

# HABITAT-FRIENDLY DEVELOPMENT PROVISIONS

CPA 2006-00001 / DCA 2006-0000

## PROPOSED AMENDMENTS

The following amendments are proposed to the Tigard Comprehensive Plan, (Volume I) and Community Development Code (Sections 18.360, 18.370, 18.705, 18.715, 18.765, 18.775, 18.810) to adopt the Significant Habitat Areas Map and to implement the recommendations of the Tualatin Basin Fish & Wildlife Habitat Program in compliance with Statewide Planning Goal 5 and Metro Title 13 (Nature in Neighborhoods). The proposed habitat-friendly development provisions will not result in increased development restrictions. Rather, the changes will give property owners and developers the option to take advantage of greater regulatory flexibility in exchange for the use of habitat-friendly development practices. Amendments will remove barriers to, and provide code flexibility for, development which incorporates habitat-friendly techniques.

Proposed amendments are shown as follows:

- Each section begins with commentary explaining the intent of the code amendment followed by the specific language to be revised.
- Language to be added to the Community Development Code is underlined.
- Language to be deleted is shown in ~~strikethrough~~.

## COMPREHENSIVE PLAN

### NATURAL RESOURCE SECTION

#### Commentary

The Basin's IGA with Metro requires jurisdictions to encourage habitat-friendly development practices in areas Metro identified as Class I and II riparian habitat areas (or Strictly Limited and Moderately Limited). Provisions may be extended to other inventoried resources, including Class III riparian areas & Class A uplands (or Lightly Limited). A map must be adopted to establish the generalized locations of Significant Habitat Areas within Tigard.

#### Amendments

- Adopt: Significant Habitat Areas Map

## COMMUNITY DEVELOPMENT CODE – TITLE 18

### SECTION 18.360 – SITE DEVELOPMENT REVIEW

#### Commentary

The intent of this amendment is to address recommendations for certain innovative techniques requiring further technical specifications, such as soil amendment and building design solution.

*18.360.010.C.* – Site Development Review

2. To encourage the innovative use of materials, methods and techniques and flexibility in building placement;

#### Code Amendments

*18.360.090.A.2.* Site Development Review, Relationship to the natural and physical environment:

- c. Innovative methods and techniques to reduce impacts to site hydrology and fish and wildlife habitat shall be considered based on surface water drainage patterns, identified per Section 18.810.100.A.3, and the City of Tigard “Significant Habitat Areas Map”. Methods and techniques for consideration may include, but are not limited to, the following:
- (1) Water quality facilities (for infiltration, retention, detention and/or treatment)
  - (2) Pervious pavement
  - (3) Soil amendment
  - (4) Roof runoff controls
  - (5) Fencing to guide animals toward safe passageways
  - (6) Re-directed outdoor lighting to reduce spill-off into habitat areas
  - (7) Preservation of existing vegetative and canopy cover

## SECTION 18.370 – VARIANCES AND ADJUSTMENTS

### Commentary

This amendment is identical to the text changed in Sect 18.810.030.A.7 (Streets, Improvements)

### Code Amendments

*18.370.020.C.* – Special adjustments.

11. Adjustments for street improvement requirements (Chapter 18.810). By means of a Type II procedure, as governed by Section 18.390.040, the Director shall approve, approve with conditions, or deny a request for an adjustment to the street improvement requirements, based on findings that the following criterion is satisfied: Strict application of the standards will result in an unacceptably adverse impact on existing development, on the proposed development, or on natural features such as wetlands, bodies of water, significant habitat areas, steep slopes or existing mature trees. In approving an adjustment to the standards, the Director shall determine that the potential adverse impacts exceed the public benefits of strict application of the standards.

## SECTION 18.705 – ACCESS, EGRESS AND CIRCULATION

### Commentary

*18.705.030* - General Provisions

Add pervious paving surfaces to list of hard surfaced materials for required walkways.

### Code Amendments

*18.705.030*

- F.4.* Required walkways shall be paved with hard surfaced materials such as concrete, asphalt, stone, brick, other pervious paving surfaces, etc. Any pervious paving surface must be designed and maintained to remain well-drained. Walkways may be required to be lighted and/or signed as needed for safety purposes.

## SECTION 18.715 – DENSITY COMPUTATIONS

### Commentary

*18.715.020.A* – Density Calculations

Definition of net development area currently deducts sensitive lands. Amend this definition to include "Significant Habitat Areas", which may also be deducted at the option of the developer.

18.715.030 – Residential Density Transfer

The Basin recommendation suggests allowing all density to be transferred up to double the density allowed on the remaining (buildable) portion of the site.

At their September 25th work session, the Planning Commission considered the Tualatin Basin recommendation to allow “all development potential to be transferred” from qualified habitat areas. Staff proposed a density transfer provision based on the Tualatin Basin recommendation to augment existing regulations which provide density transfer/bonuses for the following:

- 100-yr floodplain, steep slopes and drainageways: Up to 25%;
- Wetlands: Up to 100% for land zoned R-12, R-25, and R-40;
- Tree retention: 1% bonus for each 2% of canopy cover, up to 20% ; and
- Planned developments: 1% bonus for each 5% of the gross site area set aside in open space, up to 5%.

The Planning Commissioners expressed concern that the lack of adequate design criteria, and the proposed administrative approval procedures, for permitting density transfers may result in development which is incompatible with the surrounding neighborhood. The Planning Commission decided to recommend to the City Council that code amendments be deferred until further consideration can be given to the design standards and review procedures for permitting density transfers within significant habitat areas. The issue should be added to the Planning Commission calendar for further discussion in the near term.

**Code Amendments**

18.715.020.A

Definition of net development area. Net development area, in acres, shall be determined by subtracting the following land area(s) from the gross acres, which is all of the land included in the legal description of the property to be developed:

1. All sensitive land areas:
  - e. [Optional: Significant habitat areas, as designated on the City of Tigard “Significant Habitat Areas Map”.](#)

18.715.030 – Residential Density Transfer

A. Rules governing residential density transfer.

1. The units per acre calculated by subtracting land areas listed in Section 18.715.020 A. 1a - c from the gross acres may be transferred to the remaining buildable land areas subject to the following limitations:

- ~~1.~~ a. The number of units which can be transferred is limited to the number of units which would have been allowed on 25 percent of the unbuildable area if not for these regulations; and
- ~~2.~~ b. The total number of units per site does not exceed 125 percent of the maximum number of units per gross acre permitted for the applicable comprehensive plan designation.

~~B. 2. Additional rules governing residential density transfer Wetlands.~~ Units per acre calculated by subtracting land areas listed in Section 18.715.0320 A. 1d. from the gross acres may be transferred to the remaining buildable land areas on land zoned R-12, R-25, and R-40 subject to the following limitations:

~~1.~~ a. The number of units which can be transferred is limited to the number of units which would have been allowed on the wetland area, if not for these regulations;

~~2.~~ b. The total number of units per site does not exceed the maximum number of units per gross acre permitted for the applicable comprehensive plan designation.

**CB.** Underlying development standards. All density transfer development proposals shall comply with the development standards of the applicable underlying zoning district unless developed under the provisions of Chapter 18.440, Planned Development.

## SECTION 18.765 – OFF STREET PARKING AND LOADING

### Commentary

The Basin recommends removal of barriers to, and encourages the use of, pervious paving materials in parking areas and low traffic private streets (*equated with access drives*).

#### 18.765.040.B – Access Drives

Address concern of design standards & subgrade limitations. Some type of maintenance agreement may be necessary (as with tree survival & street performance)

#### 18.765.050.D – Bicycle Parking

Pavers are already allowed under the current standards. Address concern of design standards & subgrade limitations. Some type of maintenance agreement may be necessary (as with tree survival & street performance).

### Code Amendments

#### 18.765.040.B. – Access drives.

5. Access drives shall be improved with an asphalt, ~~or~~ concrete, or pervious paving surface. Any pervious paving surface must be designed and maintained to remain well-drained; and

#### 18.765.040.H – Parking Space Surfacing

1. Except for single-family and duplex residences, and for temporary uses or fleet storage areas as authorized in 18.765.040.H.3 and 4 below, all areas used for the parking or storage or maneuvering of any vehicle, boat or trailer shall be improved with asphalt, ~~or~~ concrete, or pervious paving surfaces. Any pervious paving surface must be designed and maintained to remain well-drained;
2. Off-street parking spaces for single and two-family residences shall be improved with an asphalt, ~~or~~ concrete, or pervious paving surface. Any pervious paving surface must be designed and maintained to remain well-drained;

#### 18.765.050 – Bicycle Parking Design Standards

D. Paving. Outdoor bicycle parking facilities shall be surfaced with a hard surfaced material, i.e., pavers, asphalt, concrete, other pervious paving surfaces, or similar material. This surface must be designed and maintained to ~~remained~~ well-drained.

## SECTION 18.775 – SENSITIVE LANDS

### Commentary

#### 18.775.010.G. Location

Add significant fish and wildlife habitat areas to list of sensitive lands.

Intent of Amendments:

- Address recommendations for adjustments to site design standard (lot dimensions: setbacks, height, and lot area) by extending provisions to areas within, or adjacent to, significant habitat.
- Establish delineation methodology & set minimum criteria for significant habitat areas.
- Allow reduction of minimum density in significant habitat areas.

## Code Amendments

### 18.775.010 Purpose

- G. Location. Sensitive lands are lands potentially unsuitable for development because of their location within:
1. The 100-year floodplain or 1996 flood inundation line, whichever is greater;
  2. Natural drainageways;
  3. Wetland areas which are regulated by the other agencies including the U.S. Army Corps of Engineers and the Division of State Lands, or are designated as significant wetland on the City of Tigard “Wetland and Stream Corridors Map”; ~~and~~
  4. Steep slopes of 25% or greater and unstable ground. (Ord. 05-01); ~~and~~
  5. [Significant fish and wildlife habitat areas designated on the City of Tigard “Significant Habitat Areas Map”](#).

### 18.775.100 Adjustment to Underlying Zone ~~Setback~~ Standards

- A. Adjustment option. The Planning Director may approve up to 50% adjustment to any dimensional standard (e.g., setback height or lot area) of the underlying zone district to allow development consistent with the purposes of this section. The purpose of the adjustment process is to reduce adverse impacts on wetlands, stream corridors, fish and wildlife habitat, water quality and the potential for slope of flood hazards.
- B. Adjustment criteria. A special adjustment to the standards in the underlying zoning district may be requested under Type II procedure when development is proposed within or adjacent to the vegetated corridor area [or within or adjacent to areas designated as “Strictly Limit” or “Moderately Limit” on the City of Tigard “Significant Habitat Areas Map.” Verification of significant habitat boundaries shall be done in accordance with the procedures described in Section 18.775.140.](#) In order for the Director to approve a dimensional adjustment to standards in the underlying zoning district, the applicant shall demonstrate that all the following criteria are fully satisfied:
2. Explicit consideration ~~has~~ been given to maximizing vegetative cover, minimizing excavation and minimizing impervious surface area on ~~un~~buildable land.
  3. Adjustment option. Design options have been considered to reduce the impacts of development, including but not limited to multi-story construction, siting of the residence close to the street to reduce driveway distance, maximizing the use of native landscaping materials, minimizing parking areas, [minimizing hydrologic impacts](#) and garage space.
  6. [Protected vegetated corridor, significant habitat areas and adjacent buffer areas must be:](#)
    - a. [Placed in a non-buildable tract or protected with a restrictive easement; and](#)
    - b. [Restoration and enhancement of habitat and buffer areas required, including monitoring for five years.](#)
- C. [Reduction to Minimum Density Requirements for Developments That Include Inventoried Significant Habitat Areas. The minimum number of units required by Section 18.510.040 \(Density Calculation\) may be waived if necessary to ensure that impacts on habitat areas are minimized.](#)

1. Approval criteria: Reduction requests will be approved if the review body finds that the applicant has shown that the following criteria are met:
  - a. An area of the property lot or parcel to be developed has been identified on the Significant Habitat Areas Map.” Verification of significant habitat boundaries shall be done in accordance with the procedures described in Section 18.775.140.
  - b. The proposal will be consistent with the character of the neighboring area.
  - c. The proposal will directly result in the protection of significant habitat areas through placement in a non-buildable tract or protected with a restrictive easement.
2. Procedure:
  - a. The amount of reduction in the minimum density shall be calculated by subtracting the number of square feet of inventoried significant habitat that is permanently protected from the total number of square feet used to calculate the minimum density requirement.
  - b. Requests for a reduction are processed as a Type II procedure along with the development proposal for which the application has been filed.

**18.775.140 Significant Habitat Areas Map Verification Procedures.**

The Significant Habitat Areas Map shall be the basis for determining the general location of Significant Habitat Areas on or adjacent to the site.

- A. Applicants who concur that the Significant Habitat Areas Map is accurate shall submit the following information to serve as the basis for verifying the boundaries of inventoried habitat areas:
  1. Submission requirements.
    - a. A detailed property description;
    - b. A scale map of the property showing the locations of Significant Habitat Areas, any existing built area, wetlands or water bodies, Clean Water Services’ vegetated corridor, the 100-year floodplain, the 1996 flood inundation line, and contour lines (2-ft. intervals for slope less than 15% and 10-ft intervals for slopes 15% or greater); and
    - c. A current aerial photograph of the property.
  2. Decision Process. The Planning Director’s decision shall be based on consideration of submitted information, site visit information, and other factual information. Should the applicant disagree with the Planning Director’s determination on the location of significant habitat areas on the property, the precise boundaries shall be verified by the applicant in accordance with the detailed delineation methodology outlined in Section 18.775.140.B.
- B. Applicants who believe that the map is inaccurate shall submit a detailed delineation conducted by a qualified professional in accordance with the following methodology to verify the precise boundaries of the inventoried habitat areas by means of a Type II procedure.
  1. **Verifying boundaries of inventoried riparian habitat.** Locating habitat and determining its riparian habitat class is a four-step process:
    - a. Locate the Water Feature that is the basis for identifying riparian habitat.
      - 1) Locate the top of bank of all streams, rivers, and open water within 200 feet of the property.
      - 2) Locate the 100-year floodplain or 1996 flood inundation line, whichever is greater, within 100 feet of the property.
      - 3) Locate all wetlands within 150 feet of the property. Identified wetlands on the property shall be further delineated consistent with methods currently accepted by the Oregon Division of State Lands and the U.S. Army Corps of Engineers.
    - b. Identify the vegetative cover status of all areas on the property that are within 200 feet of the top of bank of streams, rivers, and open water, are wetlands or are within 150 feet of wetlands, and are flood areas and within 100 feet of flood areas.
      - 1) Vegetative cover status shall be as identified on the Metro Vegetative Cover Map
      - 2) The vegetative cover status of a property may be adjusted only if (1) the property was developed prior to the time the regional program was approved, or (2) an error was made at the time the vegetative cover status was determined. To assert the latter type of error,

applicants shall submit an analysis of the vegetative cover on their property using summer 2002 aerial photographs and the following definitions of vegetative cover types in Table 18.775.1.

**Table 18.775.1**  
**Definitions of Vegetated Cover Types**

<u>Type</u>	<u>Definition</u>
<u>Low structure vegetation or open soils</u>	<u>Areas that are part of a contiguous area one acre or larger of grass, meadow, crop-lands, or areas of open soils located within 300 feet of a surface stream (low structure vegetation areas may include areas of shrub vegetation less than one acre in size if they are contiguous with areas of grass, meadow, crop-lands, orchards, Christmas tree farms, holly farms, or areas of open soils located within 300 feet of a surface stream and together form an area of one acre in size or larger).</u>
<u>Woody vegetation</u>	<u>Areas that are part of a contiguous area one acre or larger of shrub or open or scattered forest canopy (less than 60% crown closure) located within 300 feet of a surface stream.</u>
<u>Forest canopy</u>	<u>Areas that are part of a contiguous grove of trees of one acre or larger in area with approximately 60% or greater crown closure, irrespective of whether the entire grove is within 200 feet of the relevant water feature.</u>

- c. Determine whether the degree that the land slopes upward from all streams, rivers, and open water within 200 feet of the property is greater than or less than 25% (using the vegetated corridor measurement methodology as described in Clean Water Services Design and Construction Standards); and
- d. Identify the riparian habitat classes applicable to all areas on the property using Table 18.775.2 and Table 18.775.3.

**Table 18.775.2**  
**Method for Locating Boundaries of Class I and II Riparian Areas**

<u>Distance in feet from Water Feature</u>	<u>Development/Vegetation Status</u> <sup>1</sup>			
	<u>Developed areas not providing vegetative cover</u>	<u>Low structure vegetation or open soils</u>	<u>Woody vegetation (shrub and scattered forest canopy)</u>	<u>Forest Canopy (closed to open forest canopy)</u>
<u>Surface Streams</u>				
<u>0-50</u>	<u>Class II</u>	<u>Class I</u>	<u>Class I</u>	<u>Class I</u>
<u>50-100</u>		<u>Class II</u> <sup>2</sup>	<u>Class I</u>	<u>Class I</u>
<u>100-150</u>		<u>Class II</u> <sup>2</sup> if slope>25%	<u>Class II</u> <sup>2</sup> if slope>25%	<u>Class II</u> <sup>2</sup>
<u>150-200</u>		<u>Class II</u> <sup>2</sup> if slope>25%	<u>Class II</u> <sup>2</sup> if slope>25%	<u>Class II</u> <sup>2</sup> if slope>25%
<u>Wetlands (Wetland feature itself is a Class I Riparian Area)</u>				
<u>0-100</u>		<u>Class II</u> <sup>2</sup>	<u>Class I</u>	<u>Class I</u>
<u>100-150</u>				<u>Class II</u> <sup>2</sup>
<u>Flood Areas (Undeveloped portion of flood area is a Class I Riparian Area)</u>				
<u>0-100</u>			<u>Class II</u> <sup>2</sup>	<u>Class II</u> <sup>2</sup>

<sup>1</sup>The vegetative cover type assigned to any particular area was based on two factors: the type of vegetation observed in aerial photographs and the size of the overall contiguous area of vegetative cover to which a particular piece of vegetation belonged. As an example of how the categories were assigned, in order to qualify as "forest canopy" the forested area had to be part of a larger patch of forest of at least one acre in size.

<sup>2</sup> Areas that have been identified as habitats of concern, as designated on the Metro Habitats of Concern Map (on file in the Metro Council office), shall be treated as Class I riparian habitat areas in all cases, subject to the provision of additional information that establishes that they do not meet the criteria used to identify habitats of concern as described in Metro's Technical Report for Fish and Wildlife. Examples of habitats of concern include: Oregon white oak woodlands, bottomland hardwood forests, wetlands, native grasslands, riverine islands or deltas, and important wildlife migration corridors.

**Table 18.775.3**  
**Tualatin Basin "Limit" Decision**

<b><u>RESOURCE CATEGORY</u></b>	<b><u>CONFLICTING USE CATEGORY</u></b>			
	<u>High Intensity Urban</u>	<u>Other Urban</u>	<u>Future Urban (2002 and 2004 additions)</u>	<u>Non-Urban (outside UGB)</u>
<u>Class I &amp; II Riparian Inside Vegetated Corridor</u>	<u>Moderately Limit</u>	<u>Strictly Limit</u>	<u>Strictly Limit</u>	<u>N/A</u>
<u>Class I &amp; II Riparian Outside Vegetated Corridor</u>	<u>Moderately Limit</u>	<u>Moderately Limit</u>	<u>Moderately Limit</u>	<u>Moderately Limit</u>
<u>All Other Resource Areas</u>	<u>Lightly Limit</u>	<u>Lightly Limit</u>	<u>Lightly Limit</u>	<u>Lightly Limit</u>
<u>Inner Impact Area</u>	<u>Lightly Limit</u>	<u>Lightly Limit</u>	<u>Lightly Limit</u>	<u>Lightly Limit</u>
<u>Outer Impact Area</u>	<u>Lightly Limit</u>	<u>Lightly Limit</u>	<u>Lightly Limit</u>	<u>Lightly Limit</u>

\* Vegetated Corridor standards are applied consistently throughout the District; in HIU areas they supersede the "limit" decision.

2. **Verifying boundaries of inventoried upland habitat.** Upland habitat was identified based on the existence of contiguous patches of forest canopy, with limited canopy openings. The "forest canopy" designation is made based on analysis of aerial photographs, as part of determining the vegetative cover status of land within the region. Upland habitat shall be as identified on the Significant Habitat Areas Map unless corrected as provided in this subsection.
  - a. Except as provided below, vegetative cover status shall be as identified on the Metro Vegetative Cover Map used to inventory habitat (available from the Metro Data Resource Center, 600 N.E. Grand Ave., Portland, OR 97232).
  - b. The only allowed corrections to the vegetative cover status of a property are as follows:
    - 1) To correct errors made when the vegetative status of an area was determined based on analysis of the aerial photographs used to inventory the habitat. The perimeter of an area delineated as "forest canopy" on the Metro Vegetative Cover Map may be adjusted to more precisely indicate the dripline of the trees within the canopied area provided that no areas providing greater than 60% canopy crown closure are de-classified from the "forest canopy" designation. To assert such errors, applicants shall submit an analysis of the vegetative cover on their property using the aerial photographs that were used to inventory the habitat and the definitions of the different vegetative cover types provided in Table 18.775.1; and
    - 2) To remove tree orchards and Christmas tree farms from inventoried habitat; provided, however, that Christmas tree farms where the trees were planted prior to 1975 and have not been harvested for sale as Christmas trees shall not be removed from the habitat inventory.

- c. [If the vegetative cover status of any area identified as upland habitat is corrected pursuant to 18.775.140.A.2.b.1. to change the status of an area originally identified as “forest canopy.” then such area shall not be considered upland habitat unless it remains part of a forest canopy opening less than one acre in area completely surrounding by an area of contiguous forest canopy.](#)

## SECTION 18.810 – STREET AND UTILITY IMPROVEMENT STANDARDS

### Commentary

The intent of these amendments is to address recommendations for reducing the amount of paving in habitat areas for roadways, sidewalks (planter strips), stream crossings and block length.

#### *18.810.030.A.7: Streets, Improvements*

In 2002, street widths were reduced with the TSP update following a great deal of negotiation with TVFR (BR). “Skinny” roadway widths are allowed on local streets if criteria is met. The code provides for adjustments to the Street Utility Improvement Standards to minimize adverse impact on natural features such as wetlands, steep slopes, or existing mature trees.

In order to further address recommendations to minimize paving, sidewalk reduction and narrow street right-of-ways through stream crossings, “significant habitat areas” shall be added to the list of natural features considered for adjustments to street improvement standards.

#### *18.810.040.B. Block Size*

Explicitly add "significant habitat areas" to the list of natural features precluding block size.

#### *18.810.070.C. Sidewalks, Planter Strip Requirement*

Explicitly add "habitat areas" to the list of significant natural features.

### Code Amendments

#### *18.810.030.A.7: Streets, Improvements*

The approval authority may approve adjustments to the standards of this chapter if compliance with the standards would result in an adverse impact on natural features such as wetlands, [bodies of water](#), [significant habitat areas](#), steep slopes, or existing mature trees.

#### *18.810.040.B. [Block](#) Sizes.*

1. The perimeter of blocks formed by streets shall not exceed 2,000 feet measured along the centerline of the streets except:
  - a. Where street location is precluded by natural topography, wetlands, [significant habitat areas](#) or ~~other~~ bodies of water, or pre-existing development; or

#### *18.810.070 Sidewalks*

- C. [Planter strip requirements.](#) A planter strip separation of at least five feet between the curb and the sidewalk shall be required in the design of streets, except where the following conditions exist: there is inadequate right-of-way; the curbside sidewalks already exist on predominant portions of the street; it would conflict with the utilities, there are significant natural features (large trees, water features, [significant habitat areas](#), etc) that would be destroyed if the sidewalk were located as required, or where there are existing structures in close proximity to the street (15 feet or less). Additional consideration for exempting the planter strip requirement may be given on a case by case basis if a property abuts more than one street frontage.