest otherwise.</b>				
<b>1=</b>	<b>Site investigation not required.</b>				
<b>(a)</b>	<b>Discretion should be applied so that unnecessary site investigations are not required for smaller buildings within these categories. Guidelines to determine when investigations are needed should be established.</b>				
<b>(b)</b>	<b>Site investigation required if stipulated in a subdivision approval or other development approval of the planning agency. (Confirm definition.)</b>				
<b>Land Use Group</b>	<b>Land Uses</b>	<b>Relative Earthquake Hazard Zone</b>			
		<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>
Earthquake Performance Objective is Immediate Occupancy (Acceptable risk is very low)					
High-Occupancy with Involuntary or Dependent Occupants	Day care centers<250 kids	3	3	2	1
	Day care centers>250 kids	3	3	2	1
	Schools K-12<300 students	3	3	2	1
	Schools K-12>300 students	3	3	2	1
High-Occupancy with Involuntary or Dependent Occupants	Convalescent homes<50 persons	3	3	2	1
	Convalescent homes>50 persons	3	3	2	1
	Jails and detention facilities	3	3	2	1
Essential for Emergency Response	Fire and police stations	3	3	3	2
	Garages for emergency vehicles	3	3	3	2
	Water tanks	3	3	3	2
	Structures housing fire suppressants	3	3	3	2
	Government communications centers	3	3	3	2
	Emergency response centers	3	3	3	2
	Hospitals	3	3	3	2
	Medical buildings with surgical services	3	3	3	2
Critical to the Functioning of the Town of Yacolt	Large power plants	3	3	3	2
	Power interties	3	3	3	2
	Sewage treatment plants	3	3	3	2
	Water plants	3	3	3	2
	Regional highways and bridges and tunnels	3	3	3	2
	Regional rail lines	3	3	3	2
	Airports	3	3	3	2
	Port facilities	3	3	3	2
	Major communications facilities	3	3	3	2
	Telephone exchanges	3	3	3	2
Radio and TV stations	3	3	3	2	



Site Specific Seismic Hazard Investigation Requirements Based on a Relative Earthquake Hazard Map					
4=	Site investigation with panel peer review required.				
3=	Site investigation required unless data suggest otherwise.				
2=	Site investigation not required unless data suggest otherwise.				
1=	Site investigation not required.				
(a)	Discretion should be applied so that unnecessary site investigations are not required for smaller buildings within these categories. Guidelines to determine when investigations are needed should be established.				
(b)	Site investigation required if stipulated in a subdivision approval or other development approval of the planning agency. (Confirm definition.)				
Land Use Group	Land Uses	Relative Earthquake Hazard Zone			
		A	B	C	D
Earthquake Performance Objective is Damage Control (Acceptable risk is very low)					
High Occupancy	Buildings>10 stories	3	3	3	2
	Public and private colleges<500 occupants	3	3	3	2
	Public and private colleges>500 occupants	3	3	3	2
	Public assembly places with >300 capacity	3	3	3	2
	Hotels/motels>50 rooms>60,000 feet>10 stories	3	3	3	2
	Major industries and employers	3	3	2	1
	Apartments>25 units	3	3	2	1
	Buildings with>150 employees	3	3	2	1
Important Local Impacts if Damaged	Facilities using/storing small quantities of hazardous materials	3	3	2	1
	Small dams that could cause flooding	3	3	2	1
	Gas stations	2	2	2	1
	Highways, streets, bridges	2	2	2	1
	Utility lines, substations, and gas mains	3	3	2	1
	Water and sewer mains	3	3	2	1
	Industries/business important to economy	2	2	2	1
	Health care clinics	2	2	2	1
Co-generation power plants	3	3	2	1	

Site Specific Seismic Hazard Investigation Requirements Based on a Relative Earthquake Hazard Map					
4=	Site investigation with panel peer review required.				
3=	Site investigation required unless data suggest otherwise.				
2=	Site investigation not required unless data suggest otherwise.				
1=	Site investigation not required.				
(a)	Discretion should be applied so that unnecessary site investigations are not required for smaller buildings within these categories. Guidelines to determine when investigations are needed should be established.				
(b)	Site investigation required if stipulated in a subdivision approval or other development approval of the planning agency. (Confirm definition.)				
Land Use Group	Land Uses	Relative Earthquake Hazard Zone			
		A	B	C	D
Earthquake Performance Objective is Substantial Life Safety (Acceptable risk is moderate)					
Moderate Occupancy	Buildings with 4 to 10 stories	3	3	2	1
	Multi-family buildings with 9 to 25 units (b)	3	3	2	1
	Buildings with 50 to 150 employees	3	3	2	1
Moderate Occupancy	Buildings with 50 to 150 employees >60,000 feet >10 stories	3	3	2	1
	Public assembly places: 50 to 300 capacity	3	3	3	2
	Hotels/motels <50 rooms <60,000 feet <10 stories	3	3	2	1
Low Occupancy	Multi-family buildings with 2 to 8 units (a)	2	2	1	1
	Buildings with <50 employees (a)	2	2	1	1
	Buildings with 1 to 3 stories (a)	2	2	1	1
	Public assembly places with <50 capacity (a)	2	2	1	1
	Single-family houses (b)	2	2	1	1
	Manufactured dwellings (b)	2	2	1	1

440.20.030 Administration.

- I. Binding Pre-Determination. Prior to submittal of a triggering application, a person may request from the responsible official, a written binding pre-determination of whether a probable regulated geologic hazard area exists on or within one hundred feet (100') of any parcel less than forty (40) acres. The pre-determination shall be binding on the responsible official for a period of three (3) years; provided, that such pre-determination shall be subject to administrative appeal upon its application in conjunction with a triggering application. A complete pre-determination shall include a list of the submittal requirements for a site description under Section 440.20.030(III)(C). Additional submittal requirements may later be required as a part of a geologic hazard area study under Section 440.20.030(III)(D) if the proposal intends to develop within a steep slope or landslide hazard area, or their buffers.
- II. Establishment of Landslide Protection Areas.
  - A. Steep slope hazard areas and landslide areas and buffers for which permanent protection is required pursuant to Sections 440.20.020(IV) and (V) shall be designated landslide protection areas.
  - B. Landslide protection area requirements apply only to site plans and land divisions.
  - C. For all development activities subject to this section, landslide protection areas shall be delineated on binding site plans and plots which shall be recorded with the Clark County Auditor.
  - D. A conservation covenant applicable to the designated landslide protection area shall be recorded in a form approved by the prosecuting attorney as adequate to incorporate the restrictions of this ordinance.
  - E. Prior to any site development activity, the applicant shall mark with temporary markers in the field the boundary of all landslide protection areas required by this ordinance, or the limits of the proposed site disturbance outside of the landslide protection areas, using methods and materials acceptable to Clark County.
  - F. Landslide protection area boundaries shall be permanently marked on the site prior to final inspection by Clark County using methods and materials acceptable to Clark County.
  - G. Vegetation clearing requirements for development in landslide protection areas, steep slope hazard areas, and landslide hazard areas:
    1. Clearing or vegetation removal in landslide protection areas, steep slope hazard areas, or landslide hazard areas or their buffers is prohibited except for:
      - a. Activities included in an approved geologic hazard area study as defined in Section 440.20.030(III);
      - b. Limited vegetation removal for surveying and testing necessary for development approvals;
      - c. Emergency or fire hazard removal authorized by the Clark County Fire Marshal;
      - d. Removal of nuisance vegetation using methods which minimize disruption of soil and non-nuisance vegetation;
      - e. Clearing necessary for placement or maintenance of fencing;
      - f. Clearing necessary for hillside vegetation restoration;
      - g. Clearing necessary for vegetation or resource conservation projects authorized by a public agency; and
      - h. Clearing for three (3) foot wide or narrower foot paths surfaced with wood, soil, or gravel.
    2. Proposals for clearing may also be subject to other critical areas regulations. Wildlife habitat near streams, which have clearing requirements under the habitat conservation regulations, often overlap with steep slopes included in geologic hazard areas.

III. Submittal Requirements.

- A. For development activity regulated by this ordinance, submittal requirements will vary depending on the type of project and the type of hazard mitigations that are proposed. A review of a geologic hazard area will be conducted in conjunction with the primary development application. Projects are required to submit a basic site description sufficient to verify that the location of proposed building and access road improvements comply with buffers, setbacks, and vegetation preservation required by Sections 440.20.020(D) and (E). If a regulated activity is proposed within a geologic hazard area, additional information in the form of a geologic hazard area study must be provided to assure the project is feasible and will not cause an increased geologic hazard. The information required for a site description is included in subsection (C)(3) of this section. The requirements for a geologic hazard area study for projects wishing to build in a geologic hazard area are included in subsection (C)(4) of this section. To avoid duplication, the information required by this section shall be coordinated by Clark County with the assessments and requirements for other associated permits.
- B. The responsible official shall waive parts of this submittal requirements if it is determined that they are not applicable to the proposed activity.
- C. Site Description. As part of the development permit application, the following information describing the subject property and areas within twenty-five feet (25') of the property lines or smaller area of concern as deemed appropriate by the responsible official, drawn to an engineering scale no larger than one inch equals twenty feet (1"=20') and no smaller than one inch equals one hundred feet (1"=100') as deemed appropriate by the responsible official:
1. The site boundary lines;
  2. The topography at contour interval of no greater than five feet (5');
  3. The location and size of all existing and proposed site improvements including structures, wells, drainfields, drainfield reserve areas, public and private right-of-way easements, and utilities;
  4. The location of all drainage-flow characteristics, streams, groundwater seeps, springs, and evidence of seasonal surface water runoff or groundwater.
  5. The location and extent of all existing and proposed grading activities and existing natural or artificial drainage control facilities and systems;
  6. The location and description of all geologic hazards located on the site and observed on properties within one hundred feet (100') of site boundaries;
  7. The general location of all vegetation and the general location, number, and description of all trees over six inch (6") diameter measured three feet (3') above the ground; and
  8. The location of all proposed buffers and setbacks.
- D. Geologic Hazard Area Study. A geologic hazard area study is required if the proposed development does not comply with requirements of Section 440.20.020(IV), Steep Slope Hazard Areas, or Section 440.20.020(V), Landslide Hazard Areas. Geologic investigation may also be required in some cases to meet Uniform Building Code requirements for foundations and for seismic design. Geologic hazard area studies shall be prepared, stamped, and signed by a licensed geotechnical engineer or geologist. Based on the site characteristics and the information submitted by the applicant, the responsible official may require all or part of the following information to be included in a geotechnical report:
1. The requirements for the site description listed above in subsection (III)(C) of this section;
  2. Site geology information:
    - a. Topographic contours at two (2) foot intervals or as specified by the responsible official;

- b. Subsurface data that includes the exploration method, location of soil borings, borings, logs, soil and rock stratigraphy, and groundwater levels including seasonal changes;
  - c. The location of landslides, or down-slope soil movement, faults, and geologic contacts on the subject property and adjacent properties;
  - d. A site history that describes any prior grading, soil instability, or slope failure; and
  - e. A description of the site vulnerability to seismic events.
3. Geotechnical information and plan requirements:
- a. A slope stability study and opinion of slope stability on the subject property and adjacent properties;
  - b. Grading plan;
  - c. Structural foundation requirements and estimated foundation settlements;
  - d. Soil compaction criteria;
  - e. Allowable soil-bearing pressure for foundations, minimum footing widths, piling recommendations for foundations, and design pressure for retaining walls;
  - f. Laboratory data and soil index properties for soil samples;
  - g. Suitability for fill;
  - h. Lateral earth pressures;
  - i. Description of erosion vulnerability and an erosion control plan;
  - j. An evaluation of proposed surface and subsurface drainage in a stormwater control plan;
  - k. Building limitations; and
  - l. A vegetation management and restoration plan or other means for maintaining long-term stability of slopes.
4. A site evaluation that describes the suitability of the site to accommodate the proposed activity; and
5. Such additional information describing existing physical features for the site and surrounding area as required by the responsible official to complete review of the project under standards of the Uniform Building Code.

**440.30.000 FREQUENTLY FLOODED AREAS**

440.30.010 Introduction.

- I. Purpose. It is the purpose of this ordinance to:
  - A. Protect human life and health;
  - B. Minimize expenditure of public money and costly flood control projects;
  - C. Minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;
  - D. Minimize prolonged business interruptions;
  - E. Minimize damage to public facilities and utilities such as water and gas mains, electric, telephone and sewer lines, streets, and bridges located in areas of special flood hazard;
  - F. Help maintain a stable tax base by providing for the sound use and development of flood hazard areas so as to minimize future flood blight areas;
  - G. Ensure that potential buyers are notified that property is in a flood area; and
  - H. Ensure that those who occupy the areas of special flood hazard assume responsibility for their actions.
- II. Applicability.
  - A. Land to Which This Ordinance Applies. This ordinance shall apply to all flood hazard areas within the jurisdiction of the Town of Yacolt.

- B. Basis for Establishing the Flood Hazard Areas. The areas of special flood hazard identified by the Federal Emergency Management Agency in a scientific and engineering report entitled "The Flood Insurance Study for Clark County" (effective August 2, 1982 and revised July 19, 2000) and accompanying maps and any revisions thereto are adopted by reference and declared to be a part of this ordinance. The flood insurance study is on file with the Clark County Community Development Department.
- C. Flood Plain Overlay District (FP). A flood plain overlay district (FP) is established and shall be applied to all one hundred (100) year flood plains identified on the flood insurance study maps, which have been adopted by reference under Section 440.30.010(II)(B). The land use and siting provisions of these areas shall be in addition to other zoning provisions applied. Two (2) distinct areas are recognized within the FP district, as follows:
  - 1. Floodway Area. The floodway includes the channel of a river or other watercourse and land areas within one hundred feet (100') that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than one (1) foot. For areas of special flood hazard studied in detail, the floodway boundary is delineated upon the flood insurance study maps. In all other areas of special flood hazard, the floodway boundary shall be determined by the use of other base flood data, as described in Section 440.30.030(IV)(B).
  - 2. Floodway Fringe Area. The floodway fringe is the land area between the boundary of the floodway and the limits of the one hundred (100) year flood plain. In those special flood hazard areas where the floodway boundary is not delineated upon flood insurance study maps, the floodway fringe area shall be determined by the use of other base flood data, as described in Section 440.30.030(IV)(B).
- III. Relationship to Other Requirements. Land uses in flood hazard areas shall be subject to all relevant local, state, or federal regulations including those of the underlying zoning district. Where applicable, permit requirements under the Shoreline Management Act (RCW 90.58), or the State Flood Control Zone Act (RCW 86.16) may be substituted for permits required under this ordinance, provided that the standards of this ordinance are applied.
- IV. Compliance. No structure or land shall hereafter be constructed, located, extended, converted, or altered without full compliance with the terms of this ordinance and other applicable regulations.
- V. Abrogation and Greater Restrictions. This ordinance is not intended to repeal or impair any existing easements, covenants, or deed restrictions. However, where this ordinance and another code, ordinance, easement, covenant, or deed restriction conflict or overlap, that which imposes the more stringent restrictions shall prevail.
- VI. Warning and Disclaimer of Liability. The degree of flood protection required by this ordinance is considered reasonable for regulatory purpose, and is based upon scientific and engineering considerations. Larger floods can and will occur on rare occasions. Flood heights may be increased by manmade or natural causes. This ordinance does not imply that land outside flood hazard areas, or uses permitted within such areas, will be free from flooding or flood damages. This ordinance shall not created liability on the part of the Town of Yacolt, any officer or employee thereof, or the Federal Emergency Management Agency for any flood damages that result from reliance on this ordinance or any administrative decision lawfully made hereunder.

440.30.020 Standards.

- I. Regulation of Uses in the Flood Plain Overlay (FP) District.
  - A. Park, recreational, agricultural, and other similar open space uses allowed in the underlying zoning district, and not involving structures, fill, or storage of equipment, are permitted outright in the FP district.

- B. Construction or reconstruction of residential structures is prohibited in the floodway, except in accordance with RCW 86.16 for:
1. Repairs, reconstruction, or improvements to a structure which do not increase the ground floor area;
  2. Repairs, reconstruction, or improvements to a structure the cost of which does not exceed fifty percent (50%) of the market value of the structure, either:
    - a. Before the repair or reconstruction or improvement is started; or
    - b. If the structure has been damaged, and is being restored, before the damage occurred; provided, that any project for improvement of a structure to correct existing violations of state or local health, sanitary, or safety code specifications which have been identified by a code enforcement official or designee and are the minimum necessary to assure safe living conditions or to structures identified as historic places shall not be included in the fifty percent (50%) determination.
  3. Travel trailers and recreational vehicles subject to the provisions set forth in Section 440.30.020(II)(B)(4); and
  4. New construction, which for the purposes of this ordinance shall mean structures for which construction begins on or after March 21, 1982.

C. Uses Allowed with Flood Plain Review.

1. Any use other than those permitted outright in a floodway pursuant to Sections 440.30.020(I)(A) or (b) shall be subject to the terms of a flood plain review under Section 440.30.030.
2. All other uses permitted in the zoning district with which the FP district has been combined are allowed in the floodway and floodway fringe areas, subject to the terms of a flood plain review under Section 440.30.030.

II. Construction in Flood Hazard Areas.

A. General Standards. In all flood hazard areas, the following standards are required:

1. Anchoring.
  - a. All new construction and substantial improvements shall be anchored to prevent flotation, collapse, or lateral movement of the structure.
  - b. All manufactured homes must likewise be anchored to prevent flotation, collapse, or lateral movement, and shall be installed using methods and practices that minimize flood damage. Anchoring methods may include, but are not limited to, use of over-the-top or frame ties to ground anchors, and additional techniques referenced in FEMA's "Manufactured Home Installation in Flood Hazard Areas" guidebook.
2. Construction Materials and Methods.
  - a. All new construction and substantial improvements shall be constructed with materials and utility equipment resistant to flood damage.
  - b. All new construction and substantial improvements shall be constructed using methods and practices that minimize flood damage.
  - c. Electrical, heating, ventilation, plumbing, and air-conditioning equipment and other service facilities shall be designed and/or otherwise elevated or located so as to prevent water from entering or accumulating within the components during conditions of flooding.

3. Utilities.
    - a. All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of floodwaters into the system;
    - b. New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of floodwaters into the systems and discharge from the systems into floodwaters; and
    - c. On-site waste disposal systems shall be located or designed to avoid impairment to them or contamination from them during flooding.
  4. Subdivision Proposals.
    - a. All subdivision proposals shall be designed to minimize flood damage;
    - b. All subdivision proposals shall have public utilities and facilities such as sewer, gas, electrical, and water systems located and constructed to minimize flood damage;
    - c. All subdivision proposals shall have adequate drainage provided to reduce exposure to flood damage; and
    - d. Where base flood elevation data has not been provided or is not available from another authoritative source, it shall be provided by the applicant for subdivision proposals and other proposed development which contain at least fifty (50) lots or five (5) acres (whichever is less).
  5. Review of Building Permits. Where elevation data is not available either through the flood insurance study or from another authoritative source, applications for building permits shall be reviewed to assure that proposed construction will be reasonably safe from flooding. The test of reasonableness shall be a judgment of the Public Works Supervisor who shall consider historical data, high water marks, photographs of past flooding, etc., where available. Failure to elevate the lowest floor at least two feet (2') above average grade in these zones may result in higher insurance rates.
- B. Specific Standards. In all flood hazard areas where base flood elevation data has been provided as set forth in Section 440.30.010(II)(B), or Section 440.30.030(IV)(B), "Use of Other Base Flood Data", the following provisions are required:
1. Residential Construction.
    - a. New construction and substantial improvement of any residential structure shall have the lowest floor, including basement, elevated to at least one (1) foot above base flood elevation.
    - b. Fully enclosed areas below the lowest floor that are subject to flooding are prohibited, or shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of flood waters. Designs for meeting this requirement must either be certified by a registered professional engineer or must meet or exceed the following minimum criteria:
      - 1) A minimum of two (2) openings having a total net area of not less than one (1) square inch for every square foot of enclosed area subject to flooding shall be provided;
      - 2) The bottom of all openings shall be no higher than one (1) foot above grade; and
      - 3) Openings may be equipped with screens, louvers, or other coverings or devices, provided that they permit the automatic entry and exit of floodwaters.



2. **Nonresidential Construction.** New construction and substantial improvement of any commercial, industrial, or other nonresidential structure shall either have the lowest floor, including basement, elevated to at least one (1) foot above base flood elevation; or, together with attendant utility facilities shall:
  - a. Be flood-proofed so that one (1) foot above the base flood level elevation and below the structure is watertight with walls substantially impermeable to the passage of water;
  - b. Have structural components capable of resisting hydrostatic and hydrodynamic loads and effects of buoyancy;
  - c. Be certified by a registered professional engineer that the design and methods of construction are in accordance with accepted standards of practice for meeting provisions of this subsection based on their development and/or review of the structural design, specifications and plans. Such certifications shall be provided to the responsible official as set forth in Section 440.20.030(II);
  - d. Nonresidential structures that are elevated, not flood-proofed, must meet the same standards for space below the lowest floor as described in Section 440.20.020(II)(B)(1)(a); and
  - e. Applicants flood-proofing nonresidential buildings shall be notified that flood insurance premiums will be based on rates that are one (1) foot below the flood-proofed level (e.g., a building constructed to the base flood level will be rated as one (1) foot below that level).
3. **Manufactured Homes.** All manufactured homes to be placed or substantially improved within a one hundred (100) year floodplain shall be elevated on a permanent foundation such that the lowest floor of the manufactured home is at least one (1) foot above the base flood elevation and be securely anchored to an adequately anchored foundation system in accordance with the provisions of subsection 440.30.020(II)(A)(a)(2).
4. **Travel Trailers and Recreational Vehicles.**
  - a. Travel trailers and recreational vehicles may be allowed in the floodway on a seasonal basis between May 1 and October 1 of the same year and within the floodway fringe areas on a temporary basis for fewer than one hundred eighty (180) consecutive days.
  - b. Wheels and hauling apparatus shall remain on travel trailers and recreational vehicles, and these vehicles shall be sited without barriers to allow their immediate removal in the event of impending flood hazard.
  - c. Travel trailers and recreational vehicles must be fully licensed and ready for highway use, on its wheels or jacking system, attached to the site only by quick disconnect type utilities and security devices, and have no permanently attached additions.

5. Critical Facilities. Construction of new critical facilities shall be, to the extent possible, located outside the limits of the flood hazard area. Construction of new critical facilities shall be permissible within the flood hazard area if no feasible alternative site is available. Critical facilities constructed within the flood hazard area shall have the lowest floor elevated three feet (3') above the base flood elevation or to the height of five hundred (500) year flood, whichever is higher. Access to and from the critical facility should be protected to the height utilized above. Flood-proofing and sealing measures must be taken to ensure that toxic substances will not be displaced by or released into floodwaters. Access routes elevated to or above the level of base flood elevation shall be provided to all critical facilities to the extent possible.
- C. Floodways. Located within flood hazard areas established in Section 440.30.010(II) are areas designated as floodways. Since the floodway is an extremely hazardous area due to the velocity of floodwaters which carry debris, potential projectiles, and erosion potential, the following provisions apply:
1. There is a prohibition on encroachments, including fill, new construction, substantial improvements, and other development unless certification by a registered professional engineer is provided demonstrating through hydrologic and hydraulic analyses performed in accordance with standard engineering practice that encroachments shall not result in any increase flood levels during the occurrence of the base flood discharge.
  2. If it has been adequately demonstrated that the encroachment will not result in increased flood levels, all new construction and substantial improvements shall comply with all applicable flood hazard reduction provisions of this section.

440.30.030 Administration.

- I. Establishment of Flood Plain Review. A review shall be obtained before construction or development begins within any flood hazard areas established in Section 40.30.010(B).
- II. Application for a flood plain review shall be made to the responsible official, who shall be responsible for administering this ordinance. Flood Plain Review application forms shall be furnished by the responsible official. The application shall include, but not be limited to, plans in duplicate drawn to scale showing the nature, location, dimensions, and elevations of the area in question, and existing or proposed structures, fill, storage of materials, and drainage facilities. Specifically, the following information is required:
  - A. Elevation, in relation to mean sea level as determined by the National Geodetic Vertical Datum (NGVD) of 1929, of the lowest floor (including basement) of all structures;
  - B. Elevation, in relation to NGVD of 1929, to which any structure has been flood-proofed;
  - C. Certification by a registered professional engineer that the flood-proofing methods for any nonresidential structure meet the flood-proofing criteria in Section 440.30.3020(B)(2); and
  - D. Description of the extent to which any watercourse will be altered or relocated as a result of the proposed development.
- III. Responsibilities of the Responsible Official.
  - A. Proposed Development Review.
    1. Review all proposed developments to determine whether or not a flood plain review is required.
    2. Review all proposed development with respect to the flood insurance study maps and zoning district boundaries. Make interpretations, where needed as to the exact location of flood hazard area boundaries.

- B. The responsible official shall immediately forward the flood plain review application to the Public Works Supervisor, who shall be responsible for all technical aspects of the application, review, and enforcement of this ordinance. The Public Works Supervisor shall render a decision on the proposal within thirty (30) days after receiving the application unless additional information is needed from the applicant, in which case a decision shall be made within thirty (30) days after receiving the information necessary to complete the review.
  - C. Flood Plain Review.
    - 1. Inform applicants about other federal, state, or local permits or reviews that may be required, and provide related advice to the applicant or the Public Works Supervisor.
    - 2. Accept and immediately forward flood plain review applications to the Public Works Supervisor.
    - 3. Make written recommendations on flood plain review applications within the review period, when determined to be appropriate or requested by the Public Works Supervisor.
- IV. Responsibilities of the Public Works Supervisor.
- A. Flood Plain Review.
    - 1. Review all proposals to determine that the requirements of this ordinance have been satisfied.
    - 2. Review all proposals to determine that all necessary permits have been obtained from those federal, state, or local governmental agencies from which prior approval is required.
    - 3. Review all proposals to determine whether the proposed development is located in the floodway. If located in the floodway, assure that the encroachment provisions of Section 440.30.0(B)(3) are met.
  - B. Use of Other Base Flood Data. When base flood elevation data has not been provided in accordance with Section 440.30.010(II)(B), the Public Works Supervisor shall obtain, review, and reasonably utilize any base flood elevation and floodway data available from any agency of federal or state government, or other sources in order to enforce the guidelines of frequently flooded areas (Section 440.30.00).
  - C. Information to be Obtained and Maintained.
    - 1. Where base flood elevation data is provided through the flood insurance study, obtain and record the actual elevation (in relation to NGVD of 1929) of the lowest habitable floor (including basement) of all new or substantially improved structures, and whether or not the structure contains a basement.
    - 2. For all new or substantially improved flood-proofed structures, verify and record the actual elevation (in relation to NGVD of 1929) to which the structure was flood-proofed, and maintain the flood-proofing certifications required in Section 440.30.030(II)(C).
    - 3. Maintain for public inspection all records pertaining to the provisions of this ordinance.
    - 4. Granting of flood plain variances in accordance with Section 440.30.030(V).
- V. Variances.
- A. Generally, variances may be issued for new construction and substantial improvements to be erected on a lot on one-half (½) acre or less in size, abutting and surrounded by lots with existing structures constructed below the base flood level, provided items (a) to (k) in Section 440.30.030(VI)(A) have been fully considered. As the lot size increases beyond the one-half (½) acre, the technical justification required for issuing the variance increases.

- B. Variances may be issued for the reconstruction, rehabilitation, or restoration of structures listed on the National Register of Historic Places or the State Inventory of Historic Places, without regard to the procedures set forth in the remainder of this ordinance.
  - C. Variances shall only be issued upon a showing of good and sufficient cause that:
    1. The proposal has been designed to reasonably minimize the impact on the floodplain and its functions;
    2. No increase in flood levels during the base flood discharge would result;
    3. The variance is the minimum necessary, considering the flood hazard, to afford relief;
    4. Failure to grant the variance would result in exceptional hardship to the applicant;
    5. The hardship is not created by the property owner or its immediate predecessor in the title; and
    6. The granting of a variance will not result in increased flood heights, additional threats to public safety, or extraordinary public expense, create nuisances, cause fraud on or victimization of the public.
  - D. Variances, as interpreted in the National Flood Insurance Program, are based on the general zoning law principle that they pertain to a physical piece of property; they are not personal in nature and do not pertain to the structure, its inhabitants, economic or financial circumstances. They primarily address small lots in densely populated residential neighborhoods. As such, variances from the flood elevations should be quite rare.
  - E. Variances may be issued for nonresidential buildings in very limited circumstances to allow a lesser degree of flood-proofing than watertight or dry-flood-proofing, where it can be determined that such action will have low damage potential, complies with all other variance criteria except Section 440.30.030(IV)(A)(1) and (b) of the general standards.
  - F. Any applicant to whom a variance is granted shall be given written notice that the structure will be permitted to be built with a lowest floor elevation below the base flood elevation, and that the cost of flood insurance will be commensurate with the significantly increased risk resulting from the reduced lowest floor elevation.
  - G. The Public Works Supervisor shall report any variances to the Federal Emergency Management Agency upon request.
- VI. Appeals. Administrative decisions rendered by the responsible official or the Public Works Supervisor are subject to appeal according to the Town of Yacolt appeals process.
- A. In acting on appeals, the hearings examiner shall consider all technical evaluations, all relevant factors, and standards specified in other sections of this ordinance:
    1. The danger that materials may be swept onto other lands to the injury of others;
    2. The danger to life and property due to flooding or erosion damage;
    3. The susceptibility of the proposed facility and its contents to flood damage, and the effect of such damage on the individual owner;
    4. The importance of the services provided by the proposed facility to the community;
    5. The necessity to the facility of a waterfront location, where applicable;
    6. The availability of alternative locations for the proposed use, which are not subject to flooding or erosion damage;
    7. The compatibility of the proposed use with existing and anticipated development;
    8. The relationship of the proposed use to the comprehensive plan and flood plain management program for that area;
    9. The safety of access to the property in times of flood for ordinary and emergency vehicles;

10. The expected heights, velocity, duration, rate of rise, and sediment transport of the floodwaters, and the effects of wave action, if applicable, expected at the site; and
  11. The costs of providing governmental services during and after flood conditions including maintenance and repair of public utilities and facilities such as sewer, gas, electrical, and water systems, and streets and bridges.
- B. Upon consideration of the factors of Section 440.30.030(V)(A) and the purposes of this ordinance, the hearings examiner may attach such conditions to actions on appeals as it deems necessary to further the purpose of this ordinance.
  - C. The responsible official shall maintain the records of all appeal actions.

**440.40.00 PRIORITY HABITAT AREAS**

440.40.010 Introduction.

- I. The purpose of this section is to protect environmentally distinct, fragile, and valuable fish and wildlife habitat areas, as defined in Section 440.40.020(IV). The protection measures spelled out in this section are intended to conserve and enhance the functional integrity of those habitats needed to perpetually support fish and wildlife populations.

440.40.020 Applicability.

- I. General. Review under the standards of this section shall apply to any proposed development or non-development clearing activities within designated habitat areas as defined in Section 440.40.020(IV).
  - A. Development activities are those proposals already subject to existing Town land division, building, grading, or other review processes.
  - B. Non-development clearing activities are proposals which are not otherwise subject to Town review, but involve the alteration or removal of native vegetation in designated habitat areas.
- II. Activities Adjacent to Certain Designated Habitat Areas. Proposed new single-family residential development occurring immediately outside but within three hundred feet (300') of designated priority species polygons or within one hundred feet (100') of designated non-riparian priority habitat polygons shall require consultation with the Washington State Department of Fish and Wildlife prior to issuance of a development permit. In such cases, further review under this section is not required unless WDFW finds that there are potential adverse impacts. Other proposed land divisions and nonresidential development adjacent to designated wildlife sites shall be subject to SEPA as normally required, and may be required to perform mitigation measures if there are adverse impacts to the adjacent designated habitat areas.
- III. Exempt Activities.
  - A. All proposed activities outside designated habitat areas are exempt from review under this section, except where noted in Section 440.40.020(II) above. The following activities within designated habitat areas are exempt from regulation under this section and do not require further review.
    1. Hand clearing of non-native, invasive plant species.
    2. Clearing authorized by forest practices applications other than conversions in habitat areas.
    3. Emergency clearing to abate immediate danger to persons or property.
    4. Remodel, replacement, or expansion, not to exceed twenty-five percent (25%) of the 2004 footprint, of existing home or existing accessory building inside habitat areas. Home remodels, replacements, or expansions of up to five hundred (500) square feet or mobile home replacements of single-wide with double-wide models are also exempt.
    5. Non-development clearing activities in habitat areas consistent with a recorded stewardship plan for which any mitigation specified in the plan is timely completed.

- IV. Habitat Areas Covered by this Section.
- A. This section shall apply to nonexempt activities as defined in 440.40.020(II) that are proposed within the following habitat areas:
1. Riparian Priority Habitat. Areas extending outward from the ordinary high water mark of a river, stream, or creek to the edge of the one hundred (100) year floodplain, or the following distances, whichever is greater:
    - a. DNR Type 1 and 2 waters, three hundred feet (300');
    - b. DNR Type 3 waters, two hundred fifty feet (250');
    - c. DNR type 4 waters, two hundred feet (200');
    - d. DNR type 5 waters, one hundred feet (100').
 Type 1-5 definitions are based on WAC 222-16-031. Erosion gullies or rills, and streams which are man-made, less than twelve inches (12") wide or not having a defined bed and/or bank are not included.
  2. Other Priority Habitats and Species (PHS). Areas identified by and consistent with the Washington State Department of Fish and Wildlife priority habitats and species criteria, including areas within one thousand feet (1,000') of individual species point sites. The Town shall defer to the Washington State Department of Fish and Wildlife in regard to classification, mapping, and interpretation of priority habitat species.
- V. Mapping. The above habitat areas are mapped on a Townwide basis in the adopted Yacolt Critical Lands Priority Habitats and Species Map. Maps are on file with the Town and are available for public viewing and circulation. Maps of individual locations of sensitive, threatened, or endangered wildlife species are maintained separately. Under law, this information is not available for widespread public distribution unless authorized by the Washington State Department of Fish and Wildlife. However, property owners may obtain all existing information for their properties upon request. Official maps shall be updated by the Town as warranted by the availability of new information.
- VI. Best Available Science. Definitions and maps of habitat areas are based on best available science described in the following documents:
- A. 1996 Washington State Department of Fish and Wildlife Priority Habitats and Species List; and
  - B. 1995 Management Recommendations for Washington's Priority Habitats.
- Best available scientific data supporting this section may be updated and/or re-evaluated as part of future amendments.
- VII. Determining Site Specific Applicability. In the event of inconsistencies, official habitat area definitions and on-site assessments shall prevail over Townwide maps in determining applicability of this section. The Town shall follow the recommendations of the Washington State Department of Fish and Wildlife in the interpretation of site-specific conditions as they relate to the definition of priority habitat and species.
- 440.40.030 Riparian Habitat Buffers.
- I. General.
- A. Base buffer widths for Type 1-5 waters are listed in Section 440.40.030(IV)(A)(1) (1-5).
  - B. The buffer rating system is used to determine the existing condition of the buffer as well as the applicable buffer reductions that can be applied as per Section 440.40.040(II).
  - C. The determination of the specific buffer category shall be the responsibility of the applicant and be subject to review and concurrence by Town staff.
  - D. A single priority habitat feature may contain buffers of more than one (1) category as long as each category represents at least twenty-five percent (25%) of the total buffer area.

- E. Portions of habitat buffers may be deemed functionally isolated if they are separated from the sensitive area in a manner that limits buffer functions. Buffers deemed functionally isolated are exempt from regulation under Section 440.40.00 of the Yacolt CAO. Portions of buffers may be deemed functionally isolated if at least one of the following conditions exist:
1. Paved roads greater than twenty feet (20') in width.
  2. Permanent buildings or structures that will not be removed as part of the triggering application.

II. Buffer Classifications. The functions provided and overall effectiveness of a particular buffer is largely dependant on the structure and composition of the vegetation within the buffer. In order to ensure adequate protection of regulated sensitive areas, buffers management strategies as detailed in Section 440.40.040 are dependant on the particular buffer type in which these activities are taking place.

A. Type A Buffers.

1. Type A Buffer Criteria. Buffers are classified as Type A if they meet all of the requirements either subsection below:

- a. A non-forested buffer area consisting of a mature, un-impacted naturally occurring native plant community with less than ten percent (10%) aerial coverage of non-native species; or
- b. A forested buffer consisting with a diverse, mature, native vegetation composition and possesses all the following criteria:
  - 1) Multi-tiered vegetation structure (emergent, shrub, and tree layers);
  - 2) A tree canopy greater than thirty feet (30') tall with at least eighty percent (80%) aerial canopy closure;
  - 3) Three (3) or more native tree species;
  - 4) Five (5) ore more native shrub species; and
  - 5) No less than ten percent (10%) coverage of non-native species.

B. Type B Buffers.

1. Type B buffers are essentially immature versions of Type A buffers. Type B buffers are expected to meet the standards of Type A buffers within a period of ten (10) years. If buffers are to be enhanced to meet Type B criteria, the following conditions must be met:

- a. New tree, shrub, and emergent vegetation must be comprised entirely of native stock;
- b. In order to meet the Type A buffer criteria within the ten (10) year period, the minimum size for plant installation must be followed:
  - 1) Bare root trees – greater than or equal to thirty-six inches (36") in length;
  - 2) Bare root shrubs – greater than or equal to twenty-four inches (24") in length;
  - 3) Containerized trees – greater than or equal to two (2) gallon;
  - 4) Containerized shrubs – greater than or equal to one (1) gallon;
  - 5) Live-stakes or cuttings of at least twenty-four inches (24") in length can be utilized for willow (*Salix sp.*) and red-osier dogwood (*Cornus stolonifera*) plantings; and
  - 6) Trees and shrubs shall be planted at a density of ten (10) trees and twenty (20) shrubs per one thousand (1,000) square feet.

C. Type C Buffers.

1. Type C buffers are buffers that do not meet the conditions of Type A, B, or D buffers.

- D. Type D. Buffers.
1. Type D buffers are those areas which meet at least one of the following criteria:
    - a. Areas with fewer than two (2) native tree species;
    - b. Areas with fewer than three (3) native shrub species; or
    - c. Areas with non-native species that have an aerial coverage of greater than twenty-five (25%) of the individual buffer type.
- E. Buffers applied to enhanced wetlands shall be determined upon the classification of the wetland prior to enhancement.
- 440.40.040 Buffer Activities.
- I. General.
- A. Any proposed activity in a regulated buffer shall not serve to ultimately degrade or compromise the overall functions and values of the sensitive resource and buffer.
  - B. Construction of impervious surfaces or structures inside the buffer area will be deemed as impacts and shall not be permitted except in the following situations:
    1. Construction of stormwater conveyance pipes or outfall structures;
    2. Utility line construction; or
    3. Road crossings which travel in a direct line through the buffer and cross the sensitive area at a perpendicular angle.
  - C. All impervious surfaces within the buffer area resulting from any construction activities detailed in Section 440.40.040(I)(B)(1-3) shall be deemed impacts and must be mitigated at a one to one (1:1) replacement area ratio. In addition the following guidelines apply to permitted construction activities within a habitat buffer:
    1. Current BMPs will be utilized to limit impacts within the buffer areas;
    2. All construction corridors will be clearly demarcated in the field with silt fence;
    3. Impacts to native vegetation will be kept to a minimum; and
    4. A qualified biologist will be on location while grading and construction work are performed within the habitat buffer areas.
- II. Buffer Reductions.
- A. Base buffer widths as defined in Section 440.40.020(IV)(A)(1) may qualify for an automatic buffer reduction based on the type of buffer existing at the time of the land use application as detailed below:
    1. Type A buffer – twenty percent (20%);
    2. Type B buffer – fifteen percent (15%);
    3. Type C buffer – ten percent (10%); and
    4. Type D buffer – zero percent (0%).
- III. Buffer Enhancement.
- A. Type C and D buffers may be further reduced through enhancement to meet the definition of a higher quality buffer type as detailed in Section 440.40.030(B)(1-4).
  - B. Buffer reduction amounts are calculated as a percentage of the base buffer width.
  - C. The reductions for each buffer type are as follows:
    1. Type D to Type B – twenty percent (20%) reduction;
    2. Type D to Type C – ten percent (10%) reduction; and
    3. Type C to Type B – five percent (5%) reduction.
  - D. By nature of the definition of Type B buffers (Section 440.40.030(b)(2), Type B buffers can not be enhanced.
  - E. Buffer enhancement areas must be contiguous with the sensitive area and extend to the outer edge of the buffer.
  - F. The entire buffer area must be enhanced in order to receive the buffer reductions outlined in Section 440.40.040(III)(C).



- IV. Buffer Averaging.
  - A. A buffer averaging plan can be implemented in order to avoid impacts to the wetland buffer and allow a certain degree of flexibility in site design.
  - B. Applicants proposing a buffer averaging plan must demonstrate that the buffer averaging plan meets the following conditions:
    - 1. The buffer averaging will not result in a net loss of buffer area or function;
    - 2. Buffer reduction and compensation areas must be of comparable composition, structure, and type as defined in Section 440.40.030(II)(A-D);
    - 3. The maximum width of reduction available through buffer averaging is ten percent (10%) of the base buffer width;
    - 4. The maximum length of the reduction area available through buffer averaging area is twenty percent (20%) of the overall length of the outer edge of the buffer within the subject property.
- V. Pre-existing Conditions. Buffers subject to unapproved activities within five (5) years of the triggering application shall be subject to the following limitations if the unapproved activity resulted in a lower buffer classification.
  - A. The entire buffer area must be enhanced to meet the Type B buffer criteria set forth in Section 440.40.030(II)(B).
  - B. Enhancements required under Section 440.40.040(V) will not qualify for buffer width reductions detailed in Section 440.40.040(III).
  - C. Automatic buffer reductions based on buffer quality outlined in Section 440.40.040(II) are not permitted.
  - D. The Town of Yacolt reserves the right to notify appropriate state and federal regulating agencies in conjunction of violation of Section 440.40.040(V) when impacts to sensitive areas may have caused the take of state or federally threatened, endangered, or candidate species.

440.40.050 Habitat Permit Applications.

- I. General.
  - A. A habitat permit will be required if a triggering activity as defined in Section 440.40.020(I-II) is proposed within a priority habitat as defined in Section 440.40.020(IV).
  - B. The Town reserves the right to obtain independent experts for the purpose of reviewing habitat permit applications under the habitat section of the Critical Areas Ordinance (440.40).
  - C. Any proposed activity shall comply with all applicable local, state, and federal laws related to the particular sensitive area.
  - D. The Town of Yacolt can not be held liable for failure on the part of the applicant to obtain necessary authorizations referred to in Section 440.40.040(I)(C) above.
  - E. Prior to commencement of the regulated activities, principal engineers and contractors must review the issued habitat permit and sign a statement of understanding to be kept on file with the Town. Signed statements must be received by the Town no less than five (5) business days prior to commencement of construction activities.
  - F. Copies of the habitat permit must be kept on the construction site until which time that the project construction activities are completed.
- II. Habitat permit applicants must submit a habitat report detailing the existing conditions on the site and all proposed work. Habitat reports must include the following information to be deemed complete:
  - A. Graphics are to be of a legible scale and should include the following:
    - 1. Location map of the site;
    - 2. Topographic map showing the best available contours for the site;
    - 3. Color aerial photo with project plans clearly shown;
    - 4. Scaled project drawing showing the surveyed boundaries of the sensitive area and appropriate base buffers;

5. Graphical depictions of any proposed buffer averaging or enhancement activities;
  6. If applicable, location of proposed enhancement activities.
- B. Habitat reports shall also include the following information within the text of the document:
1. Project description;
  2. Existing conditions for the entire site which shall include the following:
    - a. Physical description of the sensitive area;
    - b. Existing tree species and canopy coverage estimates within the buffer area;
    - c. Existing shrub species within the buffer area;
    - d. Existing emergent vegetation within the buffer area;
    - e. Functional analysis narrative.
  3. Proposed buffer averaging, enhancement plans if applicable;
  4. Purpose and need for proposed impacts;
  5. Project impacts;
  6. If applicable, buffer enhancement details shall include:
    - a. Location and size of enhancement area;
    - b. Explanation of methods and techniques, such as, construction practices to be used to implement the identified enhancements;
    - c. Plant species, total number of plants, plant stock form, and spacing requirements;
    - d. If applicable, invasive species control plans;
    - e. Methods and techniques for monitoring said mitigation and a proposed time frame for such monitoring;
    - f. Contingency plans;
    - g. Discussion of anticipated increases in buffer functions.
- C. Applicants shall submit a preliminary habitat permit application to accompany preliminary site review plans to the Town.
- D. A final habitat permit application will incorporate all comments received during the review process.
- E. The Town reserves the right to waive the final habitat permit requirements if the preliminary permit application is deemed fully complete following the review of final construction plans.

440.40.060 Final Permit Approval.

- I. Findings. A decision of final permit approval shall be supported by findings of fact relating to the standards and conditions of Section 440.40.00.
- II. General Conditions. The following conditions apply to all applicants receiving a final habitat permit:
  - A. The entire habitat buffer will be placed in a conservation covenant running with the land that limits further development or encroachment into the buffer as per the standards of Section 440.40.00.
  - B. Applicants required to perform habitat mitigation in the forms of enhancement shall be required to fulfill the following obligations:
    1. Posting of a cash performance bond to ensure that the proposed enhancements are successfully completed. Bonds will be held for a period of three (3) years following the completion of the proposed impacts;
    2. Monitoring and maintenance will be performed on a yearly basis for a period of five (5) years to ensure project success. Yearly monitoring reports will be submitted to the Town for review and shall contain:
      - a. Photographs of the enhancement area taken from established locations;
      - b. Mortality information for planted stock;
      - c. Replanting requirements, if necessary;

- d. Discussion of general condition of enhancement area in terms of project goals established in mitigation plan.
- 3. Enhancements must follow the guidelines set forth in Section 440.40.030(II)(B)(1).
- 4. Plantings must achieve a ninety percent (90%) survival rate by the completion of the five (5) year monitoring period.
- C. The Town of Yacolt reserves the right to extend the required monitoring period of any enhancement project that has not been demonstrated to meet the conditions of Section 440.40.030(II)(B) or Section 440.40.060(II)(A)(4).

**440.50.00 WETLANDS**

440.50.010 Introduction.

I. Wetlands and wetland buffers are important natural resources which can provide significant amounts of important environmental functions that are beneficial to public health, safety, and general welfare. These functions often include attenuation of flood waters, maintenance of summer stream flows, filtration and uptake of pollutants, recharge of ground water, support of characteristic vegetation, and providing important and unique fish and wildlife habitat. Unregulated development adjacent to and within these sensitive areas can eliminate or significantly reduce the ability of wetlands to provide these important functions.

II. General.

- A. Any non-exempt development proposal that impacts wetlands or wetland buffers subject to regulation under this section shall not be allowed without an approved mitigation or enhancement plan consistent with the requirements of Section 440.50.080.
- B. The Town shall not approve a development proposal that impacts wetlands or wetland buffers without a finding that:
  - 1. The proposed activity shall not cause significant degradation of ground water or surface water quality or fish and wildlife habitat;
  - 2. The proposed activity shall comply with all state, local, and federal laws, including those related to sediment control, pollution control, floodplain restrictions, stormwater management, and on-site wastewater disposal; and
  - 3. Wetland and wetland buffer impacts shall be avoided or substantially minimized consistent with the mitigation sequencing criteria in Section 440.00.040(14).

440.50.020 Applicability.

- I. The provisions of this section apply to any land use or soil disturbance proposal that would occur on a site with wetlands or wetland buffers unless otherwise expressly exempted by this section.
- II. Exemptions. This section shall not apply to the following wetlands:
  - A. Small. All wetlands less than one thousand (1,000) square feet in area and Category 3 and 4 wetlands between one thousand (1,000) and four thousand (4,000) square feet in area.
  - B. Artificial. Wetlands intentionally created from non-wetland upland sites including, but not limited to, irrigation and drainage ditches, grass-lined swales, canals, retention facilities, storm water management facilities, farm ponds, and landscape amenities; provided, that wetlands created as mitigation shall not be exempted.
  - C. Prior Converted Cropland. Wetlands recognized by the United States Army Corps of Engineers as prior converted cropland under its Regulatory Guidance Letter 90-7 to the extent consistent with such Corps recognition.
  - D. Riparian. Wetlands less than five feet (5') wide above the ordinary high water mark along streams and lakes which are regulated under the State Shorelines Management Act.

440.50.030 Wetland Delineations.

The location of a wetland and its boundary shall be determined through the performance of a field investigation, to be performed by a qualified wetland professional. Wetland delineations are the responsibility of the applicant. The Town will maintain a list of wetland consultants on file to assist applicants in completing the requirements of this section.

- I. Methodology. Delineations shall be performed in accordance with the methodologies contained in the Washington State Wetland Identification and Delineation Manual (Publication #96-94) and the 1987 U.S. Corps of Engineers Wetlands Delineation Manual or the most current editions adopted by these agencies. The applicant shall be responsible for the cost of the professional services. If a wetland is located on an adjacent parcel, such that, the wetland buffer may extend onto the proposed development site, the applicant shall use all reasonable resources to determine the wetland boundary and category and buffer type.
- II. Information Requirements. Wetland boundaries shall be staked and flagged in the field and a delineation report shall be submitted to the Town. The report shall include the following information:
  - A. USGS topographic map with site clearly defined;
  - B. National wetland inventory map showing site;
  - C. Soil Conservation Service soils map of the site;
  - D. Site map, at a scale no smaller than 1"=400', if practical, showing the following information:
    1. Wetland boundaries;
    2. Sample sites and sample transects;
    3. Boundaries of forested areas;
    4. Boundaries of wetland classes if multiple classes exist.
  - E. An aerial photograph of the project area (scale no smaller than 1"=400');
  - F. Discussion of methods and results with special emphasis on technique used from the wetlands delineation manual;
  - G. Acreage of each wetland identified on the site based on a survey;
  - H. All completed field data sheets (U.S. Army Corps of Engineers' format for three parameter application) numbered to correspond to each sample site;
  - I. Name and contact information of the applicant and primary author(s) of the Wetland Critical Area report;
  - J. Narratives describing the following information:
    1. Existing conditions on the site;
    2. Vegetation compositions;
    3. Extent of recent disturbance if any;
    4. Existing and probably past uses;
    5. Information concerning how the wetland boundary was identified.
- III. Verification of wetland boundaries as flagged in the field is the responsibility of the applicant. Verifications from the U.S. Army Corps of Engineers or Washington State Department of Ecology or Clark County shall suffice for the purpose of implementation of this chapter.

440.50.040 Wetland Rating.

- I. The Washington State Department of Ecology's *Washington State Wetland Rating System for Western Washington-Revised* (Ecology Publication #04-06-025, August 2004) or as revised by ecology, is used to determine wetland categories, base buffer widths and to determine mitigation and enhancement requirements.
  - A. The determination of the specific category of wetland and buffer type for each wetland shall be the responsibility of the Town.
  - B. A single wetland may be classified into more than one category if distinct areas exist in the wetland that clearly meet the description of separate categories and comprises at least 20% of the total area of the entire wetland complex.

- C. Wetlands that are enhanced to meet the criteria for a higher category are classified and regulated according to the characteristics and rating of the original wetland.
- II. Wetland rating system. The rating system contains a general description of each wetland category followed by specific criteria. If the specific criteria conflicts with the general description, the Town shall determine the most appropriate classification as applied to a particular site.
- A. Category I. Category I wetlands are:
1. Relatively undisturbed estuarine wetlands larger than one (1) acre;
  2. Wetlands that are identified by scientists of the Washington Natural Heritage Program as high-quality wetlands;
  3. Bogs larger than one-half ( $\frac{1}{2}$ ) acre;
  4. Mature and old-growth forested wetlands larger than one (1) acre;
  5. Wetlands in coastal lagoons; and
  6. Wetlands that perform many functions well [scoring seventy (70) points or more]. These wetlands:
    - a. Represent unique or rare wetland types;
    - b. Are more sensitive to disturbances than most wetlands;
    - c. Are relatively undisturbed and contain ecological attributes that are impossible to replace within a human lifetime; or
    - d. Provide a high level of functions.
- B. Category II. Category II wetlands are:
1. Estuarine wetlands smaller than one (1) acre, or disturbed estuarine wetlands larger than one (1) acre;
  2. Wetlands identified by the Washington State Department of Natural Resources as containing "sensitive" plant species;
  3. Bogs between one-quarter ( $\frac{1}{4}$ ) and one-half ( $\frac{1}{2}$ ) acre;
  4. Interdunal wetlands larger than one (1) acre; or
  5. Wetlands with a moderately high level of functions.
- C. Category III. Category III wetlands are:
1. Wetlands with a moderate level of functions [scoring between thirty (30) and fifty (50) points]; and
  2. Interdunal wetlands between one-tenth (0.1) and one (1) acre. Wetlands scoring between thirty (30) and fifty (50) 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.
- E. Category IV wetlands have the lowest levels of functions [scoring less than thirty (30) points] and are often heavily disturbed. These are wetlands that we should be able to replace, or in some cases to improve. However, experience has shown that replacement cannot be guaranteed in any specific case. These wetlands may provide some important functions, and should be protected to some degree.
- III. 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.
- 440.50.050 Wetland Buffers.
- I. General.
- A. A single wetland may contain buffers of more than one (1) category as long as each category represents at least twenty-five percent (25%) of the total buffer area.
- B. All buffers shall be measured perpendicularly outward from the delineated wetland boundary.

- C. Portions of wetland buffers may be deemed functionally isolated if they are separated from the wetland in a manner that effectively limits buffer functions. Buffers deemed functionally isolated are exempt from regulation under Section 440.50 of the Yaolt CAO. Portions of buffers may be deemed functionally isolated if at least one of the following conditions exist:
1. Paved roads greater than twenty feet (20') in width;
  2. Permanent buildings or structures that will not be removed as part of the triggering application.
- D. The determination of the specific buffer category shall be the responsibility of the applicant and be subject to review and concurrence by Town staff.
- E. Permanent Marking of Buffer Area. A permanent physical demarcation along the upland boundary of the wetland buffer area shall be installed and thereafter maintained. Such demarcation may consist of logs, a tree or hedge row, fencing, or other prominent physical marking approved by the hearing examiner. In addition, signs [minimum size one foot by one foot (1'x1')] and posted three and one-half feet (3½') above grade] shall be posted at an interval of one (1) per lot or every one hundred feet (100'), whichever is less, and perpetually maintained at locations along the outer perimeter of the wetland buffer worded substantially as follows: WETLAND BUFFER – PLEASE RETAIN IN A NATURAL STATE.
- F. Marking Buffer During Construction. The location of the outer extent of the wetland buffer shall be marked in the field and such markings shall be maintained throughout the duration of the permit.
- II. Buffer Widths.
- A. Buffer widths, which are based on wetland category and modified by the intensity of the impacts from the proposed land uses, are as follows:

Category of Wetland	Land Use with Low Impact	Land Use with Moderate Impact	Land Use with High Impact
IV	25 feet	40 feet	50 feet
III	75 feet	110 feet	150 feet
II	150 feet	225 feet	300 feet
I	150 feet	225 feet	300 feet

See table below for types of land uses that can result in low, moderate, and high impacts to wetlands.

Level of Impact from Proposed Change in Land Use	Types of Land use Based on Common Zoning Designations
High	<ul style="list-style-type: none"> <li>• Commercial</li> <li>• Urban</li> <li>• Industrial</li> <li>• Institutional</li> <li>• Retail sales</li> <li>• Residential (more than 1 unit/acre)</li> <li>• Conversion to high-intensity agriculture (dairies, nurseries, greenhouses, growing and harvesting crops requiring annual tilling and raising and maintaining animals, etc.)</li> <li>• High-intensity recreation (golf courses, ball fields, etc.)</li> <li>• Hobby farms</li> </ul>
Moderate	<ul style="list-style-type: none"> <li>• Residential (1 unit/acre or less)</li> <li>• Moderate-intensity open space (parks with biking, jogging, etc.)</li> <li>• Conversion to moderate-intensity agriculture (orchards, hay fields, etc.)</li> <li>• Paved trails</li> </ul>

	<ul style="list-style-type: none"> <li>• Building of logging roads</li> <li>• Utility corridor or right-of-way shared by several utilities and including access/maintenance road</li> </ul>
Low	<ul style="list-style-type: none"> <li>• Forestry (cutting of trees only)</li> <li>• Low-intensity open space (hiking, bird-watching, preservation of natural resources, etc.</li> <li>• Unpaved trails</li> <li>• Utility corridor without a maintenance road and little or no vegetation management</li> </ul>

III. Ratings. Wetland buffer classifications are identical to the habitat buffer types detailed in Section 440.40.30(b).

IV. Exemptions. The following activities within a wetland buffer are not subject to regulation under this chapter:

- A. Hand clearing of non-native, invasive plant species;
- B. Emergency clearing to abate immediate danger to persons or property;
- C. Remodel, replacement, or expansion, not to exceed twenty-five percent (25%) of the 2004 footprint, of existing home or existing accessory buildings inside habitat areas. Home remodels, replacements, or expansions of up to five hundred (500) square feet, or mobile home replacements of single-wide with double-wide models are also exempt.
- D. Non-development clearing activities in wetland buffer areas consistent with a recorded stewardship plan for which any mitigation specified in the plan is timely completed.
- E. Construction of permeable-surface pedestrian trails no greater than five feet (5') in width located within the outer twenty-five percent (25%) of a wetland buffer provided that:
  - 1. Trail construction does not include mechanized grading;
  - 2. No trees with a DBH greater than twelve inches (12") are removed;
  - 3. Removal of native vegetation is minimized;
  - 4. Signage as per Section 440.50.050(I) is included as part of the trail construction.

440.50.060 Wetland Buffer Activities.

I. Road and Utility Crossings. Crossing buffers with new roads and utilities is allowed provided all of the following conditions are met:

- A. Buffer functions, as they pertain to protection of the adjacent wetland and its functions, are replaced according to the ratios determined in Section 440.50.070 based on the quality of the impacted buffer type;
- B. Impacts to the buffer and wetland are minimized; and
- C. The use of best management practices in maintaining existing utility corridors where such maintenance activities do not expand further into the critical area.

II. Stormwater Management Facilities. Stormwater treatment and flow control facilities shall not be built within a natural vegetated buffer, except for:

- A. Necessary conveyance systems as approved by the local government; or
- B. As allowed in wetlands approved for hydrologic modification and/or treatment in accordance with Guidesheet 1B in Appendix 1-D of Washington State Department of Ecology's *Stormwater Management Manual for Western Washington* (2001).

III. Other Activities in a Wetland Buffer. Regulated activities not involving stormwater management facilities or road and utility crossings are allowed provided all of the following conditions are met:

- A. The activity is temporary and will cease or be completed within three (3) months of the date the activity begins;
- B. The activity will not result in a permanent structure in or under the buffer;

- C. The activity will not result in the reduction of buffer acreage, type, or functions;
- D. The activity will not result in a reduction of wetland acreage, classification, or functions.

440.50.070 Wetland Compensatory Mitigation.

- I. General. As per the requirements of Section 440.50.010(II), non-exempt development proposals that impact wetlands or wetland buffers shall submit a mitigation plan to offset project impacts.



- II. Ratios for Compensatory Mitigation. When the acreage required for compensatory mitigation is divided by the acreage of impact, the result is a number known variously as a *replacement, compensation, or mitigation ratio*. Compensatory mitigation ratios are used to help ensure that compensatory mitigation actions are adequate to offset unavoidable wetland impacts by requiring a greater amount of mitigation area than the area of impact. Requiring greater mitigation area helps compensate for the risk that a mitigation action will fail and for the time lag that occurs between the wetland impact and achieving a fully functioning mitigation site. The ratios for compensatory mitigation are based on the assumption that the category and hydrogeomorphic (HGM) class or subclass of the affected wetland and the mitigation wetland are the same. The ratios may be adjusted either up or down if the category of HGM class or subclass of the wetland proposed for compensation is different. Compensatory mitigation should not result in the creation, restoration, or enhancement of an atypical wetland. An atypical wetland is defined as a wetland whose design does not match the type of wetland that would be found in the geomorphic setting of the proposed site (i.e., the water source(s) and hydroperiod proposed for the mitigation site are not typical for the geomorphic setting).
- III. Definitions of Types of Compensatory Mitigation. The ratios presented are based on the type of compensatory mitigation proposed (e.g., restoration, creation, and enhancement). In its *Regulatory Guidance Letter 02-02*, the U.S. Army Corps of Engineers provided definitions for these types of compensatory mitigation. For consistency, this document uses the same definitions which are provided below:
- A. Restoration. The manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural or historic functions to a former or degraded wetland. For the purpose of tracking net gains in wetland acres, restoration is divided into:
1. Re-establishment. The manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural or historic functions to a former wetland. Re-establishment results in a gain in wetland acres (and functions). Activities could include removing fill material, plugging ditches, or breaking drain tiles.
  2. Rehabilitation. The manipulation of the physical, chemical, or biological characteristics of a site with the goal of repairing natural or historic functions of a degraded wetland. Rehabilitation results in a gain in wetland function but does not result in a gain in wetland acres. Activities could involve breaching a dike to reconnect wetlands to a floodplain or return tidal influence to a wetland.
- B. Creation (Establishment). The manipulation of the physical, chemical, or biological characteristics present to develop a wetland on an upland or deepwater site where a wetland did not previously exist. Establishment results in a gain in wetland acres. Activities typically involve excavation of upland soils to elevations that will produce a wetland hydroperiod, create hydric soils, and support the growth of hydrophytic plant species.
- C. Enhancement. The manipulation of the physical, chemical, or biological characteristics of a wetland site to heighten, intensify, or improve specific function(s) or to change the growth stage or composition of the vegetation present. Enhancement is undertaken for specified purposes such as water quality improvement, flood water retention, or wildlife habitat. Enhancement results in a change in some wetland functions and can lead to a decline in other wetland functions, but does not result in a gain in wetland acres. Activities typically consist of planting vegetation, controlling non-native or invasive species, modifying site elevations or the proportion of open water to influence hydroperiods, or some combination of these activities.

- D. Protection/Maintenance (Preservation). Removing a threat to, or preventing the decline of, wetland conditions by an action in or near a wetland. This includes the purchase of land or easements, repairing water control structures or fences, or structural protection such as repairing a barrier island. This term also includes activities commonly associated with the term *preservation*. Preservation does not result in a gain of wetland acres, may result in a gain in functions, and will be used only in exceptional circumstances.

#### MITIGATION RATIOS

Category and Type of Wetland Impacts	Re-establishment or Creation	Rehabilitation Only	Re-establishment or Creation (R/C) and Rehabilitation (RH)	Re-establishment or Creation (R/C) and Enhancement (E)	Enhancement Only
All Category IV	1.5:1	3:1	1:1 R/C and 1:1 RH	1:1 R/C and 2:1 E	6:1
All Category III	2:1	4:1	1:1R/C and 2:1 RH	1:1 R/C and 4:1 E	8:1
Category II Estuarine	Case-by-case	4:1 Rehabilitation of an estuarine wetland	Case-by-case	Case-by-case	Case-by-case
Category II Interdunal	2:1 Compensation has to be interdunal wetland	4:1 Compensation has to be interdunal wetland	1:1 R/C and 2:1 RH Compensation has to be interdunal wetland	Not considered an option	Not considered an option
All Other Category II	3:1	6:1	1:1 R/C and 4:1 RH	1:1 R/C and 8:1 E	12:1
Category I Forested	6:1	12:1	1:1 R/C and 4:1 RH	1:1 R/C and 20:1 E	24:1
Category I based on score for functions	4:1	8:1	1:1 R/C and 6:1 RH	1:1 R/C and 12:1 E	16:1
Category I Natural Heritage site	Not considered possible	6:1 Rehabilitation of a Natural Heritage site	R/C Not considered possible	R/C Not considered possible	Case-by-case
Category I Coastal Lagoon	Not considered possible	6:1 Rehabilitation of a coastal lagoon	R/C Not considered possible	R/C Not considered possible	Case-by-case
Category I Bog	Not considered possible	6:1 Rehabilitation of a bog	R/C Not considered possible	R/C Not considered possible	Case-by-case
Category I Estuarine	Case-by-case	6:1 Rehabilitation of an estuarine wetland	Case-by-case	Case-by-case	Case-by-case

440.50.080 Wetland Permits

- I. Preliminary Wetland/Buffer Enhancement Plan. The preliminary enhancement/mitigation plan consists of two parts, baseline information for the site and a conceptual plan.
  - A. Baseline information shall include:
    1. Wetland delineation report;
    2. Description and maps of vegetative conditions at the site;
    3. Description and maps of hydrological conditions at the site;
    4. Description of soil conditions at the site based on a preliminary on-site analysis;
    5. A topographic map of the site; and
    6. Assessment of the functional uses of the existing wetland and buffer.
  - B. The contents of the conceptual plan shall include:
    1. Goals objectives, and performance standards of the proposed mitigation project;
    2. Description of wetland type to be created, rehabilitated, restored, or enhanced;
    3. Map (This map should include the base buffer and the proposed buffer.) showing proposed wetland and buffer;
    4. Site plan;
    5. Discussion and map of plant material to be planted and planting densities;
    6. Preliminary drainage plan identifying location of proposed drainage facilities including detention structures and water quality features (e.g., swales);
    7. Discussion of water sources for the wetland;
    8. Project schedule;
    9. Discussion of how the completed project will be managed and monitored; and
    10. Discussion of contingency plans in case the project does not meet the goals initially set for the project.
- II. Final Wetland/Buffer Enhancement Plan. The contents of the final enhancement/mitigation plan shall include:
  - A. Preliminary enhancement/mitigation plan and all conditions imposed on that plan.
  - B. Performance Standards. Specific criteria shall be provided for evaluating whether or not the goals and objectives of the enhancement/mitigation project are being met. Such criteria may include water quality standards, survival rates of planted vegetation, species abundance and diversity targets, habitat diversity indices, or other ecological, geological, or hydrological criteria.
  - C. Detailed Construction Plans. Written specifications for the enhancement/mitigation project shall be provided. The specifications shall include the proposed construction sequence, grading and excavation details, water and nutrient requirements for planting, specification of substrate stockpiling techniques, and planting instructions, as appropriate. These written specifications shall be accompanied by detailed site diagrams, sealed cross-sectional drawings, topographic maps showing slope percentage and final grade elevations, and any other drawings appropriate to show construction techniques or anticipated final outcome.
  - D. Monitoring Program. Description of a detailed program for monitoring the success of the enhancement/mitigation project. A monitoring program shall include, but is not limited to:
    1. Establishing vegetation plots to track changes in plant species composition and density over time;
    2. Using photo stations to evaluate vegetation community response;
    3. Measuring base flow rates and storm water runoff to model and evaluate water quality predictions, if appropriate;
    4. Measuring sedimentation rates, if applicable; and

5. Sampling fish and wildlife populations to determine habitat utilization, species abundance and diversity. A protocol shall be included outlining how the monitoring data will be evaluated by agencies that are tracking the progress of the project. A monitoring report shall be submitted annually, at a minimum, documenting milestones, successes, problems, and contingency actions of the compensation project. The compensation project shall be monitored for a period necessary to establish that performance standards have been met, but not for a period less than five (5) years. Ten (10) years or more of monitoring are needed for forested and scrub-shrub communities.
- E. Associated Plans and Other Permits.
    1. Final landscaping plan;
    2. An as built plan for projects that require wetland creation or wetland construction;
    3. Final drainage plan; and
    4. Final erosion and sediment control plan.
  - F. Evidence of Financial and Scientific Proficiency. A description of how the enhancement/mitigation project will be managed during construction and the scientific capability of the designer to successfully implement the proposed project. In addition, a demonstration of the financial capability of the applicant to successfully complete the project and ensure it functions properly over a five (5) year period. There should also be evidence that required bonding can be obtained.
  - G. Contingency Plan. Identification of potential courses of action, and any corrective measures to be taken when monitoring or evaluation indicates project performance standards are not being met.
- III. Wetland Permit – Applications.
- A. Applications for wetland permits shall be made to the Town on forms furnished by the Town. The Town shall process a wetland permit application as a request for land use approval pursuant to existing Land Use Review Procedures.
  - B. Wetlands Permit Applications shall include:
    1. Wetland delineations and required buffer width;
    2. A site plan for the proposed activity overlaid on an aerial photograph at a scale no smaller than one inch equals four hundred feet (1"=400') showing the location, width, depth, and length of all existing and proposed structures, roads, storm water management facilities, sewage treatment, and installations within the wetland and its buffer;
    3. The exact sites and specifications for all regulated activities including the amounts and methods; and
    4. A proposed preliminary enhancement/mitigation plan meeting the requirements of this chapter.
- IV. Wetland Permit – Approval.
- A. The Town shall issue final approval of the wetland permit authorizing commencement of the activity permitted thereby upon:
    1. Submittal and approval of a final enhancement/mitigation plan;
    2. Installation and approval of the required field markings; and
    3. The recording of a conservation covenant.
  - B. Conditions. An approval of a wetland permit shall incorporate the following conditions:
    1. Posting of a cash performance bond or other security acceptable to the Town in an amount and with surety and conditions sufficient to fulfill the initial (first year) requirements of the required final plan, mitigation plan, and enhancement plan and to secure compliance with other conditions and limitations set forth in the permit.

2. The Town shall release the performance bond upon determining that:
    - a. All initial (first year) activities, including any required compensatory mitigation, have been completed in accordance with the terms and conditions of the permit and the requirements of this chapter; and
    - b. Upon forfeiture of a performance bond, the proceeds thereof shall be utilized either to correct deficiencies which resulted in forfeiture or, if such correction is deemed by Clark County to be impractical or ineffective, to enhance other wetlands in the same watershed.
  3. Posting of a cash maintenance bond or other security acceptable to the Town in an amount and with surety and conditions sufficient to fulfill the requirements of the required final plan, mitigation plan, and enhancement plan and to secure compliance with other conditions and limitations set forth in the permit for the duration (beyond one year) of the required monitoring and maintenance time period.
  4. The Town shall release the maintenance bond at the end of the approved monitoring and maintenance time period upon determining that:
    - a. All activities, including any required compensatory mitigation, have been completed in accordance with the terms and conditions of the permit and the requirements of this chapter; and
    - b. Upon forfeiture of a performance or maintenance bond, the proceeds thereof shall be utilized either to correct deficiencies which resulted in forfeiture or, if such correction is deemed by Clark County to be impractical or ineffective, to enhance other wetlands in the same watershed.
- C. Duration. Wetland permit final approval shall be valid for a period of two (2) years from the date of issuance unless:
1. A longer period, not to exceed five (5) years, is specified in the permit; or
  2. The Town grants an extension upon the written request of the original permit holder or successor in title demonstrating to the satisfaction of the Town:
    - a. That the original intent of the permit would not be altered or enlarged by the extension; and
    - b. That relevant circumstances and standards have not changed substantially since the permit application; and
    - c. That the applicant has complied with the terms of the permit.
- D. Revocation. In addition to other remedies provided for elsewhere, the Town may suspend or revoke a permit if the applicant or permittee has not complied with any of the conditions or limitations set forth in the permit, has exceeded the scope of work set forth in the permit, or has failed to undertake the project in the manner set forth in the permit.
- V. Emergency Wetland Permit.
- A. Authorization. Notwithstanding the provisions of this chapter, the Mayor or his or her designee may issue a temporary emergency wetland permit prospectively or, in the case of imminent threats to public health, safety, or welfare, retroactively, where the anticipated threat or loss may occur before a permit can be issued or modified under the procedures otherwise required by the act and other applicable laws.
  - B. Prior to issuing an emergency wetland permit, the Mayor or his or her designee shall issue a finding that extraordinary circumstances exist and that the potential threat to public health, safety, or welfare from the emergency situation is clearly significant and substantial.

- C. Conditions. Any emergency permit granted shall incorporate, to the greatest extent practicable and feasible but not inconsistent with the emergency situation, the standards and criteria required for non-emergency activities under this act and shall:
  1. Be limited in duration to the time required to complete the authorized emergency activity, not to exceed ninety (90) days; and
  2. Require, within this ninety (90) day period, the restoration of any wetland altered as a result of the emergency activity, except that if more than the ninety (90) days from the issuance of the emergency permit is required to complete restoration, the emergency permit may be extended to complete the restoration.
- D. Notice. Notice of issuance of an emergency permit shall be published in a newspaper having general circulation in the Town of Yacolt not later than ten (10) days after issuance of such permit.
- E. Termination. The emergency permit may be terminated at any time without process upon a determination by the Town that the action is no longer necessary to protect human health or the environment.

The Ordinance shall take effect immediately upon adoption and publication according to law.

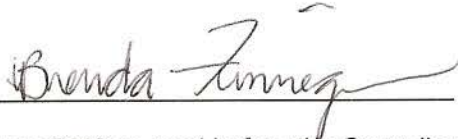
Passed by the Town Council of the Town of Yacolt, Washington on this 17<sup>th</sup> day of April, 2006.

AYES Holyk, Marbut, Weldon, Stewart

NAYS None

ABSENT None

MAYOR 

ATTEST 

I hereby certify that this is a true and correct copy of Ordinance #440 as read before the Council and passed on the date herein mentioned and passed according to law.

ATTEST   
 Brenda Finnegan, Clerk/Treasurer