

A G E N D A

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METRO

Agenda

MEETING: METRO COUNCIL WORK SESSION MEETING
DATE: July 12, 2005
DAY: Tuesday
TIME: 2:00 PM
PLACE: Metro Council Chamber

CALL TO ORDER AND ROLL CALL

- | | | | |
|---------|----|---|---------------------|
| 2:00 PM | 1. | DISCUSSION OF AGENDA FOR COUNCIL
REGULAR MEETING, JULY 14, 2005/
ADMINISTRATIVE/CHIEF OPERATING OFFICER
AND CITIZEN COMMUNICATIONS | |
| 2:15 PM | 2. | MEASURE 37 CLAIMS PROCESS | Neill |
| 2:45 PM | 3. | TECHNICAL REVISIONS TO THE MODEL
ORDINANCE | Wilkinson |
| 3:15 PM | 4. | BREAK | |
| 3:20 PM | 5. | REVIEW OF REQUEST FOR PROPOSALS FOR
SYSTEM CONSULTANT FOR DISPOSAL SYSTEM
PLANNING | Hoglund/
Ehinger |
| 3:35 PM | 6. | OREGON TRANSPORTATION PLANNING RULE
COMMENTS | Kloster |
| 3:55 PM | 7. | PUBLIC EMPLOYEES RETIREMENT SYSTEM
UNFUNDED LIABILITY | Stringer |
| 4:30 PM | 8. | COUNCIL BRIEFINGS/COMMUNICATION | |

ADJOURN

MEASURE 37 CLAIMS PROCESS

Metro Council Work Session
Tuesday, July 12, 2005
Metro Council Chamber

METRO COUNCIL

Work Session Worksheet

Presentation Date: 7/19/05

Time:

Length:

Presentation Title: Measure 37 Claims Process

Department: Planning

Presenters: Lydia Neill

ISSUE & BACKGROUND

Metro has begun to receive Measure 37 applications that will require action. The applications require action within 180 days. The claims process needs to be in place in order for the Metro Council to take action on these claims. A claim process provides an opportunity for the Metro Council to make decisions on compensation or waiver of land use regulations.

OPTIONS AVAILABLE

Provide comments on the draft ordinance. Instruct staff to schedule an ordinance for adoption.

IMPLICATIONS AND SUGGESTIONS

Without a claims process in place the Metro Council will be unable to take action on these claims which could allow property owners to proceed to circuit court for a judgement. If the claim proceeds to circuit court Metro would be responsible for legal fees and perhaps compensation for the claim.

QUESTION(S) PRESENTED FOR CONSIDERATION

Are there changes to the proposed ordinance?

LEGISLATION WOULD BE REQUIRED FOR COUNCIL ACTION X Yes ___ No
DRAFT IS ATTACHED X Yes ___ No

SCHEDULE FOR WORK SESSION

Department Director/Head Approval _____

Chief Operating Officer Approval _____

DRAFT 5
Exhibit A to Ordinance No. 05-XXXX
Claims under Ballot Measure 37

2.21.010 Purpose

This chapter establishes a process for treatment of claims for compensation submitted to Metro under Ballot Measure 37. Metro adopts this chapter in order to afford property owners the relief guaranteed them by Ballot Measure 37 and to establish a process that is fair, informative and efficient for claimants, other affected property owners and taxpayers. It is the intention of Metro to implement Measure 37 faithfully and in concert with its other responsibilities, including its charter mandate to protect the environment and livability of the region for current and future generations.

2.21.020 Definitions

(a) "Appraisal" means a written statement prepared by an appraiser licensed by the Appraiser Certification and Licensure Board of the State of Oregon pursuant to ORS chapter 674. In the case of commercial or industrial property, "appraisal" additionally means a written statement prepared by an appraiser holding the MAI qualification, as demonstrated by a written certificate.

(b) "Family member" means the wife, husband, son, daughter, father, brother, brother-in-law, sister, sister-in-law, mother-in-law, father-in-law, aunt, uncle, niece, nephew, stepparent, stepchild, grandparent or grandchild of the owner of the real property, an estate of any of the foregoing family members, or a legal entity owned by any one or combination of these family members or the owner of the real property.

(c) "Land use regulation" means a provision of a Metro functional plan.

(d) "Owner" means the owner of the property, or any interest therein. "Owner" includes all persons or entities who share ownership of a property.

(e) "Reduction in value" means a reduction in the fair market value of real property, or any interest therein, resulting from enactment or enforcement of a land use regulation as of the date the owner makes a written claim for compensation.

(f) "Waiver" means action by the Metro Council to modify, remove or not apply the land use regulation resulting in a reduction in value.

2.21.030 Filing a Claim

(a) A person may file a claim with Metro for compensation under Measure 37 without following the process set forth in this chapter. Metro will give priority to a claim filed under this chapter over claims filed without compliance with this chapter.

(b) A person filing a claim under this chapter must be the owner of the property that is the subject of the claim at the time the claim is submitted to Metro. The person must simultaneously file with Metro all claims against Metro under Measure 37 that involve the property. The person shall submit the claim or claims to the Chief Operating Officer (COO) and shall include, at a minimum, the following information:

(1) The name, street address and telephone number of the claimant and all other persons and entities with an interest in the property.

(2) A title report issued no more than 30 days prior to submission of the claim that shows the claimant's current real property interest in the property, the deed registry of the instrument by which the claimant acquired the property, the location and street address and township, range, section and tax lot(s) of the property, and the date on which the owner acquired the property interest;

(3) A written statement signed by all owners of the property, or any interest in the property, consenting to the filing of the claim;

(4) A copy of any and all specific, existing land use regulation the claimant believes reduced the value of the property and a description of the manner in which the regulation restricts the use of the property;

(5) A copy of the land use regulation that applied to the property at the time the claimant acquired the property;

(6) An appraisal that shows the reduction in value of the property that the claimant believes resulted from the land use regulation that restricts the use of the property and the methodology used in the appraisal, such as comparable sales data;

(7) A description of the claimant's proposed use of the property if the Council chooses to waive a land use regulation instead of paying compensation; and

(8) A statement whether the claimant is filing claims with other public entities involving the same property.

(c) A claim shall not be considered complete for purposes of paragraphs (4) and (6) of subsection 2 of Ballot Measure 37 until the claimant has submitted the information required by this section.

2.21.040 Review of Claim by Chief Operating Officer and Recommendation

(a) The COO shall review the claim to ensure that it provides the information required by section 2.21.030. If the COO determines that the claim is incomplete, the COO shall, within 15 business days after the filing of the claim, provide written notice of the incompleteness to the claimant. If the COO does not notify the owner that the claim

is incomplete within the prescribed 15 days, the claim shall be considered complete on the date it was filed with the COO.

(b) If the COO receives a completed claim, the COO shall post the claim at Metro's website and conduct a preliminary review to determine whether the claim satisfies all of the following prerequisites for full evaluation of the claim:

(1) The property lies within Metro's jurisdictional boundary;

(2) The land use regulation that is the basis for the claim is a provision of a functional plan or was adopted by a city or county to comply with a functional plan; and

(3) The claimant acquired the property before the effective date of the land use regulation.

(c) If the claim fails to satisfy one or more of the prerequisites in subsection (b) of this section, the COO shall prepare a report to that effect and recommend to the Metro Council that it dismiss the claim as provided in section 2.21.060(a)(1).

(d) If the claim satisfies each of the prerequisites in subsection (b) of this section, the COO shall complete the review of the claim to determine whether:

(1) The claimant owns an interest in the property and has owned an interest in the property without interruption since the claimant acquired the interest and prior to the effective date of the land use regulation that is the basis for the claim;

(2) The land use regulation that applied to the property at the time the claimant acquired the property allowed the claimant's proposed use and, if so, what criteria or conditions applied to the proposed use under the regulation;

(3) The specific, existing land use regulation that allegedly reduced the value of the property allows the proposed use and, if so, what criteria or conditions apply to the proposed use under the regulation;

(4) The specific, existing land use regulation that allegedly reduced the value of the property is exempt from Ballot Measure 37 under subsection 3 of the measure; and

(5) If the specific, existing land use regulation that allegedly reduced the value of the property is not exempt from Ballot Measure 37, the regulation restricts the proposed use and the restriction has reduced the value of the property.

(c) The COO may commission an appraisal or direct other research in aid of the recommendation whether a claim meets the requirements of Ballot Measure 37.

(d) The COO shall prepare a written report, to be posted at Metro's website, with the determinations required by subsection (b) of this section and the reasoning to support

the determinations. The report shall include a recommendation to the Metro Council on the validity of the claim and, if valid, whether Metro should compensate the claimant for the reduction of value or waive the regulation. If the COO recommends compensation or waiver, the report shall recommend any conditions that should be placed upon the compensation or waiver to help achieve the purpose of this chapter and the policies of the Regional Framework Plan.

(e) The COO shall provide the report to the Council, the owner and other persons who request a copy. If the COO determines that the Council adopted the regulation in order to comply with state law, the COO shall send a copy of the report to the Oregon Department of Administrative Services.

2.21.050 Hearing on Claim before Metro Council

(a) The Metro Council shall hold a public hearing on the claim before taking final action. The COO shall schedule the hearing for a date prior to the expiration of 180 days after the filing of a completed claim under section 2.21.030.

(b) The COO shall provide notification of the date, time and location of the public hearing at least 25 days before the hearing to the claimant, owners and occupants of property within 500 feet of the subject property, the local government with land use planning responsibility for the property and any person who requests notification. The notification shall indicate that a copy of the COO's recommendation under section 2.21.040 is available upon request.

2.21.060 Action on Claim by Metro Council

(a) After the public hearing, but not later than 180 after the filing of a claim under section 2.21.030, the Metro Council shall consider the COO's recommendation and:

(1) Determine that the claim does not qualify for compensation;

(2) Determine that the claim qualifies for compensation and provide relief in the form of compensation or enhancement of the value of the property or decide not to apply the land use regulation; or

(3) Determine that the claim qualifies for compensation and resolve to modify or remove the land use regulation.

(4) The Council shall take the action that is most consistent with the purpose of this chapter and the Regional Framework Plan.

(5) The Council shall issue an order with its decision and direct the COO to send the order to the owner, to persons who participated at the hearing held under section 2.21.050, other persons who request a copy, and the Oregon Department of

Administrative Services if the Council adopted the land use regulation to comply with state law.

2.21.070 Conditions on Compensation or Waiver

(a) The Metro Council may place any conditions on its action under section 2.21.060, including conservation easements and deed restrictions, that are appropriate to achieve the purposes of this chapter. The Council shall place a condition a decision under section 2.21.060(a)(1) or (2) that the decision constitutes a waiver by the claimant of any further claims against Metro under Measure 37 involving the subject property.

(b) Failure by a claimant to comply with a condition provides a basis for action to recover any compensation made or revoke any action by the Council under section under section 2.21.060(a)(2).

2.21.080 Fee for Processing Claim

(a) The COO may establish a fee to be paid by a person filing a claim at the time the person files the claim. The fee shall be based upon an estimate of the actual cost incurred by Metro in reviewing and processing claims. The COO may waive the fee if the claimant demonstrates that the fee would impose an undue hardship.

(b) The COO shall maintain a record of Metro's costs in reviewing and processing the claim. After final action by the Council under section 2.21.060 the COO shall determine Metro's total cost and issue a refund to the claimant if the estimated fee exceeded the total cost or a bill for the amount by which the total cost exceeded the estimated fee.

TECHNICAL REVISIONS TO THE MODEL ORDINANCE

Metro Council Work Session
Tuesday, July 12, 2005
Metro Council Chamber

METRO COUNCIL

Work Session Worksheet

Presentation Date: 7/12/05

Time:

Length: 60 min

Presentation Title: Nature in Neighborhoods Title 13 Model Ordinance Technical Revisions Report

Department: Planning

Presenter(s): Wilkinson

ISSUE & BACKGROUND

When the Council adopted amendments to Ordinance 05-1077 on May 12th, they also directed staff to form a subcommittee of MTAC to review the Title 13 Model Ordinance (Exhibit E of the Ordinance) for technical changes to ensure the ordinance would be workable for local jurisdictions. The subcommittee has met weekly since late May and has now completed their review, meeting the July 1st deadline (the revised version of the Model Ordinance and a summary are attached). MTAC discussed the revised Model Ordinance on July 6th, and has forwarded a recommendation for MPAC to endorse the revised Model Ordinance on July 13th. If the Council amends Ordinance 05-1077A to replace Exhibit E with the revised version of the Model Ordinance, there will be some accompanying technical amendments to be made to Title 13 of the Functional Plan. Council is scheduled to consider the revised Model Ordinance on July 14.

The subcommittee reviewed the entire Title 13 Model Ordinance, however most of their time was focused in several key areas. These main issues, a summary of how they were treated in Ordinance 05-1077A, and how they have been changed in the revised version of the Model Ordinance are described in the table in the 7/6/05 memo to MTAC (attached). Following Council direction, the subcommittee focused on technical issues. The subject that generated the most discussion was the mitigation planting standard in Section 6, the clear and objective development standards. While many strong opinions were voiced, the subcommittee came to a general consensus on the standard included in the revised draft, in which the numbers of plants are lowered but site preparation, plant care, and monitoring requirements have been added. A streamlined approach for allowing off-site mitigation and for varying the number and/or sizes of plants is now included in Section 7, alternative development standards.

One policy issue arose from the discussion of mitigation, which was the concept of a fee-in-lieu of mitigation planting program. Such an approach would provide more flexibility for developers, especially on industrial sites where land is at a premium. The subcommittee discussed the concept, but it was clearly a policy issue and it appeared unlikely that the group would reach consensus that a fee-in-lieu approach would adequately compensate for lost ecological functions.

OPTIONS AVAILABLE

Councilors can ask staff for clarification on the technical amendments, adopt, modify, or not adopt the amendments. Council could also direct staff to assess the potential of a fee-in-lieu of mitigation program.

IMPLICATIONS AND SUGGESTIONS

The Council will be asked to vote on technical amendments to Exhibit E of Ordinance 05-1077A, and accompanying amendments to Exhibit C (Title 13 of the Functional Plan) at the July 14th meeting. This session will help the Council become familiar with the issues under consideration to facilitate a thorough discussion and preparation for the upcoming vote. Ordinance 05-1077B (if the Council chooses to accept the revisions to the Title 13 Model Ordinance) will be available to property owners and interested parties for public comment once the Measure 56 notice is mailed out in early August.

QUESTION(S) PRESENTED FOR CONSIDERATION

Should the Council amend Ordinance 05-1077A to replace Exhibit E with the revised version of the Title 13 Model Ordinance?

Are there any other questions that staff should be working on prior to the Council's scheduled consideration of Ordinance 05-1077 in September?

LEGISLATION WOULD BE REQUIRED FOR COUNCIL ACTION X Yes No
DRAFT IS ATTACHED Yes X No

SCHEDULE FOR WORK SESSION

Department Director/Head Approval _____

Chief Operating Officer Approval _____

M E M O R A N D U M

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METRO

Date: July 1, 2005
To: MTAC
From: Malu Wilkinson, Senior Regional Planner

RE: Revised Title 13 Model Ordinance

When the Council adopted amendments to Ordinance 05-1077 on May 12th, they also directed staff to form a subcommittee of MTAC to review the Title 13 Model Ordinance (Exhibit E of the Ordinance) for technical changes to ensure the ordinance would be workable for local jurisdictions. The subcommittee has met weekly since late May and has now completed their review, meeting the July 1st deadline. MTAC will discuss the revised Model Ordinance on July 6th, and will forward a recommendation to MPAC for their consideration on July 13th. If the revised Model Ordinance is recommended, there will be some accompanying technical amendments to be made to Title 13 of the Functional Plan. Council is scheduled to consider the revised Model Ordinance on July 14.

The subcommittee reviewed the entire Title 13 Model Ordinance, however most of their time was focused in several key areas. These main issues, a summary of how they were treated in Ordinance 05-1077A, and how they have been changed in the revised version of the Model Ordinance are described in the table on the following page. Following Council direction, the subcommittee focused on technical issues. The subject that generated the most discussion was the mitigation planting standard in Section 6, the clear and objective development standards. While many strong opinions were voiced, the subcommittee came to a general consensus on the standard included in the revised draft, in which the numbers of plants are lowered but site preparation, plant care, and monitoring requirements have been added. A streamlined approach for allowing off-site mitigation and for varying the number and/or sizes of plants is now included in Section 7, alternative development standards.

One policy issue arose from the discussion of mitigation, which was the concept of a fee-in-lieu of mitigation planting program. Such an approach would provide more flexibility for developers, especially on industrial sites where land is at a premium. The subcommittee discussed the concept, but it was clearly a policy issue and it appeared unlikely that the group would reach consensus that a fee-in-lieu approach would adequately compensate for lost ecological functions.

Along with the revised version of the Title 13 Model Ordinance, we have included a summary of the ordinance that describes the most important elements of each section. Please review these documents prior to MTAC's discussion on July 6th.

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Title 13 Model Ordinance Key Issues

Issue	Ord. 05-1077A	MTAC Subcommittee recommended change
<i>Applicability:</i> An applicant would have to read several sections of the Model Ordinance to determine if it applied to a specific circumstance.	Applicability is found in several sections of the Model Ordinance (Sections 2, 3, 4...)	A new section 2 provides applicants with an easy reference guide to which sections of the ordinance apply to their proposed development. Section 3 defines all the exempt uses and conditioned activities.
<i>Planting standards:</i> Several parties expressed concern that the planting standards in the clear and objective approach were too high, others were concerned that no requirements were included that defined how vegetation would be planted to ensure survival.	Planting standards for mitigation in Section 6: Development Standards were based on Metro's experience with restoration plantings, and would require 8 trees and 36 shrubs per 500 sq. ft. disturbed; did not include requirements to ensure plant survival or monitoring	Planting standards for mitigation in Section 6 are enhanced to achieve the goal of forested conditions in riparian corridors. The standards would require 5 trees and 25 shrubs per 500 sq. ft., based on CWS and Pleasant Valley Code. Requirements for site preparation, plant care, 80% survival after 5 years, and monitoring are included.
<i>Process and notification:</i> Concerns were raised that the model ordinance should not define process and notice requirements that are required by state law.	Process and notification requirements for different types of decisions are included	Most references to process and notification are removed, or else reference is to appropriate state or local requirements. Notification to Metro of certain activities is included in the Model Ordinance. Notification to Watershed Councils is included for more complex map verifications.
<i>MCDD and WHMA Conditioned Activities:</i> Inclusion of these activities in the Discretionary Review section of the Model Ordinance.	Special conditions for activities by Multnomah County Drainage District (MCDD) to manage the altered floodplain and by the Port of Portland to maintain aircraft safety on Port owned properties covered by a Wildlife Hazard Management Area plan were placed in the Discretionary Review section of the Model Ordinance	These conditioned activities are included in Section 3: Exempt Uses and Conditioned Activities, specific reference is made as to which portions of the ordinance apply.
<i>Land divisions:</i> Concern raised that land partitions could be made that would result in the loss of additional habitat.	No mention of partitions. Subdivisions are required to set aside a portion of the HCA in an unbuildable tract in Section 6.	Preserve treatment of subdivisions, requirements that partitions are created in a way that minimizes disturbance to the HCA.
<i>Discretionary review:</i> Concern was expressed that a full alternatives analysis would be too onerous for some of the less complex proposals that would have to use discretionary review, such as off-site mitigation.	One process included in the Discretionary Review section that required an applicant to include an impact and alternatives analysis for any project that did not meet the standards in Section 6.	Includes streamlined processes in discretionary review section for: partitions that cannot meet the standards in Section 6; off-site mitigation; and varying the size and number of plants for mitigation.
<i>Utilities:</i> Concerns have been raised that new utilities need a clear and objective standard and that the ordinance should not conflict with the requirements of permits complying with the federal Clean Water Act and/or the federal Safe Drinking Water Act.	Section 6 (clear and objective standards) did not include a standard for new underground utility lines. In Section 7, habitat-friendly development practices are included as part of the minimize requirement.	Added a development standard (in Section 6) for new underground utilities that are 25 feet wide or less, provided that the disturbance is completely restored. In Section 7, included reference that habitat-friendly development practices shall be used to minimize unless prohibited by a permit needed to comply with the federal CWA or SDWA.
<i>Map administration:</i> Concern that the process described would be complicated to administer and expensive for the applicant.	Three approaches to map verification, basic, intermediate, and detailed. Substantial notice requirements throughout. Applicant using detailed verification approach would be required to use discretionary review standards.	Two approaches to map verification: basic and detailed. Notice is required only for detailed approach. Applicant can use either approach for map verification, and then choose development standards in Section 6 or 7.
<i>On-site density transfers:</i> Concerns were raised that requiring a city or county to allow a 100% density transfer would not be appropriate in many instances.	Required cities and counties to allow an applicant to transfer 100% of maximum allowable density on-site to avoid or minimize impact to the HCA.	Requires cities and counties to allow an applicant to transfer density on-site to avoid or minimize impact to the HCA; allows cities and counties to establish the appropriate percentage of density to be transferred, provided that it is not less than 50% of the maximum allowable density.

Summary of Revised Title 13 Model Ordinance

7/1/05

Section 1. Intent (page 1)

- To protect and improve ecological functions in urban streamside areas, and upland wildlife habitats in new UGB expansion areas.
- To implement the performance standards of Title 13 of the Urban Growth Management Functional Plan.
- To provide clear and objective development standards and an alternative discretionary development review process.
- To encourage habitat-friendly development
- To provide mitigation standards for ecological functions lost during development within Habitat Conservation areas (HCAs).

Section 2. Applicability (page 1)

- Ordinance applies to all properties with mapped HCA.
- Development 100 feet away from the HCA requires applicants only to provide a construction management plan; development outside the HCA, but within 100 feet of the HCA, requires map verification and a construction management plan.
- Development within the HCA requires compliance with the ordinance's development standards and with map verification, unless the development is an exempt or conditioned activity under Section 3.
- Subdivisions and partitions must comply with subdivision and partition development standards in Section 6 or Section 7, as well as map verification.
- The ordinance applies in addition to other applicable local, state, regional and federal development requirements; except that the review process for Water Quality Resource Areas (WQRA) is included in the discretionary standards of Section 7 (in other words if you follow Section 7, you do not need to follow separate WQRA requirements); and, the ordinance does not impose additional wetlands' mitigation requirements beyond those required by state and federal law.

Section 3. Exempt Uses and Conditioned Activities (page 2)

- Change of ownership.
- Uses allowed without a permit before September 22, 2005; provided residential construction is completed before January 1, 2006.
- Building permits for phased development projects.
- After subdivision is approved, subsequent development is exempt if mitigation has been completed.
- Repair and maintenance of existing structures, rebuilding after a fire or other natural hazards.
- Expansion of existing structures as long as no more than 500 square feet of HCA is disturbed and expansion gets no closer to the WQRA.
- Up to 120 square foot minor encroachments.
- Temporary clearings for site investigations, up to 200 square feet.

- Removal of 10% of vegetative cover (maximum of 20,000 square feet). During subsequent development review, the original mapped HCA will be used to calculate disturbance area.
- Maintenance of existing lawns and gardens, including new irrigation installation.
- Farming practices and farm structures on designated farmlands.
- Forest practices on designated forestlands.
- Maintenance, replacement, and repair of roads and utilities with no additional HCA intrusion.
- Maintenance and repair of existing streets, railroads, shipping terminals and utilities.
- Existing water-dependant uses.
- Manmade water control facilities.
- Approved wetland, stream or habitat restoration, and enhancement projects.
- Low-impact outdoor recreation facilities for public use, such as trails and interpretive facilities, up to 500 square feet.
- Emergency and hazard abatement procedures when there is insufficient time to address the ordinance standards. Subsequent restoration is required.
- Multnomah County Drainage District conditioned uses.
- Wildlife Hazard Management Area conditioned uses.

Section 4. Prohibitions (page 5)

- No planting of invasive non-native or noxious vegetation.
- No outside storage in the HCA, unless existing at time of ordinance adoption or approved by review processes.

Section 5. Construction Management Plans (page 5)

- All applicants provide plans to protect the HCA during construction. The plans include the location of construction equipment access and egress; staging and stockpile areas; erosion and sediment control measures; and protection for vegetation within the HCA.

Section 6. Development Standards (Clear and Objective standards) (page 5)

Application requirements:

- Applicants must verify the mapped HCA.
- Applicants must submit a map of the entire property detailing: the location of High, Moderate, and Low HCA on their property; the outline of the existing disturbance area and adjacent paved areas, stormwater facilities, and utilities; a delineation of any WQRA; a delineation of any floodplain or floodway; and contour line topography.
- Applicants must submit a detailed site plan of the proposed development.
- Applicants must submit the following information about the HCA: For properties less than one acre, the location, size, and species of all trees greater than six inches DBH, and an identification of the specific trees being proposed for removal; for properties one acre or larger, applicants may approximate the number, size and the dominant species of trees.
- Where grading shall occur, a grading plan must be submitted.

Methods for avoiding Habitat Conservation Areas (page 6):

- Building setback flexibility.

- Flexible landscaping requirements, including landscaping 'credit' for HCA preservation and the allowance of stormwater infiltration facilities within the HCA, provided they do not disturb the forest canopy.
- Flexible Site Design (On-site Density Transfer)- For residential development on-site density transfer is allowed to accommodate the transfer dimensional standards and lot sizes may be adjusted by no more than 30 percent. For commercial and industrial zones the transfer credit is 10,000 sq. ft per acre of land within the HCA. For mixed-use zones the density transfer can be either the residential or the commercial transfer credit. The remaining HCA must be legally protected through a deed restriction or public dedication.

Site Capacity Incentives:

- A 25% density bonus may be allowed for any development of 4 or more units in a multi-family zone, so long as 75% or more of the HCA is legally protected.
- For properties inside the Metro UGB by January 1, 2002, any area within the HCA that is legally protected from future development may be subtracted from the calculations of net size for the purposes of determining minimum density.

Optional tool that may be adopted by a city or county: Transfer of development off-site in residential zones:

- Properties that contain a minimum of 50 percent HCA may transfer development rights to: 1) Any property within a 2040 Mixed-Use area provided the property does not contain HCA and that the property is not in an undeveloped floodplain; or 2) City or county may identify the receiving sites.
- The receiving property density may not exceed 200 percent of the receiving property's allowable density and dimensional standards and lot sizes may be adjusted by no more than 30 percent.
- Transfer requires a recorded covenant from the sending property, the sending property must participate in the development application of the receiving property, and the city or county may purchase rights for a development rights bank.

Development within HCAs (page 8):

- Maximum Disturbance Areas within the HCA for single family residential are determined by subtracting the area outside the HCA from the following Total Disturbance Area Limitations: for High HCA, the lesser of 5,000 square feet or 50% of the lot area; for Moderate or Low HCA, the lesser of 6,000 square feet or 65% of the lot area. If a property contains more High HCA the MDA is calculated for High; if it contains more Moderate or Low HCA the MDA is calculated for Moderate/Low. The location of the disturbance area is outside of the HCA, if possible, or within the lowest value HCA, if possible.
- Maximum Disturbance Areas for all other zones, including Industrial, Commercial, and Multi-family zones, are 10 percent of the High HCA on site, 15 percent of the Moderate HCA on site, and 50 percent of the Low HCA on site.

Protection of Habitat during site development:

- Work areas marked.
- HCA trees not used as anchors for construction equipment.

- Conserve native soils on-site.
- Erosion and sediment control plan.
- Compliance with the construction management plan in Section 5.

Utility facility standards:

- Utility facility connections are allowed, up to 10-foot wide disturbance area.
- Upgrade of existing utility facility, up to 15-foot wide disturbance area.
- New underground utility facilities, up to 25 feet wide and disturbance of no more than 200 linear feet of WQRA per 1,000 linear feet of the utility facility.
- Any fill or excavation within the ordinary high water mark must go through the US Army Corps of Engineers permit process.
- All disturbance must be mitigated.

Mitigation requirements for disturbance in HCAs (page 11):

- All plants must be natives.
- There are two mitigation options for disturbance areas less than 1 acre; applicants must use the option that results in more planting:
 - 1) calculated based on the number and size of the trees being removed; or
 - 2) calculated based upon the square footage of the disturbance area, such that every 500 square feet of disturbance area requires the planting of 5, one half inch caliper trees; and 25 one gallon, at least 12 inch tall, shrubs.
- For one acre or larger disturbance areas, every 500 square feet of disturbance area requires the planting of 5, one half inch caliper trees; and 25 one gallon, at least 12 inch tall, shrubs.
- All planting must be on-site, within the HCA or contiguous to the HCA (contiguous planting must be legally protected from future development).
- Invasive vegetation must be removed from the mitigation area, there must be diversity in the species planted, and the plants must be mulched, watered, and protected from weeds.
- Applicants must provide annual reports about the success of their mitigation for a period of five years, and dead plants must be replaced each year.
- At the end of the five years at least 80% of the trees and shrubs must be alive.

Standards for Partitions and Subdivisions (page 13):

Partitions-

- Applicants seeking to partition must verify the mapped HCA and when they divide their property the resultant parcels may contain no more than a 30% percentage point difference in the percentage of the HCA on the parcels; for example, on a property that is 40% covered by HCA, a partition that creates two parcels, one of 55% HCA and one of 25% HCA is acceptable; whereas a partition that creates one parcel with 60% HCA and parcel with 20% HCA is not acceptable.
- Applicants may also partition a property such that at least 90% of the High HCA and 80% of the moderate HCA is on a separate unbuildable lot, protected by a legal instrument.
- Subsequent development on the parcels must comply with the development standards of the ordinance.

Subdivisions-

- Applicants must verify the mapped HCA.
- Applicants only dividing, but not developing, can choose to do all required mitigation, thus freeing the development lots from any further compliance with the ordinance; or, not do any required mitigation, thus requiring the development lots to go through development review, and potential mitigation, under the ordinance.
- Applicants dividing and developing must comply with the ordinance's development standards.
- When a property is divided the new plat must place 90% of the High HCA and 80% of the Moderate HCA in a separate unbuildable tract protected by a restrictive covenant, a public dedication, or, for residential properties, a conservation easement.

Section 7. Discretionary Review Processes (page 14)

A. Streamlined review process for applicants seeking only to partition:

- Applicants must verify the map; submit a map that delineates the High, Moderate, and Low HCA on the property and any WQRA or floodways, and a delineation of the proposed partition.
- Applicants must submit a narrative explanation of why it is not practicable to comply with the clear and objective partition standards and how the plan results in the creation of the least amount of difference between the amounts of HCA placed within the resultant parcels (thus, ensuring the least amount of disturbance area when future development occurs).
- Subsequent development must comply with this ordinance's development standards.

B. Streamlined review process for off-site mitigation (page 15):

- Must occur within the same sub-watershed.
- The number of trees and shrubs planted is the same as under the clear and objective mitigation standards.
- The applicant must plant as many trees on-site as practicable and demonstrate that the off-site mitigation project is legally protected from future development.
- Off-site mitigation is subject to the same planting, monitoring, and 80% survival rate as the on-site clear and objective mitigation.

C. Streamlined review process for applicants seeking to vary the number and size of the trees and shrubs planted (page 16):

- Applicants calculate the number of plants required under clear and objective mitigation and presents documentation that the numbers and sizes of the proposed plantings will achieve, at the end of five years, results comparable to, or better than, those results that would be achieved at the end of five years under the clear and objective standards.
- Plantings are subject to the same planting, monitoring, and 80% survival rate as the clear and objective mitigation standards.

D. Discretionary Review for all other circumstances (page 17):

Types of decisions that may be made under this section include: 1) applications to increase disturbance areas; 2) applications to vary mitigation, for example, a property might contain

impaired ecological functions and therefore it may not be appropriate to do full mitigation, or, an applicant might propose, where appropriate, to restore a meadow habitat rather than forest canopy; or 3) applications to mitigate off-site and outside of the subwatershed.

Application requirements:

- Applicants must provide an Impact Evaluation and Alternatives Analysis identifying the ecological functions of the riparian habitat, and the ecological function of upland wildlife habitat in future urban growth boundary expansion areas; and an evaluation of alternative locations, design modifications, or methods of development to determine which options decrease detrimental impacts on the HCAs.
- Applicants must provide a mitigation plan that either is consistent with the clear and objective mitigation standards, or is an alternative plan that explains how the proposed mitigation compensates for lost ecological functions. The plan must also include a monitoring and reporting plan and a list of responsible parties.
- For off-site mitigation proposals, within the same subwatershed, applicants must submit a map detailing the number and location of plants that can be planted on-site, an explanation of why it is not practicable to plant on-site, and documentation the applicant has the authority to plant and perform plant maintenance at the off-site location, and a mitigation implementation schedule. Off-site mitigation must be protected from future development by a legal instrument, such as a restrictive covenant.
- Off-site mitigation proposals outside the same subwatershed must demonstrate why it is not practicable to mitigate within the same subwatershed and how the proposed mitigation will provide more ecological function value than that which was required within the original subwatershed.

Approval criteria:

- Applicants must first avoid intrusion of development into the HCA, to the extent practicable.
- Where avoidance is not practicable, the applicant shall minimize detrimental effects to the extent practicable.
- A list of habitat-development practices has been included to provide suggestions of how applicants can minimize impacts upon the HCA.
- Mitigation plans must demonstrate that they compensate for detrimental impacts to ecological functions.

Municipal Water Utility Facilities Standards:

- These facilities must minimize detrimental impacts to the HCA and employ a series of listed best management practices to protect the HCA.

Section 8. Variances (page 24)

- Notice provided according to state notice requirements. Metro and local applicable watershed councils also receive notice.
- Hardship variance must be the minimum necessary to allow proposed use or activity.
- Buildable Lot variance is available for applicants who would otherwise be denied all economically viable use of their property.
- Conditions may be imposed on variances in order to limit adverse impacts resulting from the variance.

Section 9. Map Administration and HCA verification (page 25)

Basic Verification Process:

- Basic verification process available for applicants who believe the map is accurate.
- Basic verification process available for obvious misalignment between mapped habitat and property lot lines (local jurisdictions have the option to correct these errors at the time of adoption).
- Basic verification process available for property developed between summer 2002 and the adoption of the regional program.
- The Basic verification approach entails consideration of the applicable HCA map, a detailed property description, an aerial photograph from 2005, and any other objective and factual information, such as maps created by the city /county, or by a utility or watershed organization. If the information confirms the mapped HCA, the HCA is verified.

Detailed Verification Process:

- Detailed verification is available for applicants who believe that the map is inaccurate. However, the detailed approach may not be used to challenge the assumptions underlying the designations of particular HCAs. For example, Metro mapped gravel roads as “open soils,” such areas cannot be challenged as being “not habitat.” However, the mitigation for such areas could be decreased, under discretionary review, because the area provides an “impaired ecological function,” in comparison to actual “open soils.”
- Applicants must submit reports prepared by professional engineers or natural resource professionals.
- Notice shall be provided to neighbors within 100 feet, to the local neighborhood associations, the local watershed council, and to Metro. The Planning Director shall accept written public comments about the map verification.
- The map shall be verified by: 1) Locating the water feature that is the basis for identifying riparian habitat; 2) Verifying the boundaries of inventoried upland habitat in future urban growth boundary expansion areas; 3) Identifying the Urban development value of the property; and 4) Cross-referencing “habitat class” with “urban development value.”

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EXHIBIT E—ORDINANCE NO. 05-1077A

**METRO CODE CHAPTER 3.07
URBAN GROWTH MANAGEMENT FUNCTIONAL PLAN**

TITLE 13 MODEL ORDINANCE

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Section 1. Intent

The purpose of this ordinance is to comply with Section 4 of Title 13 of Metro's Urban Growth Management Functional Plan.

- A. To protect and improve the following functions and values that contribute to fish and wildlife habitat in urban streamside areas:
 - 1. Microclimate and shade;
 - 2. Stream-flow moderation and water storage;
 - 3. Bank stabilization, sediment and pollution control;
 - 4. Large wood recruitment and retention and channel dynamics; and
 - 5. Organic material sources.
- B. To protect and improve the following functions and values that contribute to upland wildlife habitat in new urban growth boundary expansion areas:
 - 1. Large habitat patches
 - 2. Interior habitat
 - 3. Connectivity and proximity to water; and
 - 4. Connectivity and proximity to other upland habitat areas
- C. To establish High, Moderate, and Low Habitat Conservation Areas (HCA) to implement the performance standards of Title 13 of the Urban Growth Management Functional Plan.
- D. To provide clear and objective standards and a discretionary review process, applicable to development in Habitat Conservation Areas, in accordance with Statewide Land Use Planning Goal 5.
- E. To allow and encourage habitat-friendly development, while minimizing the impact on fish and wildlife habitat functions.
- F. To provide mitigation standards for the replacement of ecological functions and values lost through development in Habitat Conservation Areas.

Section 2. Applicability

- A. This ordinance applies to all properties containing mapped Habitat Conservation Areas (HCA).
- B. All applicants must provide Construction Management Plans, in accordance with Section 5 of this ordinance.
- C. Where applicants are proposing development entirely outside of the HCA, but within 100 feet of its boundary, applicants must verify this boundary through the procedures outlined in Section 9 of this ordinance.

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- D. Where applicants are proposing development within the HCA, they must comply with the Development Standards found in Section 6 and Section 7 of this ordinance, and the Map Verification procedures found in Section 9 of this ordinance. Conditioned Uses, and Activities that are exempt from these requirements, may be found in Section 3 of this ordinance.
- E. Applicants proposing to partition or subdivide properties containing HCA must comply with the partition and subdivision standards found in Section 6(F) of this ordinance, or the Discretionary standards in Section 7 of this ordinance; as well as the Map Verification procedure in Section 9 of this ordinance.
- F. The Development Standards found in Sections 6 and 7 of this ordinance do not apply to development that occurs entirely outside of any portion of the HCA.
- G. The requirements of this ordinance apply in addition to other applicable local, state, regional, and federal development requirements, including those for Water Quality Resource Areas and Flood Management Areas; except that:
 - 1. applicants using the discretionary review process in Section 7 of this ordinance do not need to engage in any additional review process for Water Quality Resource Areas; and
 - 2. this ordinance shall not impose any mitigation requirements for wetlands beyond those required by federal and state law.
- H. "Development," "Partition," and "Subdivision" are defined in Section 11 of this ordinance.

Section 3. Exempt Uses and Conditioned Activities

The following uses and activities are exempt from the requirements of this chapter:

- A. Change of ownership.
- B. Where construction of a residence was completed before January 1, 2006, the owners or residents shall not be restricted from engaging in any development that was allowed prior to September 22, 2005; unless such development required obtaining a land use decision, or a building, erosion control, or grading permit.
- C. A building permit for a phased development project for which the applicant has previously met the application requirements, so long as the site for new construction was identified on the original permit and no new portion of the HCA will be disturbed.
- D. Where a property has been subdivided under section 6(F) of this ordinance, and the mitigation requirements of 6(E) have been completed for the subdivision, development on the individual lots may proceed without further review under this ordinance.
- E. Limited types of development, redevelopment, operations, and improvements, including the following:
 - 1. Maintenance, alteration, expansion, repair and replacement of existing structures, provided that;

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- a. The rebuilding of existing residential and non-residential structures damaged by fire or other natural hazards occurs within the same foundation lines ("building footprint"); and
- b. The alteration, expansion, or replacement of a structure will not intrude more than 500 sq. ft. into the HCA, and so long as the new intrusion is no closer to the protected water feature than the pre-existing structure or improvement.
2. Minor encroachments not to exceed 120 sq. ft. of impervious surface such as accessory buildings, eave overhangs, exterior building improvements for access and exiting requirements or other similar features.
3. Temporary and minor clearing not to exceed 200 square feet for the purpose of site investigations and pits for preparing soil profiles, provided that such areas are restored to their original condition when the investigation is complete.
4. Up to 10% of vegetative cover within the original mapped HCA on a lot or parcel may be removed, provided that no more than 20,000 square feet is removed; and provided that if more than 10% has been removed at the time of a development application, the review process shall use the original mapped HCA, subject to map verification, as the basis for determining the Maximum Disturbance Area in Section 6(C) of this ordinance and Mitigation standards in Sections 6(E) and 7(B), 7(C), 7(D)(1)(b) and 7(D)(2)(d) of this ordinance.
5. Maintenance of existing gardens, pastures, lawns and landscape perimeters, including the installation of new irrigation systems within existing gardens, pastures, lawns, and landscape perimeters.
6. Removal of plants identified as nuisance or prohibited plants on the *Metro Native Plant List* and the planting or propagation of plants identified as native plants on the *Metro Native Plant List*. Handheld tools must be used to remove nuisance or prohibited plants, and after such removal all open soil areas greater than 25 square feet must be replanted.
7. Farming practices and the construction of farm structures on farm use land situated outside the Metro UGB and within an exclusive farm use zone established under ORS 215.203 or within an area designated as marginal land under ORS 197.247 (1991 Edition). "Farming practice" as used in this subsection shall have the meaning set out in ORS 30.930.
8. Forest practices on forestlands situated outside the Metro UGB, except as provided in ORS 527.722(2), (3), and (4). "Forest practices" and "forestlands" as used in this subsection shall have the meaning set out in ORS 30.930.
9. Maintenance, alteration, repair, and replacement of roads and utilities when no additional incursion into the HCA is proposed.
10. Maintenance and repair of existing streets, railroads, shipping terminals, and utilities within rights-of-way, easements, and access roads.
11. Existing water-dependent uses that can only be carried out on, in, or adjacent to water because they require access to the water for waterborne transportation or recreation.

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12. Operation, maintenance, and repair of manmade water control facilities such as irrigation and drainage ditches, constructed ponds or lakes, wastewater facilities, and stormwater pretreatment facilities.
 13. Projects with the sole purpose of restoring or enhancing wetlands, streams, or fish and wildlife habitat areas, provided that the project is part of an approved local, state, or federal restoration or enhancement plan.
 14. Low-impact outdoor recreation facilities for public use, outside of Water Quality Resource Areas, including, but not limited to, multi-use paths, access ways, trails, picnic areas, or interpretive and educational displays and overlooks that include benches and outdoor furniture, provided that the facility meets the following requirements:
 - a. It contains less than 500 sq. ft. of new impervious surface; and,
 - b. Its trails shall be constructed using non-hazardous, pervious materials, with a maximum width of four feet.
- F. Emergency procedures or activities undertaken which are necessary to remove or abate hazards and nuisances or for the protection of public health, safety and welfare; provided that such remedial or preventative action must take place within a timeframe too short to allow for compliance with the requirements of this ordinance. After the emergency, the person or agency undertaking the action shall fully restore any impacts to the HCA resulting from the emergency action. Hazards that may be removed or abated include those required to maintain aircraft safety.
- G. Multnomah County Drainage District - Within Habitat Conservation Areas located in Multnomah County Drainage District No. 1, Peninsula Drainage District No. 1, Peninsula Drainage District No. 2, and the area managed by the Sandy Drainage Improvement Company, routine operations, repair, maintenance, reconfiguration, rehabilitation, or replacement of existing drainage and flood control facilities, and existing related facilities, including any structures, pump stations, water control structures, culverts, irrigation systems, roadways, utilities, accessory uses (such as off-load facilities that facilitate water-based maintenance), erosion control projects, levees, soil and bank stabilization projects, dredging and ditch clearing within the hydraulic cross-section in existing storm water conveyance drainageways, or other water quality and flood storage projects applicable to existing facilities and required to be undertaken pursuant to ORS chapters 547 or 554 or Titles 33 or 44 of the Code of Federal Regulations, shall be allowed, provided that:
1. The project is consistent with all other applicable local, state, and federal laws and regulations;
 2. The project does not encroach closer to a surface stream or river, wetland, or other body of open water than existing operations and development;
 3. Disturbed areas are replanted with vegetation and no bare soils remain after project completion; the planting of native vegetation and removal of invasive non-native or noxious vegetation is encouraged; invasive non-native or noxious vegetation shall not be planted; and,
 4. Each district submits an annual report, to all local permitting agencies in which the district operates, describing the projects the district completed in the previous year and how those projects complied with all applicable federal and state laws and requirements.

H. **Wildlife Hazard Management Areas** - Any activity that is required to implement a Federal Aviation Administration (FAA)-compliant Wildlife Hazard Management Plan (WHMP) on property owned by the Port of Portland within 10,000 feet of an Aircraft Operating Area, as defined by the FAA, shall not have to comply with subsections 6(B-D), 7(D)(1)(a)(3) and (4), or 7(D)(2)(b), (c) and (e) of this ordinance. For disturbance within the HCA on property owned by the Port of Portland within 10,000 feet of an Aircraft Operating Area, as defined by the FAA, the applicant shall choose, at its sole discretion, between complying with subsection 6(E) of this ordinance or complying with subsection 7(B), (C), or (D)(1)(b) and D(2)(d) of this ordinance. Mitigation required pursuant to subsection 6(E) or 7(B), (C), or (D)(1)(b) and D(2)(d) of this ordinance as part of any development within the HCA on property owned by the Port of Portland within 10,000 feet of an Aircraft Operating Area, as defined by the FAA, shall be permitted at any property located:

1. Within the same 6th Field Hydrologic Unit Code subwatershed as delineated by the United States Department of Agriculture's Natural Resources Conservation Service (NRCS) if on-site mitigation would conflict with FAA-compliant WHMP; or
2. Outside of the same 6th Field Hydrologic Unit Code subwatershed as delineated by the United States Department of Agriculture's Natural Resources Conservation Service (NRCS) only if the applicant follows the discretionary review process in section 7 of this ordinance.

Section 4. Prohibitions

- A. The planting of any invasive non-native or noxious vegetation is prohibited within the HCA.
- B. Outside storage of materials is prohibited within the HCA, unless such storage began before the effective date of this ordinance; or, unless such storage is approved during development review under either Section 6 or Section 7 of this ordinance.

Section 5. Construction Management Plans

In order to ensure that trees and vegetation within HCAs are not damaged during construction, all applicants, even those not developing within an HCA, shall provide a construction management plan that includes the following information:

- A. Location of site access and egress that construction equipment will use;
- B. Equipment and material staging and stockpile areas;
- C. Erosion and sediment control measures; and
- D. Measures to protect trees and other vegetation located within the HCA, but outside of the disturbance area approved under the provisions of section 6 or section 7 of this ordinance.

Section 6. Development Standards

The development standards described in this section apply to all development and redevelopment that occurs entirely, or partially, within Habitat Conservation Areas, unless such development is exempt under Section 3, or, unless the applicant chooses to follow the discretionary process in Section 7 of this ordinance. This section also applies to subdivisions and partitions of properties that contain HCAs.

Application for a land use, building, grading, land division, or other development permit through the clear and objective process may be an administrative decision. *[Insert city/county decision-type here.]*

A. Application Requirements. Applications for a building permit or development permit must provide a development plan and accompanying narrative explanation that includes the following information in addition to any other building permit or development permit requirements. All of the application requirements must be met prior to approval of a building or development permit.

1. Applicants must verify the HCA on their property as described in Section 9 of this ordinance.
2. For the entire subject property (HCA and non-HCA), applicants must submit a scale map of the property that includes:
 - a. Location of all High, Moderate, and Low HCAs on the property;
 - b. Outline of any existing disturbance area, including the location of existing adjacent streets and paved areas, utilities, culverts, stormwater management facilities, or bridges;
 - c. Location of any wetlands or water bodies on the property, including a delineation of the Water Quality Resource Area;
 - d. Location of 100 year floodplain and floodway boundary as defined by the Federal Emergency Management Agency (FEMA) and the area of the 1996 flood inundation; and
 - e. Topography shown by contour lines of 2-ft. intervals for slopes less than 15% and by 10 ft. intervals for slopes 15% or greater. On properties that are two acres or larger, such a contour map is required only for the portion of the property to be developed.
3. Detailed site plan of proposed development outlining total disturbance area, including, proposed building footprints, site property improvements, utilities and landscaping.
4. The following additional information shall be provided about the HCA:
 - a. For properties containing less than one acre of HCA, the location of all trees within the HCA that are greater than six inches diameter at breast height (DBH), shall be identified by size and species. For properties containing one acre or more of HCA, the applicant may approximate the number of trees and the diameter range, and provide a listing of the dominant species;
 - b. For proposed disturbance areas containing less than one acre of HCA, all trees with a diameter of six inches or greater that will be removed shall be specifically identified as to diameter at breast height (DBH) and species. For proposed disturbance areas containing one acre or more of HCA an approximate of the number of trees, their diameters and the dominant species; and
 - c. If grading will occur within the HCA, a grading plan showing the proposed alteration of the ground at 1-ft. vertical contours in areas of slopes less than 5%, and 2-ft. vertical contours in areas of slopes 6-15%, and at 5-ft. vertical contours of slopes 15% or greater.

B. Methods for avoiding Habitat Conservation Areas. The following habitat-friendly development practices may be used to avoid or minimize development within HCAs by allowing flexible site

design. [*Cities/counties shall allow the following methods to avoid, or minimize, development within HCAs*]:

1. ***Building setback flexibility*** to avoid, or minimize, development within HCAs. The minimum building setback of the base zone may be reduced to any distance between the base zone minimum and zero, unless this reduction conflicts with applicable fire or life safety requirements.
2. ***Flexible landscaping requirements*** to avoid, or minimize, development within HCAs.
 - a. Landscaping requirements, apart from those required for parking lots or street berms, may be met by preserving the HCA.
 - b. Facilities that infiltrate stormwater onsite, including the associated piping, may be placed within the HCA so long as the forest canopy and the areas within the driplines of the trees are not disturbed. Such facilities may include, but are not limited to, vegetated swales, rain gardens, vegetated filter strip, and vegetated infiltration basins. Only native vegetation may be planted in these facilities.
3. ***Flexible Site Design*** (On-site Density Transfer) to avoid or minimize development within HCAs.
 - a. ***Residential.*** For residential development proposals on lands with a HCA, a transfer of density within the property site is permitted. [*Cities/counties may establish the appropriate percentage of density that may be transferred, provided that it is not less than 50% of the maximum density that would have been permitted under the applicable zoning code requirements.*]
 - b. In order to accommodate the transferred density, dimensional standards and lot sizes may be adjusted by no more than 30 percent. [*Cities/counties may set the percentage of the adjustment, provided that it is no lower than 20%.*]
 - c. ***Commercial and Industrial Zones.*** For on-site density transfers in Commercial or Industrial zones, the transfer credit is 10,000 sq. ft floor area ratio (FAR) per acre of land within the HCA.
 - d. ***Mixed-Use Zones.*** Within mixed-use zones the density transfer credit can be factored using either 3(a) or 3(b) above, depending on the type of development proposed.
 - e. All remaining HCA shall be permanently restricted from development and maintained for habitat functions, such as by making a public dedication or executing a restrictive covenant.
4. ***Site Capacity Incentives.*** The following site capacity standards provide flexibility in the design of land divisions in order to allow ways to better protect HCAs.
 - a. Density bonus if HCA is protected. In multi-family residential zones, a 25 percent density bonus may be allowed for any development of four (4) or more dwelling units if 75 percent or more of the HCA on a site is permanently preserved, such as by making a public dedication or executing a restrictive covenant. The bonus density shall be in addition to the base density allowed in the applicable zoning district.
 - b. All area within a HCA, or any portion of it, may be subtracted from the calculations of net size for purposes of determining minimum density provided that such area is protected, such

as by making a public dedication or executing a restrictive covenant. This provision may only be applied to properties that were inside the Metro UGB on January 1, 2002.

5. *[Cities/Counties may allow the following tools for avoiding or minimizing development in HCAs]:*

Transfer of development rights (off-site) in residential zones. Transfer of development rights preserves development opportunities and reduces development pressure on environmentally-sensitive properties. The regulations described below allow development rights to be transferred from properties with HCAs to off-site areas that can accommodate the additional density without environmental conflict. Transfer of development rights between properties is allowed as follows. "Development rights" are the number of potential dwelling units that would be allowed on the property by the base zone.

- a. Sending properties. Properties where at least 50 percent of the property is within a HCA may transfer development rights.
- b. Receiving Properties.

Option 1: All properties in 2040 Mixed-Use areas may receive development rights from sending properties except:

- i. Where any portion of the receiving property is within an HCA; or
- ii. Where any portion of the receiving property is in the undeveloped 100-year floodplain as currently defined by the Federal Emergency Management Agency (FEMA).

Option 2: City or county may identify receiving properties upon adoption of this ordinance to be selected using the criteria in Option 1. The resulting map or criteria to identify receiving properties may include fewer properties than Option 1.

- a. Maximum density. The density of the receiving property may not exceed 200 percent of the allowable density of the receiving property.
- b. In order to accommodate the transferred density, dimensional standards and lot sizes may be adjusted by no more than 30 percent.
- c. Transfer procedure. Transfer of development rights is allowed as follows:
 - i. Covenant required. The owner of the sending property must execute a covenant with the authorizing authority that reflects the reduced development potential on the sending property. The covenant must be recorded before approval of the final plan. Density transfers shall be recorded on the title of the sending lot in the HCA and on the title of the transfer (receiving) property.
 - ii. Sending property included. The sending property must be a part of the application for development on the receiving property. A copy of the covenant for the sending property must be included with the application.
 - iii. City or county may purchase development rights from sending properties to place in a development rights bank for later sale to developers to use on receiving properties.

B. Development within HCAs. The following development standards apply to all development that occurs within the HCA except for exempt uses and conditioned activities addressed in Section 3 of this ordinance and utility facilities addressed in subsection 6(D) of this ordinance. If all development occurs outside of an HCA on a property, these standards do not apply. These standards also do not apply to development that occurs pursuant to the standards established by the alternative discretionary development standards in Section 7 of this ordinance. (Note: Applicants seeking to develop within a Water Quality Resource Area must utilize either the discretionary standards located in Section 7 of this ordinance or the review standards for Metro's Title 3 Water Quality Resource Areas).

1. Disturbance area limitations to minimize impact to HCA.

a. *Single-family residential.* The maximum disturbance area (MDA) allowed within HCAs is determined by subtracting the area of the lot or parcel outside of the HCAs from the total disturbance area (TDA) calculated as described in Table 1 below.
(TDA – Area outside the HCA = MDA)

i. Moderate and Low HCAs are subject to the same disturbance area limitations.

ii. Calculation of maximum disturbance area. If a lot or parcel includes both High and Moderate/Low HCAs then:

(A) If there is more High HCA than Moderate/Low HCA on the lot or parcel, then the MDA shall be calculated as if all of the Moderate/Low and High HCA were High, per Table 1 below; or

(B) If there is more Moderate/Low HCA than High HCA on the lot or parcel, then the MDA shall be calculated as if all of the Moderate/Low and High HCA were Moderate/Low, per Table 1 below.

iii. Location of MDA. If a lot or parcel includes different types of HCAs, then:

(A) The amount of development that may occur within the High HCA is equal to the total disturbance area minus the area of the lot or parcel outside of the High HCA (TDA – non-High HCA = MDA). If the area of the lot or parcel outside the High HCA is greater than the total disturbance area, then development shall not occur within the High HCA:

(Area outside High HCA > TDA = no development in High HCA);

(B) The amount of development that may occur within the Moderate HCA is equal to the total disturbance area minus the area of the lot or parcel outside of the High and Moderate HCA (TDA – (Low HCA + non-HCA) = MDA). If the area of the lot or parcel outside the Moderate HCA is greater than the total disturbance area, then development shall not occur within the Moderate HCA:

(Area outside Moderate HCA > TDA = no development in Moderate HCA);

and

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- (C) The amount of development that may occur within the Low HCA is equal to the total disturbance area minus the area of the lot or parcel outside of the High, Moderate and Low HCA (TDA – non-HCA = MDA). If the area of the lot or parcel outside the Low HCA is greater than the total disturbance area, then development shall not occur within the Low HCA:

(Area outside Low HCA > TDA = no development in Low HCA).

Table 1. HCA Total Disturbance Area Limitations for SFR.

HCA type	Total Disturbance Area
High	50 percent of the lot area, up to maximum of 5,000 sq. ft.
Moderate/Low	65 percent of the lot area, up to maximum of 6,000 sq. ft.

- b. *All other zones.* The maximum disturbance area (MDA) allowed by right within Low, Moderate and High HCAs in these zones is found in Table 2 below; this MDA is subject to the mitigation requirements described in subsection 6(E) of this ordinance.

Table 2. HCA Disturbance Area Limitations for all zones other than SFR.

HCA type	Maximum Disturbance Area
High	10 percent of HCA on site
Moderate	15 percent of HCA on site
Low	50 percent of HCA on site

- c. Development within an HCA in accordance with the provisions of this ordinance shall not result in a change of the HCA status of such developed areas on a property. In the case of a later development request seeking to develop within previously undisturbed HCAs on a property where a prior development request was subject to the provisions of this ordinance, the calculation of the MDA allowed on the property shall be based on the location of the HCA, notwithstanding the location of any authorized development within the HCA.
2. **Protection of habitat during site development.** During development of any site containing a HCA, the following standards apply:
- a. Work areas shall be marked to reduce potential damage to the HCA.
 - b. Trees in HCAs shall not be used as anchors for stabilizing construction equipment.
 - c. Native soils disturbed during development shall be conserved on the property.
 - d. An erosion and sediment control plan is required and shall be prepared in compliance with requirements set forth in the [*locally adopted Title 3 erosion control regulations*];
 - e. Prior to construction, the HCA that is to remain undeveloped shall be flagged, fenced, or otherwise marked and shall remain undisturbed.
 - f. All work on the property shall conform to the Construction Management Plan described in Section 5 of this ordinance.

The following disturbance area limitations apply to new utilities, private connections to existing or new utility lines, and upgrades of existing utility lines, and new underground utility facilities within an HCA:

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- a. The disturbance area for utility facility connections to utility facilities is no greater than 10 feet wide.
- b. The disturbance area for the upgrade of existing utility facilities is no greater than 15 feet wide.
- c. The disturbance area for new underground utility facilities is no greater than 25 feet wide and disturbs no more than 200 linear feet of Water Quality Resource Area, within any 1,000 linear foot stretch of Water Quality Resource Area; provided that this disturbance area shall be restored with the exception of necessary access points to the utility facility.
- d. No fill or excavation is allowed within the ordinary high water mark of a stream, unless a permit is obtained from the US Army Corps of Engineers through the Standard Local Operating Procedures for Endangered Species (SLOPES) process.
- e. Mitigation is required as described in subsection E below.

E. Mitigation requirements for disturbance in HCAs. In order to achieve the goal of reestablishing forested canopy that meets the ecological values and functions described in section 1(A) of this ordinance, tree replacement and vegetation planting are required when development intrudes into a HCA according to the following standards, except for wetlands mitigation requirements imposed by state and federal law.

1. ***Required plants and plant densities.*** All trees, shrubs and ground cover must be native plants selected from the *Metro Native Plant List*. An applicant must meet Mitigation Option 1 or 2, whichever results in more tree plantings; except that where the disturbance area is one acre or more, the applicant shall comply with Mitigation Option 2:
 - a. ***Mitigation Option 1.*** In this option, the mitigation requirement is calculated based on the number and size of trees that are removed from the site. Trees that are removed from the site must be replaced as shown in Table 3. Conifers must be replaced with conifers. Bare ground must be planted or seeded with native grasses or herbs. Non-native sterile wheat grass may also be planted or seeded, in equal or lesser proportion to the native grasses or herbs.

Table 3. Tree Replacement

Size of tree to be removed (inches in diameter)	Number of trees and shrubs to be planted
6 to 12	2 trees and 3 shrubs
13 to 18	3 trees and 6 shrubs
19 to 24	5 trees and 12 shrubs
25 to 30	7 trees and 18 shrubs
over 30	10 trees and 30 shrubs

- b. ***Mitigation Option 2.*** In this option, the mitigation requirement is calculated based on the size of the disturbance area within a HCA. Native trees and shrubs are required to be planted at a rate of five (5) trees and twenty-five (25) shrubs per every 500 square feet of disturbance area. Bare ground must be planted or seeded with native grasses or herbs. Non-native sterile wheat grass may also be planted or seeded, in equal or lesser proportion to the native grasses or herbs.

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2. **Plant size.** Replacement trees must be at least one-half inch in caliper, measured at 6 inches above the ground level for field grown trees or above the soil line for container grown trees (the one-half inch minimum size may be an average caliper measure, recognizing that trees are not uniformly round), unless they are oak or madrone which may be one gallon size. Shrubs must be in at least a 1-gallon container or the equivalent in ball and burlap and must be at least 12 inches in height.
3. **Plant spacing.** Trees shall be planted between 8 and 12 feet on-center and shrubs shall be planted between 4 and 5 feet on center, or clustered in single species groups of no more than four (4) plants, with each cluster planted between 8 and 10 feet on center. When planting near existing trees, the dripline of the existing tree shall be the starting point for plant spacing measurements.
4. **Plant diversity.** Shrubs must consist of at least two (2) different species. If 10 trees or more are planted, then no more than 50% of the trees may be of the same genus.
5. **Location of mitigation area.** All vegetation must be planted on the applicant's site within the HCA or in an area contiguous to the HCA; provided, however, that if the vegetation is planted outside of the HCA then the applicant shall preserve the contiguous area by executing a deed restriction, such as a restrictive covenant. *(Note: an off-site mitigation option is provided in a streamlined discretionary review process).*
6. **Invasive vegetation.** Invasive non-native or noxious vegetation must be removed within the mitigation area prior to planting.
7. **Tree and shrub survival.** A minimum of 80% of the trees and shrubs planted shall remain alive on the fifth anniversary of the date that the mitigation is completed.
8. **Monitoring and reporting.** Monitoring of the mitigation site is the ongoing responsibility of the property owner. Plants that die must be replaced in kind. For a period of five years, the property owner must submit an annual report to (list appropriate city or county department) documenting the survival of the trees and shrubs on the mitigation site. *[Optional: the city or county may require the property owner to post a performance bond in the amount sufficient to cover costs of plant material and labor associated with site preparation, planting, and maintenance in lieu of the monitoring and reporting requirement.]*
9. To enhance survival of the mitigation plantings, the following practices are required:
 - a. **Mulching.** Mulch new plantings a minimum of three inches in depth and 18 inches in diameter to retain moisture and discourage weed growth.
 - b. **Irrigation.** Water new plantings one inch per week, between June 15th to October 15th, for the three years following planting.
 - c. **Weed control.** Remove, or control, non-native or noxious vegetation throughout maintenance period.
10. To enhance survival of tree replacement and vegetation plantings, the following practices are recommended:

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- a. Planting season. Plant bare root trees between December 1st and February 28th, and potted plants between October 15th and April 30th.
- b. Wildlife protection. Use plant sleeves or fencing to protect trees and shrubs against wildlife browsing and resulting damage to plants.

F. Standards for Partitions and Subdivisions standards. The purpose of this section is to allow for partitions in a manner that limits the total amount of allowable development within HCAs on the partitioned parcels; and to require that new subdivision plats delineate and show the Moderate and High HCAs as a separate unbuildable tract.

1. *Standards for Partitions containing HCAs:*

- a. When partitioning a property into parcels, an applicant shall verify the boundaries of the HCA on the property according to Section 9 of this ordinance.
- b. Applicants who are partitioning, but are not simultaneously developing their property, do not need to comply with Section 5 of this ordinance.
- c. When partitioning a property into parcels there shall be no more than a 30% percentage point difference in the percentage of HCA on the parcels; for example, a partition that produces two parcels, one that is 55% HCA and the other that is 35% HCA is permissible; whereas a partition that produces two parcels, one that is 75% HCA and the other that is 30% HCA is not permissible. However, an applicant may partition a property such that at least 90% of the original property's High HCA and 80% of its moderate HCA is on a separate unbuildable parcel, protected by a restrictive covenant or a public dedication.
- d. Subsequent development on any parcels containing HCAs shall comply with Section 5, and the development standards of either section 6 or section 7 of this ordinance.

2. *Standards for Subdivisions:*

- a. Applicants who are sub-dividing, but not developing, must verify the location of the HCA boundary according to Section 9 of this ordinance, and comply with this subsection 6(F); such applicants do not need to comply with Section 5 of this ordinance. Applicants who are sub-dividing, but not developing, property may:
 - i. Complete the mitigation requirements of section 6(E) and thereby exempt all subsequent development on lots containing HCA from further review under this ordinance; or
 - ii. Not complete the mitigation requirements of section 6(E), thus requiring that any subsequent development within an HCA be subject to this ordinance.
- b. Applicants who are sub-dividing and developing properties must comply with Sections 5, 6, and 9 of this ordinance.
- c. When a property containing any HCA is subdivided, this ordinance requires that new subdivision plats delineate and show the Moderate and High HCA as a separate unbuildable tract according to the following process:

- i. The applicant must place at least 90% of the High HCA and 80% of the Moderate HCA in a separate tract.
 - (A) If over 50% of the HCA on a property is of a High designation, the entire calculation is for High (i.e., 90% of the HCA must be placed within a separate tract).
 - (B) If over 50% of the HCA on a property is of a Moderate designation, the entire calculation is for Moderate (i.e., 80% of the HCA must be placed within a separate tract).
- ii. If the tract is adjacent to the backyard for residences, the minimum backyard requirement is reduced to 10 ft.
- iii. The standards for land divisions in Moderate and High HCAs shall apply in addition to the requirements of the city/county land division ordinance and zoning ordinance.
- iv. Prior to preliminary plat approval, the Moderate and/or High HCA shall be shown as a separate tract, which shall not be a part of any lot used for construction of a dwelling unit.
- v. Prior to final plat approval, ownership of the HCA tract shall be identified to distinguish it from lots intended for sale. The tract may be identified as any one of the following:
 - (A) Private natural area held by the owner or homeowners association by a restrictive covenant; or
 - (B) For residential land divisions, private natural area subject to an easement conveying storm and surface water management rights to the city/county and preventing the owner of the tract from activities and uses inconsistent with the purpose of this ordinance; or
 - (C) At the owner's option, public natural area where the tract has been dedicated to the city/county or other governmental unit, or a private non-profit with the mission of land conservation.

Section 7. Alternative Discretionary Development Standards

Applicants may choose to use the alternative discretionary development standards provided in this section rather than the development standards provided in section 6 of this ordinance. There are four discretionary review processes provided in this section: subsection A provides discretionary review for an applicant seeking only to partition a property; subsection B provides discretionary review for an applicant who will comply with the development standards in section 6 of this ordinance, except that the applicant seeks to meet the mitigation requirements of that section on a different property from the property on which a HCA will be disturbed; subsection C provides discretionary review for an applicant who will comply with the development standards in section 6 of this ordinance, except that the applicant seeks to meet the mitigation requirements of that section by proportionally varying the number and size of plants required to be planted; and subsection D provides general discretionary review standards applicable to an applicant seeking some other type of discretionary approval of development that will disturb an HCA.

A. Discretionary Review for Partitions. An applicant seeking to partition land in ways that do not accord with the standards established in Section 6(F)(1) may seek review under this subsection 7(A).

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1. The applicant shall verify the boundaries of the HCAs on the property according to Section 9 of this ordinance.
 2. The applicant shall submit the following application materials:
 - a. A scale map of the entire property that includes:
 - i. Location of all High, Moderate, and Low HCA on the property;
 - ii. Location of any wetlands or water bodies on the property, including a delineation of the Water Quality Resource Area;
 - iii. Location of 100 year floodplain and floodway boundary as defined by the Federal Emergency Management Agency (FEMA) and the area of the 1996 flood inundation; and
 - iv. A delineation of the proposed partition.
 - b. A written and documented explanation of how and why the proposed partition satisfies the approval criteria in subsection 7(A)(3). Such written documentation shall include an alternatives analysis of different possible partition plans, based on the characteristics and zoning of the property.
 3. Approval Criteria. A partition shall be approved under this subsection 7(A) provided that the applicant demonstrates that it is not practicable to comply with the partition standards in Section 6(F)(1) of this ordinance, and that the applicant's partition plan will result in the smallest practicable percentage point difference in the percentage of HCA on the parcels created by the partition (this will minimize the amount of allowable disturbance areas within HCAs on the parcels, assuming that the development standards in this Section 6 were applied to future development on such parcels)..
 4. Subsequent development on any parcels created by the partition and containing HCAs shall comply with all provisions of this ordinance, except that the map verification completed and approved as part of the partition may be used to satisfy the requirements of section 9 of this ordinance for any such development.
- B. Discretionary Review To Approve Off-Site Mitigation.** An applicant seeking discretionary approval only for off-site mitigation within the same subwatershed (6th Field Hydrologic Unit Code), but who will comply with all other provisions of Section 6 of this ordinance, may seek review under this subsection 7(B). (An applicant who seeks to conduct the mitigation in a different subwatershed may apply for such approval under subsection 7(D) of this ordinance.)
1. The applicant shall submit:
 - a. A calculation of the number of trees and shrubs the applicant is required to plant under Section 6(E) of this ordinance; and
 - b. A map and accompanying narrative that details the following:
 - i. The number of trees and shrubs that can be planted on-site;

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- ii. The on-site location where those trees and shrubs can be planted;
 - iii. An explanation of why it is not practicable for the remainder of the mitigation to occur on-site; and
 - iv. The proposed location for off-site mitigation and documentation that the applicant can carry out and ensure the success of the mitigation, including documentation that the applicant possesses legal authority to conduct and maintain the mitigation, such as having a sufficient ownership interest in the mitigation site, and, if the mitigation is not within a HCA, documentation that the mitigation site will be protected after the monitoring period expires, such as through the use of a restrictive covenant.
2. Approval Criteria. Off-site mitigation shall be approved under this subsection 7(B) provided that the applicant has demonstrated that it is not practicable to complete the mitigation on-site and that the applicant has documented that it can carry out and ensure the success of the off-site mitigation on a property within the same subwatershed (6th Field Hydrologic Unit Code) as the related disturbed HCA.
 3. Mitigation approved under this subsection 7(B) of this ordinance shall be subject to all of the requirements of subsection 6(E) of this ordinance, except for the requirements of subsection 6(E)(5) of this ordinance.

C. Discretionary Review To Approve Mitigation That Varies the Number and Size of Trees and Shrubs. An applicant seeking discretionary approval only to proportionally vary the number and size of trees and shrubs required to be planted under subsection 6(E), for example to plant fewer larger trees and shrubs or to plant more smaller trees and shrubs, but who will comply with all other provisions of Section 6 of this ordinance, may seek review under this subsection 7(C).

1. The applicant shall submit:
 - a. A calculation of the number of trees and shrubs the applicant would be required to plant under Section 6(E) of this ordinance;
 - b. The numbers and sizes of trees and shrubs that the applicant proposes to plant;
 - c. An explanation of why the numbers and sizes of trees and shrubs that the applicant proposes to plant will achieve, at the end of the fifth year after initial planting, comparable or better mitigation results as the results that would be achieved if the applicant complied with all of the requirements of subsection 6(E) of this ordinance. Such explanation shall be prepared and signed by a knowledgeable and qualified natural resources professional or a certified landscape architect and shall include discussion of plant diversity, plant spacing, site preparation including removal of invasive and noxious vegetation and soil additives, planting season, and immediate post-planting care including mulching, irrigation, wildlife protection, and weed control; and
 - d. The applicant's mitigation site monitoring and reporting plan.
2. Approval Criteria. A request to vary the numbers and sizes of trees and shrubs to be planted shall be approved if the applicant demonstrates that its planting will achieve, at the end of the fifth year after initial planting, comparable or better mitigation results as the results that would be achieved if the applicant complied with all of the requirements of subsection 6(E) of this ordinance. Such

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determination shall take into consideration all of the information required to be submitted under subsection 7(C)(1) of this ordinance.

3. Mitigation approved under this subsection 7(C) of this ordinance shall be subject to the requirements of subsections 6(E)(4) through 6(E)(9) of this ordinance, and it is recommended that such mitigation also follow the practices recommended in subsection 6(E)(10) of this ordinance.

D. Discretionary Review. An applicant seeking discretionary approval to undertake any development activity within a HCA that does not comply with subsection 6 of this ordinance and is not described in subsections 7(A), (B), or (C) of this ordinance may file an application under this section 7(D) of this ordinance.

1. **Application Requirements.** The applicant shall provide all items described in subsection 6(A) of this ordinance and the following, except that for utility projects undertaken by public utilities across property that is not owned by the utility, the utility shall not be required to map or provide any information about the property except for the area within 300 feet of the location of the proposed disturbance area of the utility's project:

- a. **Impact Evaluation and Alternatives Analysis.** An impact evaluation and alternatives analysis is required to determine compliance with the approval criteria and to evaluate development alternatives for a particular property. The alternatives must be evaluated on the basis of their impact on the HCA, the ecological functions provided by the HCA on the property, and off-site impacts within the subwatershed (6th Field Hydrologic Unit Code) where the property is located. The impact evaluation shall include all of the following items:

- i. Identification of the ecological functions of riparian habitat found on the property as described in Table 4 of this ordinance and the habitat connectivity ecological functions described in subsection 7(D)(1)(a)(ii)(C) and (D) of this ordinance.
- ii. For upland habitat in areas to be added to the Metro urban growth boundary areas after October 1, 2005, identification of the impact the proposed development would have on the following ecological functions provided by upland wildlife habitat:

- (A) Habitat patch size;
- (B) Interior habitat;
- (C) Connectivity of the habitat to water; and
- (D) Connectivity of the habitat to other habitat areas.

- iii. Evaluation of alternative locations, design modifications, or alternative methods of development to determine which options reduce the significant detrimental impacts on the HCAs and the ecological functions provided on the property. At a minimum, the following approaches must be considered:

- (A) The techniques described in subsection 6(B) of this ordinance;
- (B) Multi-story construction;
- (C) Minimizing building and development footprint;

- (D) Maximizing the use of native landscaping materials; and
 - (E) Minimal excavation foundation systems (e.g., pier, post or piling foundation).
- iv. Determination of the alternative that best meets the applicable approval criteria and identification of significant detrimental impacts that are unavoidable.

Table 4. Ecological functional values of riparian corridors.

Ecological function	Landscape features providing functional values
Microclimate and shade	Forest canopy or woody vegetation within 100 feet of a stream; a wetland ¹ ; or a flood area ² .
Streamflow moderation and water storage	A wetland or other water body ³ with a hydrologic connection to a stream; or a flood area ² .
Bank stabilization, sediment and pollution control	All sites within 50 feet of a surface stream; Forest canopy, woody vegetation, or low structure vegetation/open soils within 100 feet of a stream or a wetland; or forest canopy, woody vegetation, or low structure vegetation/open soils within a flood area; and, Forest canopy, woody vegetation, or low structure vegetation/open soils within 100-200 feet of a stream if the slope is greater than 25%.
Large wood and channel dynamics	Forest canopy within 150 feet of a stream or wetland; or within a flood area; and The channel migration zone is defined by the floodplain, but where there is no mapped floodplain a default of 50 feet is established to allow for the channel migration zone.
Organic material sources	Forest canopy or woody vegetation within 100 feet of a stream or wetland; or within a flood area.

¹ Refers to "hydrologically-connected wetlands," which are located partially or wholly within ¼ mile of a surface stream or flood area.

² Developed floodplains are not identified as HCAs because they do not provide primary ecological functional value.

³ "Other water body" could include lakes, ponds, reservoirs, or manmade water feature that is not a water quality facility or farm pond.

- b. **Mitigation Plan.** The purpose of a mitigation plan is to compensate for unavoidable significant detrimental impacts to ecological functions that result from the chosen development alternative as identified in the impact evaluation. However, when development occurs within delineated wetlands, then the mitigation required under subsection 7(D)(2)(d) shall not require any additional mitigation than the mitigation required by state and federal law for the fill or removal of such wetlands.
 - i. An applicant may choose to develop a mitigation plan consistent with the requirements of subsection 6(E) of this ordinance. If an applicant so chooses, then the applicant shall submit a mitigation plan demonstrating such compliance.
 - ii. If an applicant chooses to develop an alternative mitigation plan that would not comply with the requirements of subsection 6(E) of this ordinance, including, for example, a

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proposal to create an alternative plant community type such as an oak savannah or a low-structure plant community, or where an applicant demonstrates that a portion of identified HCA on its property provides only impaired ecological functions, then the applicant shall submit a mitigation plan that includes all of the following:

- (A) An explanation of how the proposed mitigation will adequately compensate for the impacts to ecological functions described in the impact evaluation required by subsection 7(C)(1)(a). The applicant may use the mitigation that would be required under subsection 6(E) of this ordinance as the baseline mitigation required to compensate for disturbance to a HCA that provides an average level of ecological functions. Such explanation shall include:
 - (1) If the applicant uses the mitigation that would be required under subsection 6(E) of this ordinance as the baseline mitigation required to compensate for disturbance to a HCA, then the applicant shall submit a calculation of the number of trees and shrubs the applicant would be required to plant under subsection 6(E) of this ordinance;
 - (2) A site plan showing where the specific mitigation activities will occur and the numbers and sizes of trees and shrubs that the applicant proposes to plant; and
 - (3) A discussion of plant diversity, plant spacing, site preparation including removal of invasive and noxious vegetation and soil additives, planting season, and immediate post-planting care including mulching, irrigation, wildlife protection, and weed control.
- (B) Documentation of coordination with appropriate local, regional, special district, state, and federal regulatory agencies.
- (C) A list of all responsible parties.
- (D) The applicant's mitigation site monitoring and reporting plan.
- (E) If the proposed mitigation will not be conducted on-site, the applicant shall submit a map and accompanying narrative that details the following:
 - (1) The number of trees and shrubs that can be planted on-site;
 - (2) The on-site location where those trees and shrubs can be planted;
 - (3) An explanation of why it is not practicable for the remainder of the mitigation to occur on-site; and
 - (4) The proposed location for off-site mitigation and documentation that the applicant can carry out and ensure the success of the mitigation, including documentation that the applicant possesses legal authority to conduct and maintain the mitigation, such as having a sufficient ownership interest in the mitigation site, and, if the mitigation is not within a HCA, documentation that the mitigation site will be protected after the monitoring period expires, such as through the use of a restrictive covenant.

- (F) If the mitigation area is off-site and not within the same subwatershed (6th Field Hydrologic Unit Code) as the related disturbed HCA, the applicant shall submit an explanation of why it is not practicable to conduct the mitigation within the same subwatershed and of why and how, considering the purpose of the mitigation, the mitigation will provide more ecological functional value if implemented outside of the subwatershed.
 - (G) An implementation schedule, including timeline for construction, mitigation, mitigation maintenance, monitoring, reporting and a contingency plan. If the applicant is proposing any in-stream work in fish-bearing streams as part of the mitigation project, then the applicant shall submit documentation that such work will be done in accordance with the Oregon Department of Fish and Wildlife in-stream work timing schedule.
- c. The Impact Evaluation and Alternatives Analysis required by subsection 7(D)(1)(a) and the Mitigation Plan required by subsection 7(D)(1)(b) shall be prepared and signed by either (1) a knowledgeable and qualified natural resource professional, such as a wildlife biologist, botanist, or hydrologist, or (2) a civil or environmental engineer registered in Oregon to design public sanitary or storm systems, storm water facilities, or other similar facilities. The application shall include a description of the qualifications and experience of all persons that contributed to the Impact Evaluation and Alternatives Analysis and to the Mitigation Plan, and, for each person that contributed, a description of the elements of such reports to which the person contributed.

2. Approval Criteria.

- a. All application requirements in subsection 7(D)(1) shall be met.
- b. ***Avoid.*** An applicant shall first avoid the intrusion of development into the HCA to the extent practicable. The development that is proposed must have less detrimental impact to HCAs than other practicable alternatives, including significantly different practicable alternatives that propose less development within HCAs. If there is more than one type of HCA on a property then the applicant shall first avoid the intrusion of development into the higher-valued HCA, to the extent practicable, and the development that is proposed must have less detrimental impact to the higher-valued HCAs than other practicable alternatives. To avoid development in HCAs, and to the extent practicable, applicants shall use the approaches described in subsection 7(D)(1)(a)(iii).
- c. ***Minimize.*** If the applicant demonstrates that there is no practicable alternative that will not avoid disturbance of the HCA, then the development proposed by the applicant within the HCA shall minimize detrimental impacts to the extent practicable. If there is more than one type of HCA on a property then the development within higher-valued HCAs shall be considered more detrimental than development within lower-valued HCAs.
 - i. Development must minimize detrimental impacts to ecological functions and loss of habitat consistent with uses allowed by right under the base zone, to the extent practicable;
 - ii. To the extent practicable within the HCA, the proposed development shall be designed, located, and constructed to:

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- (A) Minimize grading, removal of native vegetation, and disturbance and removal of native soils by using the approaches described in subsection 6(C)(2), reducing building footprints, and using minimal excavation foundation systems (e.g., pier, post or piling foundation);
- (B) Minimize adverse hydrological impacts on water resources such as by using the techniques described in Part (a) of Table 5, unless their use is prohibited by an applicable and required State or Federal permit issued to a unit of local government having jurisdiction in the area, such as a permit required under the federal Clean Water Act, 33 U.S.C. §§1251 et seq., or the federal Safe Drinking Water Act, 42 U.S.C. §§300f et seq., and including conditions or plans required by such permit;
- (C) Minimize impacts on wildlife corridors and fish passage such as by using the techniques described in Part (b) of Table 5; and
- (D) Consider using the techniques described in Part (c) of Table 5 to further minimize the impacts of development in the HCA.

Table 5. Habitat-friendly development practices.¹

Part (a): Design and Construction Practices to Minimize Hydrologic Impacts

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| <ul style="list-style-type: none">1. Amend disturbed soils to original or higher level of porosity to regain infiltration and stormwater storage capacity.2. Use pervious paving materials for residential driveways, parking lots, walkways, and within centers of cul-de-sacs.3. Incorporate stormwater management in road right-of-ways.4. Landscape with rain gardens to provide on-lot detention, filtering of rainwater, and groundwater recharge.5. Use green roofs for runoff reduction, energy savings, improved air quality, and enhanced aesthetics.6. Disconnect downspouts from roofs and direct the flow to vegetated infiltration/filtration areas such as rain gardens.7. Retain rooftop runoff in a rain barrel for later on-lot use in lawn and garden watering.8. Use multi-functional open drainage systems in lieu of more conventional curb-and-gutter systems.9. Use bioretention cells as rain gardens in landscaped parking lot islands to reduce runoff volume and filter pollutants.10. Apply a treatment train approach to provide multiple opportunities for storm water treatment and reduce the possibility of system failure.11. Reduce sidewalk width and grade them such that they drain to the front yard of a residential lot or retention area.12. Reduce impervious impacts of residential driveways by narrowing widths and moving access to the rear of the site.13. Use shared driveways.14. Reduce width of residential streets, depending on traffic and parking needs.15. Reduce street length, primarily in residential areas, by encouraging clustering and using curvilinear designs.16. Reduce cul-de-sac radii and use pervious vegetated islands in center to minimize impervious effects, and allow them to be utilized for truck maneuvering/loading to reduce need for wide loading areas on site.17. Eliminate redundant non-ADA sidewalks within a site (i.e., sidewalk to all entryways and/or to truck |
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¹ These development practices represent the state of scientific knowledge at the time of this ordinance's enactment, if more effective habitat-friendly practices become available, they should be used.

loading areas may be unnecessary for industrial developments).

18. Minimize car spaces and stall dimensions, reduce parking ratios, and use shared parking facilities and structured parking.
19. Minimize the number of stream crossings and place crossing perpendicular to stream channel if possible.
20. Allow narrow street right-of-ways through stream corridors whenever possible to reduce adverse impacts of transportation corridors.

Part (b): Design and Construction Practices to Minimize Impacts on Wildlife Corridors and Fish Passage

1. Carefully integrate fencing into the landscape to guide animals toward animal crossings under, over, or around transportation corridors.
2. Use bridge crossings rather than culverts wherever possible.
3. If culverts are utilized, install slab, arch or box type culverts, preferably using bottomless designs that more closely mimic stream bottom habitat.
4. Design stream crossings for fish passage with shelves and other design features to facilitate terrestrial wildlife passage.
5. Extend vegetative cover through the wildlife crossing in the migratory route, along with sheltering areas.

Part (c): Miscellaneous Other Habitat-Friendly Design and Construction Practices

1. Use native plants throughout the development (not just in HCA).
2. Locate landscaping (required by other sections of the code) adjacent to HCA.
3. Reduce light-spill off into HCAs from development.

d. **Mitigate.** If the applicant demonstrates that there is no practicable alternative that will not avoid disturbance of the HCA, then development must mitigate for adverse impacts to the HCA. All proposed mitigation plans must meet the following standards.

- i. The mitigation plan shall demonstrate that it compensates for detrimental impacts to ecological functions provided by HCAs, after taking into consideration the applicant's efforts to minimize such detrimental impacts through the use of the techniques described in Table 5 and through any additional or innovative techniques. A mitigation plan that requires the amount of planting that would be required under subsection 6(E) of this ordinance based on the amount of proposed disturbance area within the HCA, and that otherwise complies with all of the mitigation requirements in subsection 6(E) of this ordinance, shall be considered to have satisfied the requirements of this subsection 7(D)(2)(d) of this ordinance.
- ii. Mitigation shall occur on the site of the disturbance, to the extent practicable. Off-site mitigation shall be approved if the applicant has demonstrated that it is not practicable to complete the mitigation on-site and that the applicant has documented that it can carry out and ensure the success of the off-site mitigation, as described in subsection 7(B)(1)(b)(iv) of this ordinance. In addition, if the off-site mitigation area is not within the same subwatershed (6th Field Hydrologic Unit Code) as the related disturbed HCA, the applicant shall demonstrate that it is not practicable to complete the mitigation within the same subwatershed and that, considering the purpose of the mitigation, the mitigation will provide more ecological functional value if implemented outside of the

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subwatershed. Mitigation shall not be allowed outside of the Metro jurisdictional boundary.

- iii. All re-vegetation plantings shall be with native plants listed on the *Metro Native Plant List*.
 - iv. All in-stream work in fish-bearing streams shall be done in accordance with the Oregon Department of Fish and Wildlife in-stream work timing schedule.
 - v. A mitigation maintenance plan shall be included and shall be sufficient to ensure the success of the planting, and compliance with the plan shall be a condition of development approval.
- e. ***Municipal Water Utility Facilities Standards.*** Except as provided within this subsection, in addition to all other requirements of subsection 7(D)(2) of this ordinance, municipal potable water, storm water (drainage) and wastewater utility facilities may be built, expanded, repaired, maintained, reconfigured, rehabilitated, replaced or upsized if not exempted in Section 3 of this ordinance. These facilities may include but are not limited to water treatment plants, wastewater treatment plants, raw water intakes, pump stations, transmission mains, conduits or service lines, terminal storage reservoirs, and outfall devices provided that:
- i. Such projects shall not have to comply with the requirements of subsection 7(D)(2)(b) of this ordinance, provided that, where practicable, the project does not encroach closer to a water feature than existing operations and development, or for new projects where there are no existing operations or development, that the project does not encroach closer to a water feature than practicable;
 - ii. Best management practices will be employed that accomplish the following:
 - (A) Account for watershed assessment information in project design;
 - (B) Minimize the trench area and tree removal within the HCA;
 - (C) Utilize and maintain erosion controls until other site stabilization measures are established, post-construction;
 - (D) Replant immediately after backfilling or as soon as effective;
 - (E) Preserve wetland soils and retain soil profiles;
 - (F) Minimize compactions and the duration of the work within the HCA;
 - (G) Complete in-water construction during appropriate seasons, or as approved within requisite Federal or State permits;
 - (H) Monitor water quality during the construction phases, if applicable; and
 - (I) Implement a full inspection and monitoring program during and after project completion, if applicable.

Section 8. Variances

- A. The purpose of this Section is to ensure that compliance with this ordinance does not cause unreasonable hardship. To avoid such instances, the requirements of this ordinance may be varied. Variances are also allowed when strict application of this ordinance would deprive an owner of all economically viable use of land.
- B. This Section applies in addition to the standards governing proposals to vary the requirements of the base zone.
- C. Notice of variance applications shall be provided:
1. Upon receiving an application to vary the requirements of this ordinance, the notice shall be provided to all property owners within *[insert appropriate distance consistent with state law and other local notice provisions]* of the subject property inside the urban growth boundary, and within *[insert appropriate distance consistent with state law and other local notice provisions]* feet of the subject property outside the urban growth boundary, to Metro, to any neighborhood or community planning organization recognized by the Oregon Watershed Enhancement Board and whose boundaries include the property.
 2. Within seven (7) days of a decision on the variance, notice of the decision shall be provided to Metro, to any neighborhood or community planning organization recognized by the governing body and whose boundaries include the property, and to any watershed council recognized by the Oregon Watershed Enhancement Board and whose boundaries include the property, and to any other person required to receive notice of such a decision under state law.
- D. Hardship Variance. Variances to avoid unreasonable hardship caused by the strict application of this ordinance are permitted subject to the criteria set forth in this section. To vary from the requirements of this ordinance, the applicant must demonstrate the following:
1. The variance is the minimum necessary to allow the proposed use or activity;
 2. Unless the proposed variance is from mitigation under Section 6(E) or mitigation under Section 7 (B),(C), or (D)(1)(b) and D(2)(d), the proposed use will comply with those standards, as applicable; and
 3. The proposed use complies with the standards of the base zone.
- E. Buildable Lot Variance. A variance to avoid the loss of all economically viable use of a lot that is partially inside a HCA is permitted. Applicants must demonstrate the following:
1. Without the proposed variance, the applicant would be denied economically viable use of the subject property. To meet this criterion, the applicant must show that:
 - a. The proposed use cannot meet the standards in Section 8(D) (hardship variance); and
 - b. No other application could result in permission for an economically viable use of the subject property. Evidence to meet this criterion shall include a list of uses allowed on the subject property.
 2. The proposed variance is the minimum necessary to allow for the requested use;

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3. The proposed variance will comply with Section 6(E) or 7(B), (C), or D(1)(b) and D(2)(d) (mitigation); and
 4. The proposed use complies with the standards of the base zone.
- F. Variance Conditions. Conditions may be imposed to limit any adverse impacts that may result from granting any variance.

Section 9. Map Administration and HCA Verification

- A. Exempt development. Development that is outside of any HCA and no closer than 100 feet to the border of an HCA (including all impervious surfaces and landscaping), based on the HCA map, may proceed without having to comply with this section or any other portion of this ordinance except for Section 5, Construction Management Plan. *[Note: At the time a city or county adopts this model ordinance and its HCA map, such city or county may decrease the 100 feet "safe harbor" distance provided in this section to no fewer than 25 feet provided that it conducts additional analysis to correct any misalignment errors of the type described in section 9(E)(2) of this ordinance and adopts sufficient findings of fact to justify such corrections.]*
- B. Verification of the location of HCAs as described in this section shall not be considered a comprehensive plan amendment. *[Note: Adjustment of the mapped HCA shall only proceed as provided in this ordinance.]*
- C. Map verification is available to correct for mistakes in the location of HCAs on properties. Map verification shall not be used to dispute whether identified HCAs provide the ecological functions that they are assumed to provide based on the ecological criteria used to identify them. If an applicant believes that a properly identified HCA does not provide the ecological functions that it has been identified as providing, then the applicant may use the discretionary review process to decrease its mitigation responsibilities for disturbing such an area.
- D. Except for applicants seeking approval to undertake any exempt activities or conditioned uses described in section 3 of this ordinance, the map verification requirements described in this section 9 of this ordinance shall be met at the time an applicant requests a building permit, grading permit, tree removal permit, land division approval, or some other land use decision. A property owner, or another person with the property owner's consent, may request to verify the location of HCAs on a real property lot or parcel pursuant to this section 3 of this ordinance at other times, but whether the *[city/county]* processes such request shall be at the Planning Director's sole discretion, based on staff availability, funding resources, and policy priorities. If a person receives a verification separate from a simultaneous request for a building permit, grading permit, tree removal permit, land division approval, or some other land use decision, then the person may use the verification to satisfy the requirements of this section at any time up until five years after the date the verification was issued.
- E. Notwithstanding any other provisions of this Section 9 of this ordinance, for utility projects undertaken by public utilities across property that is not owned by the utility, the utility shall not be required to map or provide any information about the property except for the area within 300 feet of the location of the proposed disturbance area of the utility's project.
- F. Basic Verification Approaches. The basic verification approaches described in subsections 9(F)(1) through (3) of this ordinance are available for applicants who believe either (1) that the HCA map is accurate, (2) that there is a simple incongruity between the HCA map and the boundary lot lines of a

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property, or (3) that the property was developed prior to *[insert date—either the effective date of this ordinance or two years after acknowledgement of the regional program, whichever is earlier]*.

1. *Applicant Believes HCA Map is Accurate.* An applicant who believes that the HCA map is accurate may comply with this subsection 9(F)(1) of this ordinance. The applicant shall submit the following information regarding the real property lot or parcel:
 - a. A detailed property description;
 - b. A copy of the applicable HCA map;
 - c. A summer 2005 aerial photograph of the property, with lot lines shown, at a scale of at least 1 map inch equal to 50 feet for lots of 20,000 or fewer square feet, and a scale of 1 map inch equal to 100 feet for larger lots (available from the Metro Data Resource Center, 600 N.E. Grand Ave., Portland, OR 97232; 503-797-1742);
 - d. The information required to be submitted under Section 6 or 7 of this ordinance if the applicant proposes development within any HCA under those provisions; and
 - e. Any other information that the applicant wishes to provide to support the assertion that the HCA map is accurate.
2. *Obvious Misalignment Between Mapped Habitat and Property Lot Lines.* In some cases, the mapped vegetative cover layer in the GIS database might not align precisely with the tax lot layer that shows property lines, resulting in a HCA map that is also misaligned with tax lot lines. An applicant who believes that the HCA map is inaccurate based on such an obvious misalignment may comply with this subsection 9(F)(2) of this ordinance. The applicant shall submit the following information regarding the real property lot or parcel:
 - a. The information described in subsections 9(F)(1)(a) through (d) of this ordinance; and
 - b. A documented demonstration of the misalignment between the HCA map and the property's tax lot boundary lines. For example, an applicant could compare the boundary lot lines shown for roads within 500 feet of a property with the location of such roads as viewed on the aerial photograph of the area surrounding a property to provide evidence of the scale and amount of incongruity between the HCA maps and the property lot lines, and the amount of adjustment that would be appropriate to accurately depict habitat on the property.
3. *Property Developed Between Summer 2002 and [Insert date of Approval of Regional Program].* Where a property was developed between the summer of 2002 (when the aerial photo used to determine the regional habitat inventory was taken) and *[insert date that the regional program was approved]*, the applicant shall submit the following information regarding the real property lot or parcel:
 - a. The information described in subsection 9(F)(1)(a) through (d) of this ordinance;
 - b. A summer 2002 aerial photograph of the property, with lot lines shown, at a scale of at least 1 map inch equal to 50 feet for lots of 20,000 or fewer square feet, and a scale of 1 map inch equal to 100 feet for larger lots (available from the Metro Data Resource Center, 600 N.E. Grand Ave., Portland, OR 97232; 503-797-1742);

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- c. Any approved building permits or other development plans and drawings related to the development of the property that took place between summer 2002 and *insert date that the regional program was approved*; and
 - d. A clear explanation and documentation, such as supporting maps or drawings or an more recent aerial photograph, indicating the new development that has occurred and where previously identified habitat no longer exists because it is now part of a developed area.
4. *Decision Process.* The Planning Director's map verification decision made pursuant to this subsection 9(F) of this ordinance may be an administrative decision. The Planning Director's decision shall be based on consideration of the information submitted by the applicant, any information collected during a site visit to the lot or parcel, any information generated by prior map verifications that have occurred on adjacent properties, and any other objective factual information that has been provided to the Planning Director.
- G. Detailed Verification Approach. All applicants who believe that the HCA map is inaccurate for a reason other than as described in subsections 9(F)(2) and (3) may file a verification request consistent with this subsection 9(G) of this ordinance.
- 1. *Application requirements.* The applicant shall submit a report prepared and signed by either (1) a knowledgeable and qualified natural resource professional, such as a wildlife biologist, botanist, or hydrologist, or (2) a civil or environmental engineer registered in Oregon to design public sanitary or storm systems, storm water facilities, or other similar facilities. Such report shall include:
 - a. A description of the qualifications and experience of all persons that contributed to the report, and, for each person that contributed, a description of the elements of the analysis to which the person contributed;
 - b. The information described in subsections 9(F)(1)(a) through (e) of this ordinance;
 - c. The information described in subsections 9(F)(2)(b) and 9(F)(3)(b) through (d) of this ordinance, if the applicant believes such information is relevant to the verification of habitat location on the subject lot or parcel;
 - d. Additional aerial photographs if the applicant believes they provide better information regarding the property, including documentation of the date and process used to take the photos and an expert's interpretation of the additional information they provide;
 - e. A map showing the topography of the property shown by contour lines of 2 foot intervals for slopes less than 15% and by 10 foot intervals for slopes 15% or greater; and
 - f. Any additional information necessary to address each of the verification criteria in subsection 9(G)(4) of this ordinance, a description of where any HCAs are located on the property based on the application of the verification criteria in subsection 9(G)(4) of this ordinance, and factual documentation to support the analysis.
 - 2. *Notice requirements.* Upon receipt of a completed application pursuant to this subsection 9(G) of this ordinance, the Planning Director shall provide notice of the map verification application to Metro, to the owners of record of property on the most recent property tax assessment roll where such property is located within 100 feet of the subject property, [*Note: A city or county may increase the 100 feet neighbor notification requirement if it so chooses*] to any neighborhood or

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community planning organization recognized by the governing body and whose boundaries include the property, and to any watershed council recognized by the Oregon Watershed Enhancement Board and whose boundaries include the property. The notice provided by the jurisdiction shall comply with the notice requirements of ORS 197.763. The Planning Director shall accept written public comments regarding the matter during a public comment period.

3. *Decision process.* The Planning Director shall apply the verification criteria in subsection 9(G)(4) of this ordinance to confirm the location of any HCAs based on the HCA map, the information submitted by the applicant, any information received during the public comment period, and any additional information readily available, including information collected during a site visit to the lot or parcel. The applicant and all persons that submitted written comments shall be provided with a written explanation of the Planning Director's decision.
4. *Verification Criteria.* The verification of the location of HCAs shall be according to the four-step process described in this subsection 9(G)(4) of this ordinance. A verification application shall not be considered complete and shall not be granted unless all the information required to be submitted with the verification application has been received.
 - a. *Step 1. Verifying boundaries of inventoried riparian habitat.* Locating habitat and determining its riparian habitat class is a four-step process:
 - i. Locate the Water Feature that is the basis for identifying riparian habitat.
 - (A) Locate the top of bank of all streams, rivers, and open water within 200 feet of the property.
 - (B) Locate all flood areas within 100 feet of the property..
 - (C) Locate all wetlands within 150 feet of the property based on the Local Wetland Inventory map (if completed) and on the Metro 2002 Wetland Inventory Map (available from the Metro Data Resource Center, 600 N.E. Grand Ave., Portland, OR 97232; 503-797-1742). Identified wetlands shall be further delineated consistent with methods currently accepted by the Oregon Division of State Lands and the U.S. Army Corps of Engineers.
 - ii. 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.
 - (A) Vegetative cover status shall be as identified on the Metro Vegetative Cover Map (available from the Metro Data Resource Center, 600 N.E. Grand Ave., Portland, OR 97232; 503-797-1742).
 - (B) 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 (see subsection 9(F)(3) of this ordinance, above), 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 definitions of the different vegetative cover types provided in Section 11 of this ordinance.

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- iii. 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 methodology as described in *[insert a reference to the city or county code section that describes the methodology used to identify Water Quality Resource Areas pursuant to Title 3 of the Urban Growth Management Functional Plan]*); and
 - iv. Identify the riparian habitat classes applicable to all areas on the property using Table 6 and the data identified in subsections 9(G)(4)(a)(i) through (iii).
- b. *Step 2. Verifying boundaries of inventoried upland habitat in future urban growth boundary expansion areas.* 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 HCA map unless corrected as provided in this subsection.
- i. Except as provided in subsection 9(G)(4)(b)(ii), vegetative cover status shall be as identified on the Metro Vegetative Cover Map used to inventory habitat at the time the area was brought within the urban growth boundary (available from the Metro Data Resource Center, 600 N.E. Grand Ave., Portland, OR 97232; 503-797-1742).
 - ii. The only allowed corrections to the vegetative cover status of a property are as follows:
 - (A) 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 at the time the area was brought within the urban growth boundary. For example, an area may have been identified as “forest canopy” when it can be shown that such area has less than 60% canopy crown closure, and therefore should not have been identified as “forest canopy.” 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 at the time the area was brought within the urban growth boundary and the definitions of the different vegetative cover types provided in Section 11 of this ordinance; and
 - (B) 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.
 - iii. If the vegetative cover status of any area identified as upland habitat is corrected pursuant to subsection 9(G)(4)(b)(ii)((A)) 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.

Table 6: Method for Locating Boundaries of Class I and II Riparian Areas

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

¹ 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.

² 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.

- c. **Step 3. Urban Development Value of the Property.** The urban development value of property designated as regionally significant habitat is depicted on the Metro Habitat Urban Development Value Map (available from the Metro Data Resource Center, 600 N.E. Grand Ave., Portland, OR 97232; 503-797-1742).
- A property's urban development value designation shall be adjusted upward if the Metro 2040 Design Type designation for the property lot or parcel has changed from a category designated as a lower urban development value category to one designated as a higher urban development value category. 2040 Design Type designations are identified on the Metro 2040 Applied Concept Map (also available from the Metro Data Resource Center, 600 N.E. Grand Ave., Portland, OR 97232; 503-797-1742).
 - Properties in areas designated on the 2040 Applied Concept Map as the Central City, Regional Centers, Town Centers, and Regionally Significant Industrial Areas are considered to be of high urban development value; properties in areas designated as Main Streets, Station Communities, Other Industrial Areas, and Employment Centers are of medium urban development value; and properties in areas designated as Inner and Outer Neighborhoods and Corridors are of low urban development value.

- iii. As designated in Title 13 of Metro's Urban Growth Management Functional Plan, properties owned by a regionally significant educational or medical facility are designated as high urban development value.
- d. *Step 4. Cross-Reference Habitat Class With Urban Development Value.* City and county verification of the locations of High, Moderate, and Low Habitat Conservation Areas shall be consistent with Tables 7 and 8.

Table 7: Method for Identifying Habitat Conservation Areas ("HCA")

Fish & wildlife habitat classification	High Urban development value¹	Medium Urban development value²	Low Urban development value³	Other areas: Parks and Open Spaces, no design types outside UGB
Class I Riparian	Moderate HCA	High HCA	High HCA	High HCA / High HCA+ ⁴
Class II Riparian	Low HCA	Low HCA	Moderate HCA	Moderate HCA / High HCA+ ⁴
Class A Upland Wildlife	No HCA	No HCA	No HCA	No HCA / High HCA ⁵ / High HCA+ ⁴
Class B Upland Wildlife	No HCA	No HCA	No HCA	No HCA / High HCA ⁵ / High HCA+ ⁴

NOTE: The default urban development value of property is as depicted on the Metro Habitat Urban Development Value Map. The Metro 2040 Design Type designations provided in the following footnotes are only for use when a city or county is determining whether to make an HCA adjustment.

¹ Primary 2040 design type: Regional Centers, Central City, Town Centers, and Regionally Significant Industrial Areas

² Secondary 2040 design type: Main Streets, Station Communities, Other Industrial areas, and Employment Centers

³ Tertiary 2040 design type: Inner and outer neighborhoods, Corridors

⁴ Cities and counties shall give Class I and II riparian habitat and Class A and B upland wildlife habitat in parks designated as natural areas even greater protection than that afforded to High Habitat Conservation Areas.

⁵ All Class A and B upland wildlife habitat in publicly-owned parks and open spaces, except for parks and open spaces where the acquiring agency clearly identified that it was acquiring the property to develop it for active recreational uses, shall be considered High HCAs.

Table 8: Method for Identifying Habitat Conservation Areas (“HCA”) in Future Urban Growth Boundary Expansion Areas

Fish & wildlife habitat classification	High Urban development value¹	Medium Urban development value²	Low Urban development value³	Other areas: Parks and Open Spaces, no design types outside UGB
Class I Riparian	Moderate HCA	High HCA	High HCA	High HCA / High HCA+ ⁴
Class II Riparian	Low HCA	Low HCA	Moderate HCA	Moderate HCA / High HCA+ ⁴
Class A Upland Wildlife	Low HCA	Moderate HCA	Moderate HCA	High HCA / High HCA ⁵ / High HCA+ ⁴
Class B Upland Wildlife	Low HCA	Low HCA	Moderate HCA	Moderate HCA / High HCA ⁵ / High HCA+ ⁴

NOTE: The default urban development value of property is as depicted on the Metro Habitat Urban Development Value Map. The Metro 2040 Design Type designations provided in the following footnotes are only for use when a city or county is determining whether to make an HCA adjustment.

¹ Primary 2040 design types: Regional Centers, Central City, Town Centers, and Regionally Significant Industrial Areas

² Secondary 2040 design types: Main Streets, Station Communities, Other Industrial areas, and Employment Centers

³ Tertiary 2040 design types: Inner and outer neighborhoods, Corridors

⁴ Cities and counties shall give Class I and II riparian habitat and Class A and B upland wildlife habitat in parks designated as natural areas even greater protection than that afforded to High Habitat Conservation Areas.

⁵ All Class A and B upland wildlife habitat in publicly-owned parks and open spaces, except for parks and open spaces where the acquiring agency clearly identified that it was acquiring the property to develop it for active recreational uses, shall be considered High HCAs.

Section 10. Severability

The provisions of this ordinance are severable. If any section, clause, or phrase of this ordinance is adjudged to be invalid by a court of competent jurisdiction, the decision of that court shall not affect the validity of the remaining portions of this ordinance.

Section 11. Definitions

Unless specifically defined below, words or phrases used in this section shall be interpreted to give them the same meaning as they have in common usage and to give this classification its most reasonable application.

Building site - The area on a lot or parcel that is designated to contain a structure, impervious surface, or non-native landscaping.

Building footprint - The area that is covered by buildings or other roofed structures. A roofed structure includes any structure more than 6 feet above grade at any point, and that provides an impervious cover over what is below. Building footprint also includes uncovered horizontal structures such as decks, stairways and entry bridges that are more than 6 feet above grade. Eaves are not included in building coverage. Underground facilities and structures are defined based on the foundation line.

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Developed areas not providing vegetative cover - are areas that lack sufficient vegetative cover to meet the one-acre minimum mapping units of any other type of vegetative cover.

Developed floodplain - Any man-made change to improved or unimproved lands within a FEMA defined floodplain, including but not limited to buildings or other structures, dredging, filling, grading, paving, excavation, or storage of equipment and materials.

Development - Any man-made change defined as buildings or other structures, mining, dredging, paving, filling, or grading in amounts greater than ten (10) cubic yards on any lot or excavation. In addition, any other activity that results in the removal of more than: either 10 percent or 20,000 square feet of the vegetation in the Habitat Conservation Areas on the lot is defined as development. When individual trees are removed, the area contained within the tree's drip line shall be the basis for calculating the square footage of vegetation removed.

Development does not include the following: a) Stream enhancement or restoration projects approved by cities and counties; b) Farming practices as defined in ORS 30.930 and farm use as defined in ORS 215.203, except that buildings associated with farm practices and farm uses are subject to the requirements of Titles 3 and 13.

Disturb - Man-made changes to the existing physical status of the land, which are made in connection with development. The following uses are excluded from the definition:

- enhancement or restoration of the Water Quality Resource Area;
- planting native cover identified in the Metro Native Plant List.

Disturbance Area - An area that contains all temporary and permanent development, exterior improvements, and staging and storage areas on the site. For new development the disturbance area must be contiguous. The disturbance area does not include agricultural and pasture lands or naturalized areas.

Dripline - The outermost edge of a tree's canopy; when delineating the drip line on the ground, it will appear as an irregularly shaped circle defining the canopy's perimeter.

Ecological functions - The primary biological and hydrologic characteristics of healthy fish and wildlife habitat. Riparian ecological functions include microclimate and shade, streamflow moderation and water storage, bank stabilization and sediment/pollution control, sources of large woody debris and natural channel dynamics, and organic material sources. Upland wildlife ecological functions include size of habitat area, amount of habitat with interior conditions, connectivity of habitat to water resources, connectivity to other habitat areas, and presence of unique habitat types.

Effective Impervious Area - A subset of total impervious area that is hydrologically connected via sheet flow or discrete conveyance to a drainage system or receiving body of water

Emergency - Any man-made or natural event or circumstance causing or threatening loss of life, injury to person or property, and includes, but is not limited to, fire, explosion, flood, severe weather, drought earthquake, volcanic activity, spills or releases of oil or hazardous material, contamination, utility or transportation disruptions, and disease.

Engineer - A registered professional engineer licensed by the State of Oregon.

Enhancement - The process of improving upon the natural functions and/or values of an area or feature that has been degraded by human activity. Enhancement activities may or may not return the site to a pre-disturbance condition, but create/recreate beneficial processes and features that occur naturally.

Erosion - Erosion is the movement of soil particles resulting from actions of water or wind.

Fill - Any material such as, but not limited to, sand, gravel, soil, rock or gravel that is placed in a Title 3 wetland or floodplain for the purposes of development or redevelopment.

Floodplain - The land area identified and designated by the United States Army Corps of Engineers, the Oregon Division of State Lands, FEMA, or (identify name) county/city that has been or may be covered temporarily by water as a result of a storm event of identified frequency. It is usually the flat area of land adjacent to a stream or river formed by floods.

Floodway - The portion of a watercourse required for the passage or conveyance of a given storm event as identified and designated by the (identify name) city/county pursuant to this Ordinance. The floodway shall include the channel of the watercourse and the adjacent floodplain that must be reserved in an unobstructed condition in order to discharge the base flood without flood levels by more than one foot.

Flood Management Areas - All lands contained within the 100-year floodplain, flood area and floodway as shown on the Federal Emergency Management Agency Flood Insurance Maps and the area of inundation for the February 1996 flood. In addition, all lands which have documented evidence of flooding.

Flood areas - Those areas contained within the 100-year floodplain, flood area and floodway as shown on the Federal Emergency Management Agency Flood Insurance Maps and all lands that were inundated in the February 1996 flood (note that areas that were mapped as flood areas but were filled to a level above the base flood level prior to September 30, 2005, consistent with all applicable local, state, and federal laws shall no longer be considered habitat based on their status as flood areas).

Floor Area Ratio (FAR) - The amount of floor area in relation to the amount of site area, expressed in square feet. For example, a floor area ratio of 2 to 1 means two square feet of floor area for every one square foot of site area.

Forest Canopy - 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.

Habitat Conservation Area or HCA - An area identified on the Habitat Conservation Areas Map and subject to the development standards.

Habitat-friendly development - A method of developing property that has less detrimental impact on fish and wildlife habitat than does traditional development methods. Examples include clustering development to avoid habitat, using alternative materials and designs such as pier, post, or piling foundations designed to minimize tree root disturbance, managing storm water on-site to help filter rainwater and recharge groundwater sources, collecting rooftop water in rain barrels for reuse in site landscaping and gardening, and reducing the amount of effective impervious surface created by development.

Invasive Non-native or Noxious Vegetation - Plant species that are listed as nuisance plants or prohibited plants on the Metro Native Plant List as adopted by Metro Council resolution because they are plant species that have been introduced and, due to aggressive growth patterns and lack of natural enemies in the area where introduced, spread rapidly into native plant communities.

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Lot - Lot means a single unit of land that is created by a subdivision of land. (ORS 92.010).

Low structure vegetation or open soils - 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).

Mitigation - The reduction of adverse effects of a proposed project by considering, in the order: a) avoiding the impact all together by not taking a certain action or parts of an action; b) minimizing impacts by limiting the degree or magnitude of the action and its implementation; c) rectifying the impact by repairing, rehabilitating or restoring the affected environment; d) reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action by monitoring and taking appropriate measures; and e) compensating for the impact by replacing or providing comparable substitute water quality resource areas or habitat conservation areas.

Native Vegetation or Native plant - Vegetation listed as a native plant on the Metro Native Plant List as adopted by Metro Council resolution and any other vegetation native to the Portland metropolitan area provided that it is not listed as a nuisance plant or a prohibited plant on the Metro Native Plant List.

Open Space - Land that is undeveloped and that is planned to remain so indefinitely. The term encompasses parks, forests and farmland. It may also refer only to land zoned as being available to the public, including playgrounds, watershed preserves and parks.

Owner or Property Owner - The person who is the legal record owner of the land, or where there is a recorded land sale contract, the purchaser thereunder.

Parcel - Parcel means a single unit of land that is created by a partitioning of land. (ORS 92.010).

Partition - Partition means to divide land into two or three parcels of land within a calendar year. (ORS 92.010)

Phased development project - A phased development plan includes the following:

- A site plan showing the proposed final development of the site and phases, including the initial and interim phases.
- A written statement describing each phase, including the potential uses, and the approximate timeline for each phase of development.

Practicable - means available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purpose and probable impact on ecological functions. The practicability of a development option shall include consideration of the type of HCA that will be affected by the proposed development. For example, High HCAs have been so designated because they are areas that have been identified as having lower urban development value and higher-valued habitat, so it should be more difficult to show that alternative development options that avoid the habitat are not practicable. On the other hand, Low HCAs have been so designated because they are areas that have been identified as having higher urban development value and lower-valued habitat, so it should be less difficult to show that alternative development options that avoid the habitat are not practicable.

Redevelopment – Development that occurs on sites that have previously been developed.

DRAFT REVISION 6/30/05

Restoration - The process of returning a disturbed or altered area or feature to a previously existing natural condition. Restoration activities reestablish the structure, function, and/or diversity to that which occurred prior to impacts caused by human activity.

Riparian - Those areas associated with streams, lakes and wetlands where vegetation communities are predominately influenced by their association with water.

Routine Repair and Maintenance - Activities directed at preserving an existing allowed use or facility, without expanding the development footprint or site use.

Set-back Adjustment - The placement of a building a specified distance away from a road, property line or protected resource.

Significant Negative Impact - An impact that affects the natural environment, considered individually or cumulatively with other impacts on the HCA, to the point where existing fish and wildlife habitat functional values are degraded.

Statewide Land Use Planning Goal 5 - Oregon's statewide planning goal that addresses open space, scenic and historic areas, and natural resources. The purpose of the goal is to conserve open space and protect natural and scenic resources.

Steep slopes - Steep slopes are those slopes that are equal to or greater than 25%. Steep slopes have been removed from the "buildable lands" inventory and have not been used in calculations to determine the number of acres within the urban growth boundary that are available for development.

Stormwater Pre-treatment Facility - Any structure or drainage way that is designed, constructed, and maintained to collect and filter, retain, or detain surface water run-off during and after a storm event for the purpose of water quality improvement.

Stream - A body of running water moving over the earth's surface in a channel or bed, such as a creek, rivulet or river. It flows at least part of the year, including perennial and intermittent streams. Streams are dynamic in nature and their structure is maintained through build-up and loss of sediment.

Structure - A building or other major improvement that is built, constructed or installed, not including minor improvements, such as fences, utility poles, flagpoles or irrigation system components, that are not customarily regulated through zoning codes.

Subdivision - A Subdivision of land means to divide land into four or more lots within a calendar year. (ORS 92.010).

Top of Bank - The same as "bankful stage" defined in OAR 141-85-010.

Urban Development Value - The economic value of a property lot or parcel as determined by analyzing three separate variables: assessed land value, value as a property that could generate jobs ("employment value"), and the Metro 2040 design type designation of property. The urban development value of all properties containing regionally significant fish and wildlife habitat is depicted on the Metro Habitat Urban Development Value Map

Urban Growth Boundary or UGB - means an urban growth boundary adopted pursuant to ORS chapter 197.

DRAFT REVISION 6/30/05

Utility Facilities - Buildings, structures or any constructed portion of a system which provides for the production, transmission, conveyance, delivery or furnishing of services including, but not limited to, heat, light, water, power, natural gas, sanitary sewer, stormwater, telephone and cable television. Utility facilities do not include stormwater pre-treatment facilities.

Variance - means a discretionary decision to permit modification of the terms of an implementing ordinance based on a demonstration of unusual hardship or exceptional circumstances unique to a specific property.

Water-Dependent - A use which can be carried out only on, in, or adjacent to water because it requires access to the water for waterborne transportation or recreation. Water-dependent also includes development, which by its nature, can be built only on, in, or over water. Bridges supported by piers or pillars, as opposed to fill, are water-dependent development.

Water Feature - All rivers, streams (regardless of whether they carry year-round flow, i.e., including intermittent streams), springs which feed streams and wetlands and have year-round flow, Flood Management Areas, wetlands, and all other bodies of open water.

Water Quality Resource Area - is an area identified by a city or county as a Water Quality Resource Area in order to comply with Title 3 of Metro's Urban Growth Management Functional Plan, Metro's code provision's 3.07.310- 3.07.370.

Watershed - A watershed is a geographic unit defined by the flows of rainwater or snowmelt. All land in a watershed drains to a common outlet, such as a stream, lake or wetland.

Wetlands - Wetlands are those areas inundated or saturated by surface or ground water at a frequency and duration sufficient to support and 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 are those areas identified and delineated by a qualified wetland specialist as set forth in the 1987 Corps of Engineers Wetland Delineation Manual.

Woody Vegetation - 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.

M:\attorney\confidential\07 Land Use\04 2040 Growth Concept\03 UGMFP\02 Stream Protection (Title 3)\02 Goal 5\02 Program\Ord 05-1077A\070605 model ord draft2.doc

***REVIEW OF REQUEST FOR PROPOSALS FOR SYSTEM CONSULTANT FOR DISPOSAL SYSTEM
PLANNING***

Metro Council Work Session
Tuesday, July 12, 2005
Metro Council Chamber

METRO COUNCIL

Work Session Worksheet

Presentation Date: July 12, 2005 Length: 15 minutes Time: 3:20 PM
Presentation Title: RFP for Disposal System Planning Analysis
Department: Solid Waste and Recycling
Presenters: Mike Hoglund and Paul Ehinger

ISSUE & BACKGROUND

Solid waste planning and disposal are two of the principal responsibilities of Metro. The solid waste planning function is guided primarily through the Regional Solid Waste Management Plan (RSWMP). RSWMP is a long-range (ten-year timeframe) functional plan as specified in ORS 268.390. The current plan expires in 2005 and Metro is in the process of updating the document for the next ten years.

One of the key RSWMP issues identified to date is ensuring adequate public services are provided through the regional solid waste system in the decade ahead. Disposal System Planning (DSP) rose out of this issue. One of the main purposes of the DSP project is to determine whether public services in the region are provided in the most efficient and effective manner possible. More broadly, Metro Council seeks to understand where the system can be improved, and determine Metro's role as both a participant and regulator in the system.

Disposal system planning work plan discussions concluded at the May 24, 2005 Council work session. There was agreement on the work plan, primarily involving an analysis of alternative transfer station system models, and a determination of the value of the public transfer facilities.

The work plan envisions the use of two consultants conducting the analysis. One consultant would be responsible for creating the analytical framework that would be used together with evaluation criteria and background information to conduct the alternatives analysis (the System Consultant). A second consultant would be used to determine the value of the stations (Valuation Consultant). The system consultant would be the lead for developing the alternatives analysis, while the valuation consultant would provide the range of values to be used in the analysis. It is anticipated that the system consultant would be obtained first to provide input into the scope of work for the valuation consultant and to ensure valuation work can be appropriately incorporated into the alternatives analysis.

The request for proposals for the System Consultant is attached as Exhibit A. The scope of work anticipates the analysis will be conducted over a period of up to six months and provide the Council with sufficient information for a decision on whether to proceed with divestiture of the two public transfer stations or consider any other transfer station system modifications. Regular updates would be provided to ensure informational needs are being addressed and appropriate input provided.

A ten-day letter has been filed with the Council to allow release of the request for proposals and award of a contract to the most responsive proposer, without additional formal Council actions.

OPTIONS AVAILABLE

Council options include:

1. **Proceed with the transfer station system analysis.** Allow release of the attached request for proposals for the System Consultant. Necessary modifications incorporated into the final RFP before release.
2. **Revise the RFP based on Council comment and bring back for final review before release.**

IMPLICATIONS AND SUGGESTIONS

If Council directs staff to proceed with the analysis staff anticipates incurring approximately \$75,000 to \$100,000 in consulting costs for the system consultant and approximately \$10,000 to \$20,000 for the valuation consultant. In addition, approximately 1.5 non-managerial FTE would be required from SWR and approximately .25 FTE from OMA for the duration of the project. The analysis should provide Council with sufficient information to make a decision on whether or not to proceed with divestiture of the public facilities and/or pursue other types of modifications to the regional transfer system.

QUESTION(S) PRESENTED FOR CONSIDERATION

Is Council satisfied with the RFP?

LEGISLATION WOULD BE REQUIRED FOR COUNCIL ACTION ____ Yes X No
DRAFT IS ATTACHED ____ Yes X No

SCHEDULE FOR WORK SESSION

Chief Operating Officer Approval _____

Attachment

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Request for Proposals

**DRAFT #4 Request for Proposals
FOR
The Provision of Consulting Services to Evaluate the Effects
of
Different Solid Waste Transfer System Ownership Alternatives**

I. INTRODUCTION

The Solid Waste & Recycling Department of Metro, a metropolitan service district organized under the laws of the State of Oregon and the Metro Charter, located at 600 NE Grand Avenue, Portland, OR 97232-2736, is requesting proposals for consulting services to conduct a comparative analysis of how different ownership alternatives of the solid waste transfer system in the Metro region would affect the performance of the system, as well as Metro's role in that system as operator and/or regulator.

Proposals will be due no later than _____ p.m., _____, 2005 in Metro's business offices at 600 NE Grand Avenue, Portland, OR 97232-2736. Details concerning the project and proposal are contained in this document.

II. BACKGROUND/HISTORY OF PROJECT

Metro is a regional government providing a variety of services for the urbanized portions of Clackamas, Multnomah and Washington counties of Oregon. Solid waste planning and disposal are two of the principal responsibilities of Metro.

Four background documents contained in the Appendix provide an overview of the solid waste system and Metro's roles:

- Solid Waste Management Framework is Sound- Metro Auditor, 2002
- Official Statement, Solid Waste System Bond Refinancing 2003 (abstract of background)
- Regional Transfer Capacity Analysis- Metro 2004
- DRAFT- Current Practices for RSWMP Update- Metro 2005

The solid waste planning function is guided primarily through the Regional Solid Waste Management Plan (RSWMP). RSWMP is a long-range (ten-year timeframe) functional plan as specified in Oregon Revised Statute 268.390. Metro first adopted RSWMP as a functional plan in 1988; the document was last updated in 1994/95 and has been amended several times since. The current plan expires in 2005 and preliminary planning is underway for updating the document for the next ten years (2005 – 2015)¹.

¹ See Regional Solid Waste Management Plan Update, Progress Report #3 contained in the Appendix.
Revised June 05

Request for Proposals

One of the key planning issues that has been identified to date is the Disposal System Planning (DSP) project element of the plan². The main purpose of the project contemplated herein is to determine whether the needs of the region's transfer station component of the disposal system are being met in the most efficient and effective manner; and to recommend adjustments where the system can be improved.

The disposal system planning issues were the focus of a Metro Council work session in late 2004³. Council discussions regarding the DSP element of the regional plan became focused on the issue of the value of the Metro-owned transfer stations, and the role of these stations in the context of the larger solid waste system.

Discussions between staff and the Metro Council continued through May 2005⁴ during a series of Council work sessions. These discussions concluded at the May 24, 2005 Council work session (see Appendix) with agreement on a work plan for an analysis of the transfer station system. The purpose of the analysis is to provide Council with information to be used in shaping the transfer station portion of the solid waste disposal system for the Metro region. The Council then directed staff to hire consultants to assist staff in implementing portions the work plan presented below.

Transfer Station System Analysis-Proposed Work Plan⁵

The following work plan is an overview of the steps to complete the transfer station portion of the disposal system planning portion of the Regional Solid Waste Management Plan. Only portions of the work plan will be accomplished under the RFP contemplated herein. It is presented here to provide context for the overall planning effort.

Task 1. Develop Project Work Plan The work plan will provide a process to conduct a comparative analysis of how different ownership alternatives of the solid waste transfer system in the Metro region affects the performance of the system, and determine Metro's role in that system as operator and regulator.

Completion Date: May 24, 2005

Product: Work Plan discussed/approved by Metro Council

Lead: Staff

Task 2. Develop Outreach & Communications Plan with Council Liaison

Completion Date: June 30, 2005

Product: Outreach & Communications Plan

Lead: Staff

Task 3. Select Consultants

² See Disposal System Planning- Metro Council Project Proposal, February 2005 in Appendix.

³ See Work Session sheet and minutes for 9/28/04 in Appendix.

⁴ A number of additional work sessions were held to discuss disposal system planning, see: 10/12/04, 1/11/05, 2/08/05, 4/12/05, 4/26/05

⁵ See Gantt Chart of project in Appendix.

Revised June 05

Request for Proposals

a. Solid Waste System Alternatives Analysis

- o *Purpose* - Select a *System Consultant* to assist in conducting the comparative analysis including the development of models, evaluation criteria, data gathering and feedback processes
- o *Process*
 1. Develop scope of work based on work plan
 2. Incorporate changes to work plan at May 24th work session (see minutes of work session)
 3. Conduct procurement⁶

Completion Date: July 30, 2005

Product: Executed Contract

Lead: Staff

b. Transfer Station Valuation Study

- o *Purpose*- Select a consultant to assist in estimating the value of Metro's two transfer stations from multiple perspectives (the analysis will consider selling one or both):
 1. Sale as transfer station
 2. Highest & Best Use
 3. Other methods as appropriate
- o *Process*
 1. Develop scope of work based on approved work plan
 2. Modify based on input from system consultant
 3. Conduct procurement

Completion Date: August 30, 2005

Product: Executed Contract

Lead: Staff

Task 4. Develop Appropriate Background Information

a. Conduct Valuation Study on value of Metro Stations

- o Identify potential impacts of waste disposal guarantee
- o Effects of removing IRS constraints after bonds paid off

b. Research Legal Issues

- o Review potential statutory limitations on uses of proceeds of sale of assets
- o Review charter limitations on excise tax expenditures, sales of Metro assets
- o Review impacts of conveyance on solid waste disposal contract
- o Identify additional legal issues in modifying or altering current disposal system including alternative governance structures

c. Identify Other System Issues

- o Identify essential/desired functions of transfer system

⁶ The schedule for each task is premised on the use of a 10-day letter approval process to obtain the system consultant. If formal approval is required through a resolution, add 4 to 6 weeks to the projected schedule.

Request for Proposals

- o Review state law requirement to provide HHW depots
- o Consider impacts on recovery rates and amounts at transfer stations
- o Consider impacts on policy/program formation
- o Determine relative ability to respond to natural disasters
- o Identify impacts on different customer classes
- o Assess the political feasibility of different actions in achieving outcomes, for example controlling rates in a private, public or mixed system

d. Gather information

- o Review other transfer configurations
- o Conduct interviews as appropriate
- o Conduct literature review
- o Incorporate Valuation Study

Completion Date: September 30, 2005

Lead: Valuation Consultant/System Consultant/OMA/Staff

Task 5. Alternative Analysis

a. Ownership options to be explored

- o *Current Mixed System:* System of public and private stations and current regulatory structure as a baseline scenario
- o *Private System:* System of privately owned transfer stations with regulation to ensure service delivery as directed by Metro Council
- o *Public System:* System of public transfer stations only

b. Define evaluation criteria based on council work sessions / staff input

- o Utilize Council values as identified in Fall 2003.
- o Identify System issues previously identified in background phase⁷
- o Develop metrics to measure performance of criteria (e.g., rates in other jurisdictions)

c. Conduct Alternatives Analysis, utilizing evaluation criteria across ownership options, and incorporating background information as appropriate

d. Based on review, final the analysis and prepare report of findings

Completion Date: November 30, 2005

Product: Report to COO

Lead: System Consultant

Task 6. Develop Recommendation - COO develops staff recommendation for presentation to Council

Completion Date: December 31, 2005

⁷ See Exhibits A&B from council work session of 4/26/05 for council values and related issues.
Revised June 05

Request for Proposals

Lead: Staff

Task 7. Recommendation and Report forwarded to Metro Council for Consideration

Completion Date: December 31, 2005

Lead: Council Liaison

III. PROPOSED SCOPE OF WORK/SCHEDULE

Metro is seeking proposals from qualified firms to perform the services generally described in the above work plan for the *System Consultant*- primarily in tasks #4 (items C&D) and #5. Additional information/expectations concerning the work tasks are presented below by phases. Metro expects to final a detailed scope of work based on the successful proposal and subsequent contract negotiations.

Phase I

Solid Waste System Issues/Background

The Metro Council and SW&R staff have brainstormed a number of issues within the solid waste system that should be addressed in the analysis by the System Consultant team. These are contained both in Exhibit B of the May 24th Council work session as well as in the work plan, primarily in Task #4. It will be the responsibility of the system consultant to identify additional issues, essential/desirable functions and system relationships of importance to the analysis in order to construct the framework for the analysis. During this stage of the project it is expected that it will be necessary for the consultant to:

- o Review additional information regarding the Metro solid waste system
- o Work with the Metro Council and staff
- o Meet with other key decision makers and stakeholders as appropriate
- o Interview or through other means gather information from participants in the system

Valuation Consultant Assistance

The system consultant will assist in scoping the work for the *Valuation Consultant*, its selection and providing sufficient background to this consultant about the solid waste industry so it can successfully complete its work. The information generated by the Valuation Consultant will be incorporated into the final report of the System Consultant.

Phase II

Based on the research conducted in Phase I, the *System Consultant* shall identify the ownership options, criteria and framework to be used in the analysis.

Ownership Options

Request for Proposals

As discussed in several Council Work Sessions and associated materials, it is anticipated that three basic ownership options for the solid waste transfer system will be examined in more detail (listed across the top of Exhibit A). It will be the responsibility of the contractor to describe the salient features of the ownership option it proposes to use, to explain the implications of using alternative assumptions regarding the features of a particular option and obtain signoff from the Metro project manager before proceeding with the analysis. Such features/assumptions should address the essential and desirable functions the disposal system should perform.

Characteristics and assumptions for each ownership options are presented below based on staff's current assessment of Council's intent (as well as use/review of issues listed in Exhibit B). Working with Metro staff, the consultant shall explore variations of these options for consideration in the final analysis, including varying the regulatory role of Metro.

Current Mixed System: System of public and private stations (plus a system of MRFs and other recovery facilities as described in background documents).

- o Must consider the impacts of using caps for wet waste at private facilities and how changes in such caps impact system criteria
- o It is expected that by the time the analysis is undertaken, Metro will have ruled on whether to allow a current local transfer station applicant into the system. The consultant must include the impacts of this decision in the assessment of this ownership option.
- o Examination of this option must include an assessment of the long run feasibility of maintaining the public/private balance.

Private System: System of privately owned transfer stations with/without regulation to ensure service delivery as directed by Metro Council

- o Assumes Metro will sell the stations for use as a solid waste transfer station or other non-transfer use
- o This model will examine allocating waste to transfer stations in the system that best optimizes the private system
- o Will examine the effects on service delivery vs. prices over the long run considering trends such as vertical integration and industry consolidation

Public System: System of public transfer stations only

- o Should assume private operation through contracts with public operation of scalehouses
- o Will assess the difficulty of acquiring private stations or of taking them offline

Criteria

The criteria identified to date for use in evaluating each ownership option are the Metro *Council Values* as identified in Exhibit A, as augmented by the miscellaneous issues/constraint identified in Exhibit B. It is envisioned that the consultant will perform three basic tasks as relates to the criteria:

- o Identify any other criteria that should be used in the analysis
- o Develop metrics to be used in scoring criteria across ownership options
- o Work with Metro staff and the Metro Council to finalize criteria

Request for Proposals

Phase III

During this phase the consultant will construct the conceptual model(s) that will be used in the analysis. It is anticipated that such a model will result in the evaluation of each ownership option against a set of criteria. Such a model must be able to combine qualitative (such as ranking) data with quantitative data (such as dollars) into a structured decision making process for use by decision makers. The model will be reviewed by Metro and adjusted as appropriate.

The consultant will then conduct the alternatives analysis, incorporating the valuation study as appropriate. Consultant shall produce draft findings for staff review. Consultant shall then produce a final report to Metro. It is expected that the consultant will also give presentations of the findings to the Metro Council and other stakeholders as requested, as well as regular updates concerning key concepts during construction of the model.

Summary

The following is a summary of the general approach to this project approved by the Metro Council at its April 26, 2005 work session that apply to the System Consultant RFP.

1. Identify any other criteria and constraints for the disposal system (i.e., complete Exhibits A and B).
2. Identify the functions the disposal system is to perform:
 - Essential; e.g. solid waste disposal, public customer access, household hazardous waste, etc.
 - Desirable; e.g., least-cost, etc. to be determined during the study.
3. Construct conceptual models that fulfill these functions, based on each of the ownership systems
 - The models will also take into account the system characteristics and constraints as contained in Exhibit B as well as additional factors that emerge.
 - An important element of this step is establishing the appropriate level of empirical work (e.g., the costs of various models for service delivery such as private vs. public provision of hazardous waste⁸ collection and management), *including the value of the Metro transfer stations.*⁹
4. Evaluate performance of each conceptual model
 - Utilize the evaluation criteria as established in Exhibit A.
 - Assess the strengths and weaknesses of the various ownership models.
 - Tweak each conceptual model as needed to optimize performance against the evaluation criteria.

⁸ An investigation of the current household hazardous waste system is currently underway and information will be provided to the System Consultant as it becomes available.

⁹ The department intends to employ outside consultants specializing in relevant disciplines to undertake discrete portions of the analysis. The Council and other interested and effected parties will be kept involved at each key step in the process. Overall coordination of the study will be the responsibility of SW&R staff.

Request for Proposals

- Score and rank-order the various ownership models according to their ability to meet regional needs. This step would determine whether Metro should retain ownership of the transfer stations, or divest, based on whether or not public ownership is part of the highest-ranked model.

5. Report results and conclusions.

IV. QUALIFICATIONS/EXPERIENCE

Proposers shall have the following experience:

- (1) Experience comparing public-sector provision of public services to private-sector provision.
- (2) Experience in the solid waste industry, particularly the operational and economic aspects of transfer stations
- (3) Sufficient qualifications in economic theory to assess the short-run and long-run effects of different ownership structures
- (4) Experience in assisting governments in making complex decisions with significant economic and service level implications

V. PROJECT ADMINISTRATION

The primary Metro contact for this project shall be Chuck Geyer, Principal Solid Waste Planner, 600 NE Grand Ave., Portland, OR 97232, 503-797-1691, geyer@metro.dst.or.us. Questions concerning the RFP should be directed to him. Mr. Geyer will also administer the resulting contract with the successful proposer. It is expected that multiple Metro staff will be involved in the successful completion of the project.

It is expected proposers will have a single contact for the RFP process and a single project manager for the resulting contract. Metro recognizes that multiple staff from the successful firm will require contact with Metro staff and stakeholders. Procedures for establishing such contact will be part of final negotiations with the successful proposer.

VI. PROPOSAL INSTRUCTIONS

A. Submission of Proposals

1 hard copy and one electronic copy of the proposal shall be furnished to Metro, addressed to Chuck Geyer, Principal Solid Waste Planner, 600 NE Grand Ave., Portland, OR 97232, geyer@metro.dst.or.us.

B. Deadline

Proposals will not be considered if received after 3:00 p.m., _____, 2005.

C. RFP as Basis for Proposals:

Request for Proposals

This Request for Proposals represents the most definitive statement Metro will make concerning the information upon which Proposals are to be based. Any verbal information that is not addressed in this RFP will not be considered by Metro in evaluating the Proposal. All questions relating to this RFP should be addressed to Chuck Geyer at (503) 797-1691, geyercc@metro.dst.or.us. Any questions, which in the opinion of Metro, warrant a written reply or RFP amendment will be furnished to all parties receiving this RFP. Metro will not respond to questions received after _____.

D. Information Release

All Proposers are hereby advised that Metro may solicit and secure background information based upon the information, including references, provided in response to this RFP. By submission of a proposal all Proposers agree to such activity and release Metro from all claims arising from such activity.

E. Minority and Women-Owned Business Program

In the event that any subcontracts are to be utilized in the performance of this agreement, the Proposer's attention is directed to Metro Code provisions 2.04.100.

Copies of that document are available from Purchasing/Contract Office of Metro, Metro Regional Center, 600 NE Grand Avenue, Portland, OR 97232 or call (503) 797-1816.

VII. PROPOSAL CONTENTS

The proposal should contain not more than 20 pages of written material (excluding biographies, examples and brochures, which may be included in an appendix), describing the ability of the consultant to perform the work requested, as outlined below. The proposal should be submitted on recyclable, double-sided recycled paper (post consumer content). No waxed page dividers or non-recyclable materials should be included in the proposal.

- A. Transmittal Letter: Indicate who will be assigned to the project (including subcontractors), who will be project manager, and that the proposal will be valid for ninety (90) days.
- B. Approach/Project Work Plan: Describe how the work will be done within the given timeframe and budget. Include a proposed work plan and schedule.
- C. Staffing/Project Manager Designation: Identify specific personnel (and subcontractors) assigned to major project tasks, their roles in relation to the work required, percent of their time on the project, and special qualifications they may bring to the project. Include resumes of individuals proposed for this contract.

Metro intends to award this contract to a single firm to provide the services required. Proposals must identify a single person as project manager to work with Metro. The consultant must

Request for Proposals

assure responsibility for any subconsultant work and shall be responsible for the day-today direction and internal management of the consultant effort.

- D. Experience: Indicate how your firm meets the experience requirements listed in section IV. of this RFP. List projects conducted over the past five years that involved services similar to the services required here. For each of these other projects, include the name of the customer contact person, his/her title, role on the project, and telephone number. Identify persons on the proposed project team who worked on each of the other projects listed, and their respective roles.
- E. Cost/Budget: Present the proposed cost of the project (including projected expenses) and the proposed method of compensation. List hourly rates for personnel assigned to the project, total personnel expenditures, support services, and subconsultant fees (if any). Requested expenses should also be listed. Metro has established a budget not to exceed \$75,000 for this project (excluding the valuation portion).
- F. Exceptions and Comments: To facilitate evaluation of proposals, all responding firms will adhere to the format outlined within this RFP. Firms wishing to take exception to, or comment on, any specified criteria within this RFP are encouraged to document their concerns in this part of their proposal. Exceptions or comments should be succinct, thorough and organized.

VIII. GENERAL PROPOSAL/CONTRACT CONDITIONS

- A. Limitation and Award: This RFP does not commit Metro to the award of a contract, nor to pay any costs incurred in the preparation and submission of proposals in anticipation of a contract. Metro reserves the right to waive minor irregularities, accept or reject any or all proposals received as the result of this request, negotiate with all qualified sources, or to cancel all or part of this RFP.
- B. Billing Procedures: Proposers are informed that the billing procedures of the selected firm are subject to the review and prior approval of Metro before reimbursement of services can occur. Contractor's invoices shall include an itemized statement of the work done during the billing period, and will not be submitted more frequently than once a month. Metro shall pay Contractor within 30 days of receipt of an approved invoice.
- C. Validity Period and Authority: The proposal shall be considered valid for a period of at least ninety (90) days and shall contain a statement to that effect. The proposal shall contain the name, title, address, and telephone number of an individual or individuals with authority to bind any company contacted during the period in which Metro is evaluating the proposal.
- D. Conflict of Interest. A Proposer filing a proposal thereby certifies that no officer, agent, or employee of Metro or Metro has a pecuniary interest in this proposal or has participated in

Request for Proposals

contract negotiations on behalf of Metro; that the proposal is made in good faith without fraud, collusion, or connection of any kind with any other Proposer for the same call for proposals; the Proposer is competing solely in its own behalf without connection with, or obligation to, any undisclosed person or firm.

IX. EVALUATION OF PROPOSALS

- A. Evaluation Procedure: Proposals received that conform to the proposal instructions will be evaluated. The evaluation will take place using the evaluation criteria identified in the following section. Interviews may be requested prior to final selection of one firm.
- B. Evaluation Criteria: This section provides a description of the criteria which will be used in the evaluation of the proposals submitted to accomplish the work defined in the RFP.

Percentage of Total Score

35 Project Work Plan/Approach

- | | | |
|----|--|-----|
| 1. | Demonstration of understanding of the project objectives | 50% |
| 2. | Performance methodology | 50% |

50 Project Staffing Experience

- | | | |
|----|-----------------------|-----|
| 1. | Project consultant | 50% |
| 2. | Commitment to project | 50% |

15 Budget/Cost Proposal

- | | | |
|----|---|-----|
| 1. | Projected cost/benefit of proposed work plan/approach | 70% |
| 2. | Commitment to budget and schedule parameters | 30% |

X. NOTICE TO ALL PROPOSERS -- STANDARD AGREEMENT

The attached personal services agreement is a standard agreement approved for use by the Office of Metro Attorney. This is the contract the successful Proposer will enter into with Metro; it is included for your review prior to submitting a proposal. Include any exceptions to this standard form under Section VII.

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METRO

600 NE Grand Ave.
Portland, OR 97232-2736
(503) 797-1700

LIST OF APPENDICES

- *Solid Waste Management Framework is Sound*- Metro Auditor, 2002
- *Official Statement*, Solid Waste System Bond Refinancing 2003 (abstract of background)
- *Regional Transfer Capacity Analysis*- Metro 2004
- *DRAFT- Current Practices for RSWMP Update*- Metro 2005
- *Regional Solid Waste Management Plan Update*, Progress Report #3
- *Disposal System Planning- Metro Council Project Proposal*
- *Council Work Session, minutes* 9/28/04
- *May 24, 2005 Council Work Session, minutes*
- *Additional Council Work Sessions*: 10/12/04, 1/11/05, 2/08/05, 4/12/05, 4/26/05
- *Gantt Chart*
- Exhibit A *council values* and Exhibit B *System issues* from 4/26 work session

Agenda Item Number 6.0

OREGON TRANSPORTATION PLANNING RULE COMMENTS

Metro Council Work Session
Tuesday, July 12, 2005
Metro Council Chamber

METRO COUNCIL

Work Session Worksheet

Presentation Date: July 12, 2005

Time: 1:30

Length: 20 minutes

Presentation Title: Oregon Transportation Planning Rule Comments

Department: Planning

Presenters: Tom Kloster

ISSUE & BACKGROUND

On March 15, the Oregon Land Conservation and Development Commission (LCDC) adopted broad revisions to OAR 660-012-0060, the state Transportation Planning Rule. This round of amendments was focused on critical issues raised by the recent Jaqua vs. City of Springfield case that threatened current planning practices for balancing transportation and land use plans. While the LCDC response to the Jaqua case began as "fine tuning" amendments to the TPR, sweeping new provisions were introduced shortly before the draft rule was released for public review on January 3, 2005.

The "1/2 Mile Rule"

The amended TPR reaffirms the existing practice of evaluating land use and transportation plan amendments for their effects in the horizon year of adopted 20-year plans in response to the Jaqua decision. However, the amended rule also applies a special test for transportation system adequacy along certain interstate highway corridors that creates a bar so high that the practical effect will be a zoning freeze in many of the affected areas of the metropolitan region. Known as the "1/2 mile rule", this provision represents a major shift in policy that Metro believes unacceptable because of the effects on the region's ability to implement the 2040 Growth Concept in these corridors.

The 1/2 mile rule requires plan amendments within a half mile radius of interchanges on I-5, I-205, I-405 and I-84 to be evaluated according to the Regional Transportation Plan (RTP) "financially constrained" system, a set of improvements that represents just over one third of the needed projects in the region. Metro's analysis of the financially constrained system showed that most of the interstate system in the region would fail to meet the RTP level of service policy in the 2020 horizon year with this limited set of improvements. The net effect would be a cap on plan amendments in affected areas that where added housing or employment might be proposed.

This means that zoning to increase employment or housing densities could be blocked in the Portland Central City, Gateway, Clackamas and Oregon City regional centers, Hollywood, Lents, West Linn, Tualatin and Wilsonville town centers and every station community along the Interstate, Airport and I-205 MAX lines. The inner portions of the Banfield MAX line are also affected. In many cases, local zoning that implements these 2040 designations hasn't been adopted yet, so the impact is dramatic along the Interstate and I-205 MAX corridors, in particular. In the Tualatin/Wilsonville area and Gresham's Springwater employment area, planned industry on land recently brought inside the urban growth boundary could be affected. In Metro's preliminary analysis, the rule affects more than 24,000 acres in these corridors, of which more than 8,000 areas fall into 2040

centers, station communities and main streets, alone.

Metro has opposed the "1/2 mile rule" over concerns that it is overly simplistic and has significant unintended effects that were not considered during rulemaking. Unfortunately, the State did not complete any sort of land use or transportation analysis when drafting these requirements. While Metro shares the state's interest in protecting the integrity of the interstate highway system, we also believe this goal can be much more effectively achieved through more thoughtful strategies that are coordinated with adopted land use and transportation plans.

There is also some dispute over whether the amendments apply to areas beyond the interchanges, due to confusion over how the amendments related to pre-existing terminology in the rule. This stems from an interpretation by State planning staff that the recent amendments changed the definition of "funding plan" as the term has been applied to system plans over the past 15 years. Under this interpretation, the provisions of the "1/2 mile rule" would be expanded to cover all state-owned facilities. Metro staff do not agree that this was the intention of the OTC and LCDC when the amendments, since it represents a sweeping expansion of the interchange policy that was not discussed by the joint commissions during rulemaking.

To address these issues, the accompanying amendments would establish a different process for those metropolitan areas where a regional system plan is already required by the TPR. A regional plan already provides a more comprehensive look at interchanges than the "1/2 mile rule" offers, but under the proposed amendments, regional plans would be required to include a strategy for completing Interchange Area Management Plans (IAMPs) to replace the "1/2 mile rule" for metropolitan areas. Interchange Area Management Plans already exist in state regulations, and can better address the complexities of urban interchanges. The proposed amendments also include better definition of TPR terminology used in these provisions to address the dispute over the scope of the recent rule changes, including clarity of what constitutes a "funding plan" versus a "funding mechanism."

ODOT as a Land Use Authority

The caveat to the 1/2 mile rule is that ODOT staff will be allowed to determine if additional improvements beyond the RTP financially constrained system are deemed "reasonably likely" to occur, a discretionary interpretation that would occur outside the planning process, and put ODOT staff in the position of deciding land use actions in affected areas. This provision represents a departure from Oregon's planning tradition where local elected officials adopt comprehensive plans in a public process intended to provide certainty in the development process. The effect of this provision would be to allow ODOT to make discretionary, arbitrary decisions that second-guess local policy makers on major planning decisions.

It's also unclear how this could be applied in our region, since most of the affected highway corridors are deferred to refinement plans, and have no major improvements identified in the RTP until individual corridor plans are complete. Thus, ODOT staff would be in the position of choosing projects that don't exist in the RTP in order to use this provision to "approve" plan amendments. This determination by ODOT requires no public process for evaluating the merit or impacts of such projects.


IMPLICATIONS AND SUGGESTIONS

Metro has opposed the "reasonably likely" provisions in testimony and written correspondence to the LCDC because it places ODOT in an inappropriate role as decision maker in the planning process, and could undermine the region's effort to concentrate future growth in existing urban centers and corridors in an effort to reduce urban sprawl. The draft amendments to the TPR that would limit the scope and impact of this provision in our region and reinforce the current practices used in evaluating comprehensive plan amendments. However, the proposed amendments do not seek to strike the provision, since there seems to be strong interest by the State in retaining this option, and because the amendments were so recently enacted by the LCDC.

In order to be considered by the LCDC at an upcoming July TPR subcommittee meeting, the proposed amendments must be reviewed by JPACT, MPAC and the Council by early July, with the staff recommendation that the regional policy makers forward them to the LCDC for consideration in the final stages of the TPR update. In correspondence to the LCDC, the Metro Council has also reserved the option to petition for rulemaking, should other avenues for addressing our concerns fail.

LEGISLATION WOULD BE REQUIRED FOR COUNCIL ACTION __ Yes ☒ No
DRAFT IS ATTACHED __ Yes __ No

SCHEDULE FOR WORK SESSION

Department Director/Head Approval 
Chief Operating Officer Approval _____

July 14, 2005

John VanLandingham, Chair
Land Conservation and Development Commission
635 Capitol St., NE
Suite 150
Salem, OR 97301-2540

Dear Chair VanLandingham:

Thank you for the opportunity to comment on update to the Oregon Transportation Planning Rule (TPR). We commend the joint OTC/LCDC Transportation Subcommittee for producing these amendments in such a short time frame, and support the Commission's effort to remedy the critical issues raised by the Jaqua vs. City of Springfield case. When the Commission adopted the first round of TPR amendments addressing the Jaqua case earlier this year, you encouraged local agencies to work with the Commission to fine-tune the rule to best meet this new challenge.

We have since engaged our local and regional partners in the Metro region in a review of the new TPR provisions, and are proposing following comments on Section 660-012-0060 in the spirit of fine tuning the TPR. We believe that these amendments build on existing strengths of the TPR, while also recognizing the complexity of planning in larger urban settings.

The comments focus on the "1/2 mile rule", in particular. While we are proposing amendments to this set of provisions, the changes are offered with a commitment from our region that public investments in highway interchanges are guarded carefully against inappropriate land use actions.

While we have a small share of the state's highway interchanges, they also serve as gateways to the state's most important marine and air terminals, and provide primary access to public facilities like the Oregon Convention Center, Oregon Health and Science University, Central Post Office, Portland State University, Oregon Zoo, Metro Expo Center and many other cultural, commercial, medical and recreational destinations that serve residents of the entire state. Thus, we are keenly aware of the need to protect these access points over the long term.

Clarifying Funding Plans vs. Funding Mechanisms

The recent amendments to the TPR resulted in a confusing mix of transportation funding terminology that requires clarification in order to avoid invalidating currently acknowledged transportation system plans (TSP) in the Metro region. For the purpose of the rule, we recommend that "funding plans" be defined as a TSP element where a strategy, or range of strategies, establish a road map for funding transportation revenue shortfalls during the 20-year plan period. Conversely, "funding mechanisms" would be identified

as adopted or approved sources of transportation revenue that can be used to fund projects and programs identified in TSPs.

The proposed amendments in Attachment 'A' distinguish between these terms, and clarify how they apply to plan amendments in "interchange" areas and other areas within a locality. We recently learned of DLCD staff's new interpretation of what a "funding plan" constitutes, and strongly disagree that the recent TPR amendments were intended to change this definition as it was applied in the acknowledgement of our regional transportation plan in 2000. The sharp difference of opinion between state agencies and local jurisdictions on the current language is evidence of the need to clarify the terminology. The proposed amendments would confirm the original interpretation of a "funding plan" to be part of shaping a long-range planning process, and not the state of current funding policies.

The amendments would also reduce the need to rely on ODOT interpretations of "reasonably likely" transportation improvements, which will introduce great uncertainty and ambiguity (and resulting litigation), as well as a new step in the already complicated local planning process. Local officials in the Metro region expressed concern over placing the role of an ODOT administrator above that of elected policy makers in making land use decisions, a significant departure from current practice. Instead, we believe that better interchange protections are possible through improved consultation and coordination between ODOT and local governments, as suggested below.

Interchange Management Strategy

We continue to oppose the "1/2 mile rule", a new layer of planning regulations intended to protect interstate highway interchanges from overdevelopment. As you know, Metro shares the state's concern for protecting the capacity and function of interstate interchanges. But the 1/2-mile rule is overly simplistic, particularly for urban areas where even the definition for measuring this radius cannot be applied to many interchanges. Instead, we support the use of interchange area management plans (IAMPs) in these areas, an existing tool that offers the best protection for interchanges, but has been largely unfunded by ODOT.

Our recommendation is based on a review of the interchanges located within the Metro region, and upon consultation with the Oregon MPO Consortium, which includes members from the Salem-Keizer, Eugene-Springfield, Rogue Valley, Corvallis and Bend MPOs. Our finding is that the 1/2 mile rule would not only block desired land use plans in existing urban areas, where compact development is proposed near interchanges, but also have the subsequent effect of pushing development toward the urban fringe, where the greatest interchange capacity exists in the state's larger urban areas. This effect is clearly in conflict with statewide planning goals to limit sprawl and promote compact development. The 1/2 mile rule also ignores the reality that, in larger urban areas, a much larger area might necessarily be managed as part of

protecting interchanges. For example, in the Metro region, the Marine Drive interchange on Interstate-5 serves the major marine terminals of the Portland Harbor, yet all are located outside the ½ mile area. We believe that IAMPs provide a better alternative for customizing a strategy that meets the needs of each interchange, such as Marine Drive.

The proposed amendments to the TPR shown in Attachment 'A' would require Metropolitan Planning Organizations (MPOs) to develop an interchange management strategy as part of adopting a regional TSP. The strategy would establish priorities and timing for completion of interchange area managements plans for areas governed by MPOs, and is modeled after the existing "refinement planning" provisions of the TPR. The approach is also based on the notion that the TPR already calls out MPOs as unique in their transportation needs, and thus ties the interchange management responsibility to the regional TSPs that are required for the six MPOs.

ODOT would be strongly encouraged to participate in the completion of IAMPs for these areas, since the investment in completing this work represents a fraction of what just one interchange construction project could cost in the event of an inappropriate land use decision in an interchange area. It should be noted, however, that much of the corridor planning, and even some capital improvements to ODOT highways in the Metro region are now being funded with local or regional dollars. We strongly recommend that ODOT make a meaningful investment in protecting interchanges by funding the IAMP efforts for critical facilities. ODOT has already begun this effort in the Metro region by preparing an analysis of "at risk" interchanges, but the Region 1 office will need funding support from the OTC to complete this work.

Conclusion

We look forward to continued participation and comment as the remaining portions of the TPR are reviewed by the Commission in coming months. We are committed to finding a workable solution to better protecting our interchange investments, and appreciate the opportunity to comment on this important effort.

Sincerely,

Rex Burkholder
JPACT Chair

Jack Hoffman
MPAC Chair

David Bragdon
Metro Council President

cc: Members of the LCDC
Lane Shetterly, Department of Land Conservation and Development
Members of the Oregon Transportation Commission
Bruce Warner, Oregon Department of Transportation

*Metro Comments
Draft Oregon Transportation Rule Amendments
Attachment 'B'*

Attachment 'A'

660-012-0005 - Definitions

(7) "Funding Plan" means a reasonable strategy or range of strategies adopted in a local transportation system plan that addresses identified funding shortfalls during the planning period."

(8) "Funding Mechanism" means an adopted or approved transportation revenue source used to finance projects and programs included in local transportation system plans.

(9) "Interchange Management Strategy" means an adopted strategy for developing interchange management plans in MPO areas.

660-012-0060 - Plan and Land Use Regulation Amendments

(1) Where an amendment to a functional plan, an acknowledged comprehensive plan, or a land use regulation would significantly affect an existing or planned transportation facility, the local government shall put in place measures as provided in section (2) of this rule to assure that allowed land uses are consistent with the identified function, capacity, and performance standards (e.g. level of service, volume to capacity ratio, etc.) of the facility. A plan or land use regulation amendment significantly affects a transportation facility if it would:

(a) Change the functional classification of an existing or planned transportation facility (exclusive of correction of map errors in an adopted plan);

(b) Change standards implementing a functional classification system; or

(c) As measured at the end of the planning period identified in the adopted transportation system plan:

(A) Allow land uses or levels of development that would result in types or levels of travel or access that are inconsistent with the functional classification of an existing or planned transportation facility;

(B) Reduce the performance of an existing or planned transportation facility below the minimum acceptable performance standard identified in the TSP or comprehensive plan; or

(C) Worsen the performance of an existing or planned transportation facility that is otherwise projected to perform below the minimum acceptable performance standard identified in the TSP or comprehensive plan.

(2) Where a local government determines that there would be a significant effect, compliance with section (1) shall be accomplished through one or a combination of the following:

- (a) Adopting measures that demonstrate allowed land uses are consistent with the planned function, capacity, and performance standards of the transportation facility.
- (b) Amending the TSP or comprehensive plan to provide transportation facilities, improvements or services adequate to support the proposed land uses consistent with the requirements of this division; such amendments shall include a funding plan or funding mechanisms consistent with section (4) or include an amendment to the transportation finance plan so that the facility, improvement, or service will be provided by the end of the planning period.
- (c) Altering land use designations, densities, or design requirements to reduce demand for automobile travel and meet travel needs through other modes.
- (d) Amending the TSP to modify the planned function, capacity or performance standards of the transportation facility.
- (e) Providing other measures as a condition of development or through a development agreement or similar funding method, including transportation system management measures, demand management or minor transportation improvements. Local governments shall as part of the amendment specify when measures or improvements provided pursuant to this subsection will be provided.

(3) Notwithstanding sections (1) and (2) of this rule, a local government may approve an amendment that would significantly affect an existing transportation facility without assuring that the allowed land uses are consistent with the function, capacity and performance standards of the facility where:

- (a) The facility is already performing below the minimum acceptable performance standard identified in the TSP or comprehensive plan on the date the amendment application is submitted;
- (b) In the absence of the amendment, planned transportation facilities, improvements and services as set forth in section (4) of this rule would not be adequate to achieve consistency with the identified function, capacity or performance standard for that facility by the end of the planning period identified in the adopted TSP;
- (c) Development resulting from the amendment will, at a minimum, mitigate the impacts of the amendment in a manner that avoids further degradation to the performance of the facility by the time of the development through one or a combination of transportation improvements or measures;

(d) The amendment does not involve property located in an interchange area as defined in paragraph (4)(d)(C); and

(e) For affected state highways, ODOT provides a written statement that the proposed funding and timing for the identified mitigation improvements or measures are, at a minimum, sufficient to avoid further degradation to the performance of the affected state highway. However, if a local government provides the appropriate ODOT regional office with written notice of a proposed amendment in a manner that provides ODOT reasonable opportunity to submit a written statement into the record of the local government proceeding, and ODOT does not provide a written statement, then the local government may proceed with applying subsections (a) through (d) of this section.

(4) Determinations under sections (1)-(3) of this rule shall be coordinated with affected transportation facility and service providers and other affected local governments.

(a) In determining whether an amendment has a significant effect on an existing or planned transportation facility under subsection (1)(c) of this rule, local governments shall rely on existing transportation facilities and services and on the planned transportation facilities, improvements and services set forth in subsections (b) and (c) below.

(b) Outside of interstate interchange areas, the following are considered planned facilities, improvements and services:

(A) Transportation facilities, improvements or services that are funded for construction or implementation in the Statewide Transportation Improvement Program or a locally or regionally adopted transportation improvement program or capital improvement plan or program of a transportation service provider.

(B) Transportation facilities, improvements or services that are authorized in a local transportation system plan and for which a funding plan or funding mechanism is in place or approved. These Funding mechanisms include, but are not limited to, transportation facilities, improvements or services for which: transportation systems development charge revenues are being collected; a local improvement district or reimbursement district has been established or will be established prior to development; a development agreement has been adopted; or conditions of approval to fund the improvement have been adopted.

(C) Transportation facilities, improvements or services in a metropolitan planning organization (MPO) area that are part of the area's federally-approved, financially constrained regional transportation system plan.

(D) Improvements to state highways that are included as planned improvements in a regional or local transportation system plan or comprehensive plan when

ODOT provides a written statement that the improvements are reasonably likely to be provided by the end of the planning period.

(E) Improvements to regional and local roads, streets or other transportation facilities or services that are included as planned improvements in a regional or local transportation system plan or comprehensive plan when the local government(s) or transportation service provider(s) responsible for the facility, improvement or service provides a written statement that the facility, improvement or service is reasonably likely to be provided by the end of the planning period.

(c) Within interstate interchange areas, the improvements included in (b)(A)-~~(B)~~ and those provided through funding mechanisms in (C) are considered planned facilities, improvements and services, except where one of the following applies:

(A) ODOT provides a written statement that the proposed funding and timing of mitigation measures are sufficient to avoid a significant adverse impact on the Interstate Highway system, then local governments may also rely on the improvements identified in paragraphs (b)(D) and (E) of this section; or

(B) There is an adopted interchange area management plan, then local governments may also rely on the improvements identified in that plan and which are also identified in paragraphs (b)(D) and (E) of this section.

(C) There is an adopted interchange management strategy in a regional transportation system plan in MPO areas.

(d) As used in this section and section (3):

(A) Planned interchange means new interchanges and relocation of existing interchanges that are authorized in an adopted transportation system plan or comprehensive plan;

(B) Interstate highway means Interstates 5, 82, 84, 105, 205 and 405; and

(C) Interstate interchange area means:

(i) Property within one-half mile of an existing or planned interchange on an Interstate Highway as measured from the center point of the interchange; or

(ii) The interchange area as defined in the Interchange Area Management Plan adopted as an amendment to the Oregon Highway Plan.

(D) Interchange management strategy means an adopted strategy for developing interchange management plans in MPO areas. Interchange management strategies

establish priorities and timing for completion of interchange managements plans for areas governed by MPOs.

- (e) For purposes of this section, a written statement provided pursuant to paragraphs (b)(D), (b)(E) or (c)(A) provided by ODOT, a local government or transportation facility provider, as appropriate, shall be conclusive in determining whether a transportation facility, improvement or service is a planned transportation facility, improvement or service. In the absence of a written statement, a local government can only rely upon planned transportation facilities, improvements and services identified in paragraphs (b)(A)-(C) to determine whether there is a significant effect that requires application of the remedies in section (2).
- (5) The presence of a transportation facility or improvement shall not be a basis for an exception to allow residential, commercial, institutional or industrial development on rural lands under this division or OAR 660-004-0022 and 660-004-0028.
- (6) In determining whether proposed land uses would affect or be consistent with planned transportation facilities as provided in 0060(1) and (2), local governments shall give full credit for potential reduction in vehicle trips for uses located in mixed-use, pedestrian-friendly centers, and neighborhoods as provided in (a)-(d) below;
- (a) Absent adopted local standards or detailed information about the vehicle trip reduction benefits of mixed-use, pedestrian-friendly development, local governments shall assume that uses located within a mixed-use, pedestrian-friendly center, or neighborhood, will generate 10% fewer daily and peak hour trips than are specified in available published estimates, such as those provided by the Institute of Transportation Engineers (ITE) Trip Generation Manual that do not specifically account for the effects of mixed-use, pedestrian-friendly development. The 10% reduction allowed for by this section shall be available only if uses which rely solely on auto trips, such as gas stations, car washes, storage facilities, and motels are prohibited;
- (b) Local governments shall use detailed or local information about the trip reduction benefits of mixed-use, pedestrian-friendly development where such information is available and presented to the local government. Local governments may, based on such information, allow reductions greater than the 10% reduction required in (a);
- (c) Where a local government assumes or estimates lower vehicle trip generation as provided in (a) or (b) above, it shall assure through conditions of approval, site plans, or approval standards that subsequent development approvals support the development of a mixed-use, pedestrian-friendly center or neighborhood and provide for on-site bike and pedestrian connectivity and access to transit as provided for in 0045(3) and (4). The provision of on-site bike and pedestrian connectivity and access to transit may be accomplished through application of acknowledged ordinance provisions which comply with 0045(3) and (4) or through conditions of approval or

findings adopted with the plan amendment that assure compliance with these rule requirements at the time of development approval; and

(d) The purpose of this section is to provide an incentive for the designation and implementation of pedestrian-friendly, mixed-use centers and neighborhoods by lowering the regulatory barriers to plan amendments which accomplish this type of development. The actual trip reduction benefits of mixed-use, pedestrian-friendly development will vary from case to case and may be somewhat higher or lower than presumed pursuant to (a) above. The Commission concludes that this assumption is warranted given general information about the expected effects of mixed-use, pedestrian-friendly development and its intent to encourage changes to plans and development patterns. Nothing in this section is intended to affect the application of provisions in local plans or ordinances which provide for the calculation or assessment of systems development charges or in preparing conformity determinations required under the federal Clean Air Act.

(7) Amendments to acknowledged comprehensive plans and land use regulations which meet all of the criteria listed in (a)-(c) below shall include an amendment to the comprehensive plan, transportation system plan the adoption of a local street plan, access management plan, future street plan or other binding local transportation plan to provide for on-site alignment of streets or accessways with existing and planned arterial, collector, and local streets surrounding the site as necessary to implement the requirements in Section 0020(2)(b) and Section 0045(3) of this division:

(a) The plan or land use regulation amendment results in designation of two or more acres of land for commercial use;

(b) The local government has not adopted a TSP or local street plan which complies with Section 0020(2)(b) or, in the Portland Metropolitan Area, has not complied with Metro's requirement for street connectivity as contained in Chapter 6 of the Regional Transportation Plan Title 6, Section 3 of the Urban Growth Management Functional Plan; and

(c) The proposed amendment would significantly affect a transportation facility as provided in 0060(1).

(8) A "mixed-use, pedestrian-friendly center or neighborhood" for the purposes of this rule, means:

(a) Any one of the following:

(A) An existing central business district or downtown;

(B) An area designated as a central city, regional center, town center or main street in the Portland Metro 2040 Regional Growth Concept;

(C) An area designated in an acknowledged comprehensive plan as a transit oriented development or a pedestrian district; or

(D) An area designated as a special transportation area as provided for in the Oregon Highway Plan.

(b) An area other than those listed in (a) which includes or is planned to include the following characteristics:

(A) A concentration of a variety of land uses in a well-defined area, including the following:

(i) Medium to high density residential development (12 or more units per acre);

(ii) Offices or office buildings;

(iii) Retail stores and services;

(iv) Restaurants; and

(v) Public open space or private open space which is available for public use, such as a park or plaza.

(B) Generally include civic or cultural uses;

(C) A core commercial area where multi-story buildings are permitted;

(D) Buildings and building entrances oriented to streets;

(E) Street connections and crossings that make the center safe and conveniently accessible from adjacent areas;

(F) A network of streets and, where appropriate, accessways and major driveways that make it attractive and highly convenient for people to walk between uses within the center or neighborhood, including streets and major driveways within the center with wide sidewalks and other features, including pedestrian-oriented street crossings, street trees, pedestrian-scale lighting and on-street parking;

(G) One or more transit stops (in urban areas with fixed route transit service); and

(H) Limit or do not allow low-intensity or land extensive uses, such as most industrial uses, automobile sales and services, and drive-through services.

Stats. Implemented: ORS 195.025, 197.040, 197.230, 197.245, 197.610 - 197.625, 197.628 - 197.646, 197.712, 197.717 & 197.732

Hist.: LCDC 1-1991, f. & cert. ef. 5-8-91; LCDD 6-1998, f. & cert. ef. 10-30-98; LCDD 6-1999, f. & cert. ef. 8-6-99; LCDD 3-2005, f. & cert. ef. 4-11-05

Agenda Item Number 7.0

PERS UNFUNDED LIABILITY

Metro Council Work Session
Tuesday, July 12, 2005
Metro Council Chamber

METRO COUNCIL

Work Session Worksheet

Presentation Date: 7/5/2005 Time: 2:15 pm Length: 40 Minutes

Presentation Title: Bonding for Metro's PERS Unfunded Actuarial Liability

Department: Finance

Presenters: Bill Stringer, Kathy Rutkowski, Carol Samuels (Seattle Northwest Securities)

ISSUE & BACKGROUND

Under a pension plan, the actuarial liability is the present value of the plan's current and expected benefits payments (plus administrative expenses). If a fund's actuarial liability exceeds its current assets, then the fund has a shortfall that is known as an unfunded actuarial liability ("UAL"). This shortfall is the difference between what the fund has "in the bank" right now and what is expected to be needed to pay current and future benefits. In other words, the UAL is the shortfall the fund would face if its assets were liquidated and the present values of the benefits were paid today.

PERS costs to Metro are rising rapidly. Last year Metro paid 7.14% of salaries and wages to PERS and that rate increased 4.67 percentage points on July 1 to 11.81 percent of salaries and wages. In two years, unless unforeseen earnings or losses intervene, it will increase another 4.67 percentage points to 16.48 percent of salaries and wages. These increases are caused by poor earning accruing to the PERS investment portfolio and policy choices that had adverse impacts on payout and earnings and do not relate to adverse court rulings regarding the 2003 Legislative Reforms.

When Metro joined Oregon PERS it entered with a \$7.1 million actuarial surplus. However, significant losses were incurred in Metro's portion of the PERS portfolio in 2000, 2001, 2002 and 2003. The losses are shown in the following table:

METRO OUTSTANDING UAL BALANCE

Remaining 1999 UAL	\$ (7,036,321)
Remaining 2000 Loss	3,171,354
Remaining 2001 Loss	26,452,706
Remaining 2002 Loss	39,182,032
Remaining 2003 Loss	7,947,053
2003 PERS Reform Legislation	(51,640,261)
UAL as of 12/31/2003	\$ 18,076,563

Additional losses have occurred since and are expected to occur over the next several months such that the unfunded actuarial liability by the end of October of 2005 is expected to be \$23,935,891. Note, however, that the PERS actuary in

the calculation above has assumed savings equal to \$51,640,563 attributable to the package of reforms passed by the legislature in 2003. We know that the State court has not upheld some of those reforms and another court is deciding a case in Eugene. It is not known at this time what the impact might be on the UAL by these decisions—losing all or part of the \$51.6 million savings.

OPERS currently requires Metro to pay any unfunded liability over a period of approximately 25 years. OPERS charges Metro eight percent per annum because OPERS expects, over the long term, to earn eight percent on its investments.

OPTIONS AVAILABLE

Refinancing that liability at a lower rate of interest should reduce costs for Metro. Under current bond market conditions, Metro could finance its portion of the liability at approximately 6% (a taxable rate – under federal law, these must be sold on a taxable basis) through the bond market, potentially minimizing some of the future cost increases.

However, in order to achieve savings, the funds deposited with PERS must earn more than the cost of the borrowing over its life. If the funds earn more than the cost of the borrowing, a jurisdiction that chooses to refinance will have lower PERS costs than a jurisdiction that does not make that choice. More specifically, assuming the actuary's expected return assumption of 8% proves accurate, the savings to a jurisdiction at a 6% borrowing rate equal approximately 20% on a present value basis of the amount borrowed. This savings rate compares favorably to the State's test for advance refunding, in which the minimum savings that must be achieved are 3% on a present value basis. Since 1970, PERS investments have averaged roughly 12% returns; however history is no indicator of future market performance.

Over the last two fiscal years, Metro departments have placed 6.5% of personnel services aside to help pay for any additional losses sustained as a result of adverse court rulings regarding the 2003 Legislative Reforms. These funds, which will amount to about \$5 million are currently invested in Metro's portfolio and are earning about 2.9% as of July 1, 2005. It is possible that these funds could be used to fund the unfunded liability outright, leaving about \$18 million to finance. The question as to whether this is the best use of these funds will require additional analysis which will be—but has not been—performed at this time.

IMPLICATIONS AND SUGGESTIONS

Whether or not to bond for a reduction of Metro's PERS Unfunded Actuarial Liability and how much, if any, of Metro's PERS Reserve to use to reduce the UAL has elements of risk. Ultimately, any savings accruing to Metro depends at a minimum upon:

- The reduction in rate that the PERS actuary would attribute to Metro if the UAL is reduced.
- Interest rates on long term taxable bonds at the time of refinancing.
- The yield attributable to Reserves held in Metro's portfolio;
- The movement of yields on funds held by PERS over the next 23 years.

QUESTION(S) PRESENTED FOR CONSIDERATION

1. Should Metro explore the extent of potential savings attributable to issuing bonds within a bond pool organized by Seattle Northwest Securities?
2. What amount, if any, of the PERS reserve should be used to reduce the amount of bonds sold?
3. Should a Resolution be drafted for consideration by the Council authorizing the sale? Note that such a funding is allowable under Oregon Law without a public vote but also note that a supplemental budget amendment would be required under Oregon Law to permit such a sale.

LEGISLATION WOULD BE REQUIRED FOR COUNCIL ACTION ☒ Yes ☐ No
DRAFT IS ATTACHED ☐ Yes ☒ No

SCHEDULE FOR WORK SESSION

Department Director/Head Approval _____
Chief Operating Officer Approval _____

071205c-01

A G E N D A

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METRO

Agenda

MEETING: METRO COUNCIL REGULAR MEETING
DATE: July 14, 2005
DAY: Thursday
TIME: 2:00 PM
PLACE: Metro Council Chamber

CALL TO ORDER AND ROLL CALL

1. INTRODUCTIONS

2. CITIZEN COMMUNICATIONS

- Area 93 Citizens

3. ORGANICS UPDATE

Barrett/Erickson

4. CONSENT AGENDA

- 4.1 Consideration of Minutes for the July 7, 2005 Metro Council Regular Meeting.

5. ORDINANCES - SECOND READING

- 5.1 **Ordinance No. 05-1077A**, Amending the Regional Framework Plan and the Urban Growth Management Functional Plan Relating to Nature in Neighborhoods. *(Possible technical amendments, no final action)* Hosticka

6. RESOLUTIONS

- 6.1 **Resolution No. 05-3597**, Appointing Roger Vonderharr, Jeannette Hamby and Jill Thorn to the Metro Boundary Appeals Commission. Park

7. LEGISLATIVE UPDATE

8. CHIEF OPERATING OFFICER COMMUNICATION

9. COUNCILOR COMMUNICATION

ADJOURN

Television schedule for July 14, 2005 Metro Council meeting

Clackamas, Multnomah and Washington counties, and Vancouver, Wash. Channel 11 -- Community Access Network www.yourtvvtv.org -- (503) 629-8534 2 p.m. Thursday, July 14 (live)	Portland Channel 30 (CityNet 30) -- Portland Community Media www.pcmtv.org -- (503) 288-1515 8:30 p.m. Sunday, July 17 2 p.m. Monday, July 18
Gresham Channel 30 -- MCTV www.mctv.org -- (503) 491-7636 2 p.m. Monday, July 18	Washington County Channel 30 -- TVTV www.yourtvvtv.org -- (503) 629-8534 11 p.m. Saturday, July 16 11 p.m. Sunday, July 17 6 a.m. Tuesday, July 19 4 p.m. Wednesday, July 20
Oregon City, Gladstone Channel 28 -- Willamette Falls Television www.wftvaccess.com -- (503) 650-0275 Call or visit website for program times.	West Linn Channel 30 -- Willamette Falls Television www.wftvaccess.com -- (503) 650-0275 Call or visit website for program times.

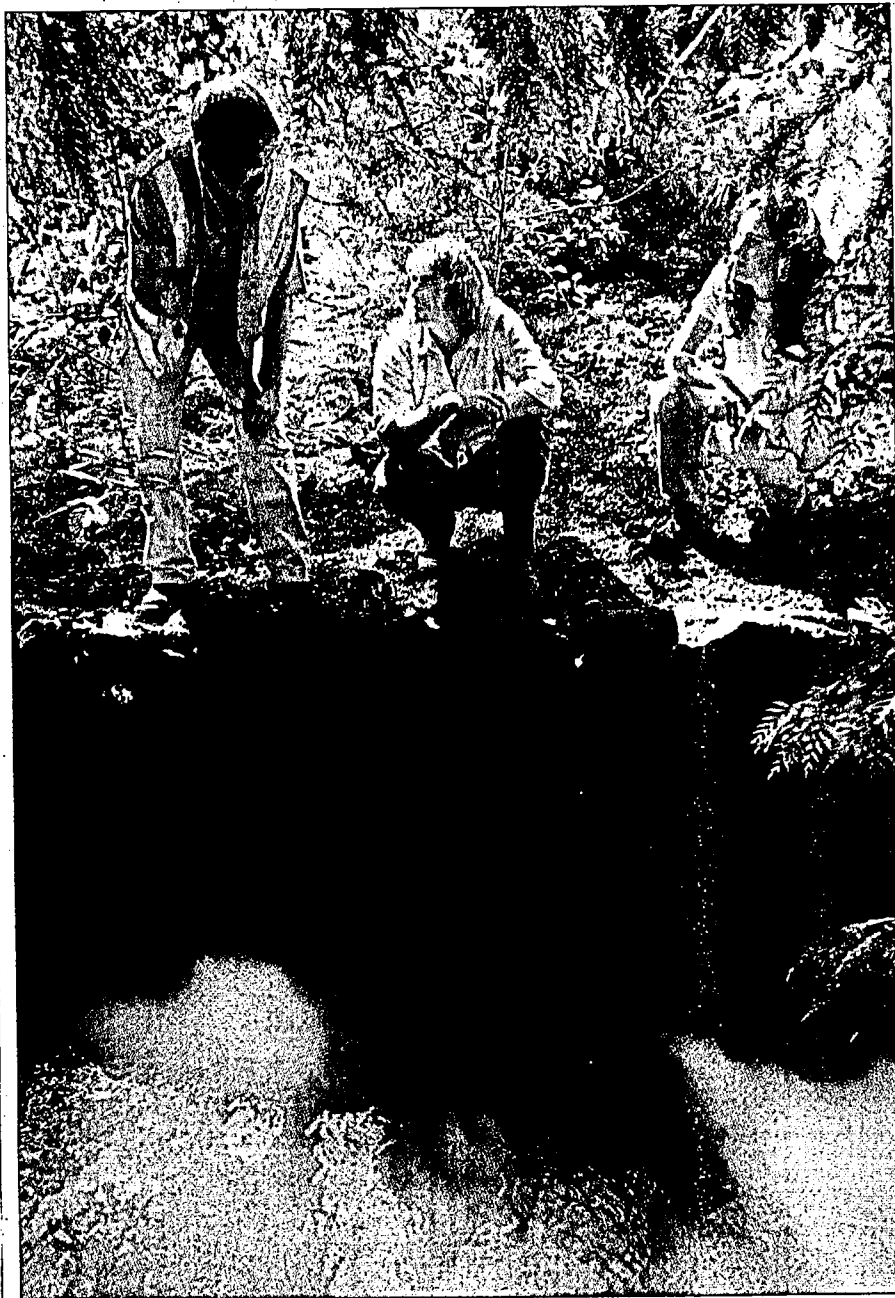
PLEASE NOTE: Show times are tentative and in some cases the entire meeting may not be shown due to length. Call or check your community access station web site to confirm program times.

Agenda items may not be considered in the exact order. For questions about the agenda, call Clerk of the Council, Chris Billington, (503) 797-1542. Public hearings are held on all ordinances second read and on resolutions upon request of the public. Documents for the record must be submitted to the Clerk of the Council to be considered included in the decision record. Documents can be submitted by e-mail, fax or mail or in person to the Clerk of the Council. For additional information about testifying before the Metro Council please go to the Metro website www.metro-region.org and click on public comment opportunities. For assistance per the American Disabilities Act (ADA), dial TDD 797-1804 or 797-1540 (Council Office).

A Washington County agency is spending millions to improve the area's streams

0712052-02

TRICKLE DOWN THEORY



Doug Gates, senior engineer for Clean Water Services, discusses replacing an undersized culvert near the intersection of Northwest Laidlaw and Saltzman roads with co-workers Kendra Smith (center) and Jill Ory. The agency recently adopted its 20-year Healthy Streams Plan, which includes numerous culvert replacements and other steps to improve the overall quality of streams in Washington County.

OLIVIA BUCKS/THE OREGONIAN

By RICHARD COLBY
THE OREGONIAN

A half-mile stretch of Johnson Creek South glimmers as an environmental showpiece. Next to the creek, in what used to be a monstrous blackberry thicket, stand young trees including Douglas fir, willows and oaks, surrounded by tall native grasses. The trees and grasses steer people away from the creek's banks in Summercrest Park, just outside Beaverton.

Two years ago, Clean Water Services contractors tore out two culvert pipes that funneled the creek beneath park trails. Foot bridges replaced the pipes, making it easier for fish to pass and improving the stream flow. For a crowning touch, the workers placed logs in the creek bed to help small fish survive.

That's just one part of one stream, says Clean Water Services' Kendra Smith. Over the next 20 years, Washington County's water-quality agency will oversee similar improvements along 45 miles of small streams crisscrossing urban areas.

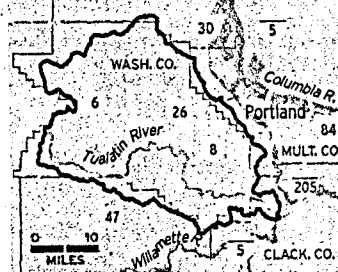
They include planting 2 million trees along stream banks to keep water running higher, cooler and cleaner for fish and other aquatic life. Undersized culverts will be replaced, and small dams and stream-fed ponds that slow or stop fish passage will be removed.

The projects planned through 2025 will cost an estimated \$95 million, Smith says. The plan is an effort to meet requirements of the federal Clean Water Act and the Endangered Species Act as the county's population grows beyond its current 480,000 to an expected 700,000-plus by 2040, Smith says.

Please see **STREAMS**, Page 9

TUALATIN RIVER WATERSHED

Tualatin River and its tributaries drain a large part of Washington County along with small parts of neighboring counties.



DERRIK QUENZER/THE OREGONIAN

10 WAYS TO IMPROVE STREAM HEALTH

1. Plant trees native to Oregon in your yard or along streams.
2. Reduce or eliminate pesticide and fertilizer use; go organic.
3. Water plants and lawns only as needed.
4. Join group tree-planting and stream-cleaning projects.
5. Be sure only rain goes into storm drains.
6. Disconnect downspouts when sealing or moss-treating roofs.
7. Keep invasive plants - blackberries, ivy, bamboo - and compost piles away from streams.
8. Report chemical spills and illegal dumping to authorities.
9. Pick up pet waste.
10. Don't feed wild ducks, geese or nutria.

Source: Clean Water Services

THE OREGONIAN ♦ THURSDAY, JULY 7, 2005

Streams: Some project are completed; many remain

Continued from Page 1

For nearly five years, Smith has run the agency's long-term planning to decide how it will protect urban streams that empty into the meandering Tualatin River.

"What we really did here was build a system," Smith says of the Healthy Streams Plan, which county commissioners adopted last month.

Along with Clean Water Services, the streams plan involves 12 cities including Portland, the coun-

ty's road management unit, Tualatin Hills Park & Recreation District, Metro and the Federal Emergency Management Agency. It describes scores of projects to be accomplished.

Among them are fixing at least 68 storm-drain pipes that run from parking lots and streets directly into streams, including Fanno and Beaverton creeks. The runoffs will be rerouted through new filtering swales.

Some projects such as the Summercrest Park work, Smith says, have already been done.

Another is just starting: two ponds on Bronson Creek have begun drying up near Northwest 185th Avenue and Cornell Road. The ponds, decorating the grounds of a 1970s-era condominium complex, were created with small dams on the creek.

After the ponds become mud

flats this summer, Smith says, the creek will be rerouted so it skirts the ponds during warmer months when flowing water becomes critical.

Nearly \$11 million of the 20-year spending is planned for streamside tree planting. The plan calls for Clean Water Services to plant a million stream-shading trees, and the cities, aided by volunteers, to put in another million over two decades.

Much of the expense will be paid with fees Clean Water Services levies on urban county households, currently \$4 per month, for surface water management. Systems-development charges on new homes and other buildings also will be used.

Economies also will be sought as city, county and state road agencies upgrade road culverts as part of other construction projects.

The plan also calls for studying

and revising flood-plain maps to regulate future development in flood-prone areas. Clean Water Services recently received a five-year \$847,000 grant from the Federal Emergency Management Agency for that effort.

The Healthy Streams Plan draws plaudits from a river watchdog group, Tualatin Riverkeepers. "We like the approach they're taking," says Brian Wegener, the group's Watershed Watch coordinator.

The plan, Wegener says, uses the latest scientific knowledge to come up with stream improvements. "It's still unclear what the Clean Water Act and Endangered Species Act requires of agencies like Clean Water Services, but we encourage them to move further than what the regulations might require."

Richard Colby: 503-294-5961;
dickcolby@news.oregonian.com

AMENDMENTS TO ORDINANCE NO. 05-1077A

TO REVISE EXHIBIT E AND MAKE CONFORMING AND
TECHNICAL AMENDMENTS TO EXHIBIT C

PART 1. The provisions of Exhibit E to Ordinance No. 05-1077A shall be deleted in their entirety and replaced with the provisions described in Attachment 1 to this amendment.

PART 2(a). Subsection 3(B)(1) of Exhibit C to Ordinance No. 05-1077A shall be amended as follows:

Amend its comprehensive plan and implementing ordinances to adopt the Title 13 Model Ordinance and the Metro Habitat Conservation Areas Map, and demonstrate compliance with the provisions of (a) subsection 4(A)(5) of this title, related to enhanced fish and wildlife protection and management of publicly-owned parks and open spaces that have been designated as natural areas and are not intended for future urban development, and (b) subsection 4(A)(8) of this title, related to the restoration of Habitat Conservation Areas when developed property is undergoing significant redevelopment; or

PART 2(b). Subsection 4(A)(8) of Exhibit C to Ordinance No. 05-1077A shall be amended as follows:

Notwithstanding subsection 4(A)(67) of this title, when a city or county exercises its discretion to approve zoning changes to allow a developed property that contains a Habitat Conservation Area to (1) change from an industrial or heavy commercial zoning designation to a residential or mixed-use/residential designation, or (2) increase the type or density and intensity of development in any area, then the city or county shall apply the provisions of this Section 4 of this title, or provisions that will achieve substantially comparable habitat protection and restoration as do the provisions of this Section 4 of this title. This provision will help to insure that, when developed areas are redeveloped in new ways to further local and regional urban and economic development goals, property owners should restore regionally significant fish and wildlife habitat as part of such redevelopment.

PART 3. Subsection 3(E)(1)(b) of Exhibit C to Ordinance No. 05-1077A shall be amended as follows:

Adopt amendments to the city's or county's comprehensive plan and implementing ordinances to remove the barriers identified pursuant to subsection 3(E)(1)(a) of this title, and shall remove such barriers so that such practices may be used, where practicable, in all regionally significant fish and wildlife habitat; provided, however that such practices shall not be permitted if their use is prohibited by an applicable and required State or Federal permit issued to a unit of local government having jurisdiction in the area, such as a permit required under the Clean Water Act, 33 U.S.C. §§1251 et seq., or the Safe Drinking Water Act, 42 U.S.C. §§300f et seq., and including conditions or plans required by such permit.

PART 4. Subsection 3(G)(1) of Exhibit C to Ordinance No. 05-1077A shall be amended as follows:

Allow a property owner, or another person with the property owner's consent, to confirm the location of habitat on a lot or parcel at any the time, whether or not the property owner has submitted a specific request for a development permit of a request for a building permit, grading permit, tree removal permit, land division approval, or some other land use decision;

PART 5. Subsection 3(G)(4) of Exhibit C to Ordinance No. 05-1077A shall be amended as follows:

Ensure that the process provides adequate opportunities for appeals and a fair and equitable dispute resolution process, consistent with state law.

PART 6. The first clause of subsection 4(A)(7) of Exhibit C to Ordinance No. 05-1077A shall be amended as follows:

Except as provided in subsection 4(A)(78) of this title, routine repair, maintenance, alteration, rehabilitation, or replacement of existing structures, roadways, driveways, utilities, accessory uses, or other development within Habitat Conservation Areas may be allowed provided that . . .

PART 7. Subsection 4(A)(9) of Exhibit C to Ordinance No. 05-1077A shall be amended as follows:

Any activity within Habitat Conservation Areas that is required to implement a Federal Aviation Administration (FAA) - compliant Wildlife Hazard Management Plan (WHMP) on property owned by the Port of Portland within 10,000 feet of an Aircraft Operating Area, as defined by the FAA, shall be allowed provided that mitigation for any such projects is completed in compliance with mitigation requirements adopted pursuant to subsections 4(B)(1), 4(B)(2)(c), and 4(B)(3) of this title. In addition, habitat mitigation for any development within Habitat Conservation Areas on property owned by the Port of Portland within 10,000 feet of an Aircraft Operating Area, as defined by the FAA, shall be permitted at any property located within the same 6th Field Hydrologic Unit Code subwatershed as delineated by the United States Department of Agriculture's Natural Resources Conservation Service (NRCS) without having to demonstrate that on-site mitigation is not practicable, feasible, or appropriate.

PART 8. Subsection 4(A)(10) of Exhibit C to Ordinance No. 05-1077A shall be amended as follows:

Within Habitat Conservation Areas located in Multnomah County Drainage District No. 1, Peninsula Drainage District No. 1, Peninsula Drainage District No. 2, and the area managed by the Sandy Drainage Improvement Company, routine operations, repair, maintenance, reconfiguration, rehabilitation, or replacement of existing drainage, and flood control facilities, and existing related facilities, including any structures, pump stations, water control structures, culverts, irrigation systems, roadways, utilities, accessory uses (such as off-load facilities that facilitate water-based maintenance), erosion control projects, levees, soil and bank stabilization projects, dredging and ditch clearing within the hydraulic cross-section in existing storm water

conveyance drainageways, or other water quality and flood storage projects applicable to existing facilities and required to be undertaken pursuant to ORS chapters 547 or 554 or Titles 33 or 44 of the Code of Federal Regulations, shall be allowed provided that:

- a. The project is consistent with all other applicable local, state, and federal laws and regulations;
- b. ~~Where practicable, the project does not encroach closer to a surface stream or river, wetland, or other body of open water than existing operations and development; and~~
- c. ~~Where practicable, vegetation native to the Metro Area is maintained, enhanced and restored, if disturbed; other vegetation is replaced, if disturbed, with any vegetation other than invasive non-native or noxious vegetation; Disturbed areas are replanted with vegetation and no bare soils remain after project completion; the planting of native vegetation and removal of invasive non-native or noxious vegetation is encouraged; and invasive non-native or noxious vegetation shall not be planted; and.~~
- d. Each district submits an annual report, to all local permitting agencies in which the district operates, describing the projects the district completed in the previous year and how those projects complied with all applicable federal and state laws and requirements.

PART 9. Subsection 4(B)(1) of Exhibit C to Ordinance No. 05-1077A shall be amended as follows:

Clear and objective development approval standards consistent with subsection 3(C) of this title that protect Habitat Conservation Areas but which allow limited development within High Habitat Conservation Areas, slightly more development in Moderate Habitat Conservation Areas, and even more development in Low Habitat Conservation Areas. Such standards shall allow (a) property owners to consider reduced building footprints and the use of minimal excavation foundation systems (e.g., pier, post or piling foundation), and (b) the flexible application of local code requirements that may limit a property owner's ability to avoid development in Habitat Conservation Areas, such as setback and landscaping requirements or limits on clustering and the transfer of development rights on-site. The habitat-friendly development practices described in Table 3.07-13c, which are intended to minimize the magnitude of the impact of development in Habitat Conservation Areas, shall be allowed, encouraged, or required to the extent that cities and counties can develop clear and objective standards for their use, unless their use is prohibited by an applicable and required State or Federal permit issued to a unit of local government having jurisdiction in the area, such as a permit required under the Clean Water Act, 33 U.S.C. §§1251 et seq., or the Safe Drinking Water Act, 42 U.S.C. §§300f et seq., and including conditions or plans required by such permit. The clear and objective development standards required by this paragraph also shall require that all development in Habitat Conservation Areas be mitigated to restore the ecological functions that are lost or damaged as a result of the development. Standards that meet the requirements of this subsection and subsection 3(C) of this title are provided in Section 7 of the Metro Title 13 Model Ordinance⁴; and

⁴ On file in the Metro Council office.

PART 10. Subsection 4(B)(2)(b)(iii) of Exhibit C to Ordinance No. 05-1077A shall be amended as follows:

The techniques described in subsection 4(B)(2)(a)(iii) shall be used to demonstrate that development within a Habitat Conservation Area has been minimized. In addition, the magnitude of the impact of development within Habitat Conservation Areas also shall be minimized, such as by use of the habitat-friendly development practices described in Table 3.07-13c, unless the use of such practices is prohibited by an applicable and required State or Federal permit issued to a unit of local government having jurisdiction in the area, such as a permit required under the Clean Water Act, 33 U.S.C. §§1251 et seq., or the Safe Drinking Water Act, 42 U.S.C. §§300f et seq., and including conditions or plans required by such permit; and

PART 11. Throughout Exhibit C to Ordinance No. 05-1077A, the word “vegetated” shall be deleted and replaced with the word “vegetative.”

M:\attorney\confidential\07 Land Use\04 2040 Growth Concept\03 UGMFP\02 Stream Protection (Title 3)\02 Goal 5\02 Program\Ord 05-1077A\Ord 05-1077A Amendment revised model ord 070805 draft.doc

M E M O R A N D U M

600 NORTHEAST GRAND AVENUE | PORTLAND, OREGON 97232 2736
TEL 503 797 1700 | FAX 503 797 1794



METRO

Date: July 6, 2005
To: MPAC
From: Andy Cotugno, Planning Department Director
RE: Revised Title 13 Model Ordinance for Nature in Neighborhoods

When the Council adopted amendments to Ordinance 05-1077 on May 12th, they also directed staff to form a subcommittee of MTAC and WRPAC to review the Title 13 Model Ordinance (Exhibit E of Ordinance 05-1077A) for technical changes to ensure the ordinance would be workable for local jurisdictions. The subcommittee has met weekly since late May and has now completed their review, meeting the July 1st deadline. Key issues addressed by the subcommittee are included in the table on the following page. MTAC discussed the revised Model Ordinance on July 6th, and unanimously voted to recommend that MPAC approve the revisions on July 13th. If the revised Model Ordinance is recommended, there will be some accompanying technical amendments to be made to Title 13 of the Functional Plan. Council is scheduled to consider the revised Model Ordinance on July 14.

MTAC identified the following issues to be forward to MPAC for their consideration:

- ***Fee-in-lieu of mitigation.*** One policy issue arose from the discussion of mitigation, which was the concept of a fee-in-lieu of mitigation planting program. Such an approach would provide more flexibility for developers, especially on industrial sites where land is at a premium. The subcommittee discussed the concept, but it was clearly a policy issue and it appeared unlikely that the group would reach consensus that a fee-in-lieu approach would adequately compensate for lost ecological functions.
- ***Staffing and technical assistance.*** MTAC expressed concern regarding the ability of many cities and counties to maintain staffing levels sufficient to adequately implement aspects of the Title 13 Model Ordinance, particularly the requirement to monitor mitigation plantings for a five-year period. The importance of technical assistance from Metro, especially for smaller cities, to aid in compliance with the Title 13 Functional Plan requirements was also emphasized.
- ***Different implementation concerns than Title 3.*** Many cities and counties implemented the water quality and flood management standards of Title 3 through their surface water management agencies, taking advantage of the funding they have available and not using land use authority to implement the code. Title 13 will most likely be included in a city or county's land use code and not as easily funded through stormwater fees.

The revised version of the Title 13 Model Ordinance is attached as well as a summary of the ordinance that describes the most important elements of each section.

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Title 13 Model Ordinance Key Issues

Issue	Ord. 05-1077A	MTAC Subcommittee recommended change
<i>Applicability:</i> An applicant would have to read several sections of the Model Ordinance to determine if it applied to a specific circumstance.	Applicability is found in several sections of the Model Ordinance (Sections 2, 3, 4...)	A new section 2 provides applicants with an easy reference guide to which sections of the ordinance apply to their proposed development. Section 3 defines all the exempt uses and conditioned activities.
<i>Planting standards:</i> Several parties expressed concern that the planting standards in the clear and objective approach were too high, others were concerned that no requirements were included that defined how vegetation would be planted to ensure survival.	Planting standards for mitigation in Section 6: Development Standards were based on Metro's experience with restoration plantings, and would require 8 trees and 36 shrubs per 500 sq. ft. disturbed; did not include requirements to ensure plant survival or monitoring.	Planting standards for mitigation in Section 6 are enhanced to achieve the goal of forested conditions in riparian corridors. The standards would require 5 trees and 25 shrubs per 500 sq. ft., based on CWS and Pleasant Valley Code. Requirements for site preparation, plant care, 80% survival after 5 years, and monitoring are included.
<i>Process and notification:</i> Concerns were raised that the model ordinance should not define process and notice requirements that are required by state law.	Process and notification requirements for different types of decisions are included.	Most references to process and notification are removed, or else reference is to appropriate state or local requirements. Notification to Metro of certain activities is included in the Model Ordinance. Notification to Watershed Councils is included for more complex map verifications.
<i>MCDD and WHMA Conditioned Activities:</i> Inclusion of these activities in the Discretionary Review section of the Model Ordinance.	Special conditions for activities by Multnomah County Drainage District (MCDD) to manage the altered floodplain and by the Port of Portland to maintain aircraft safety on Port owned properties covered by a Wildlife Hazard Management Area plan were placed in the Discretionary Review section of the Model Ordinance.	These conditioned activities are included in Section 3: Exempt Uses and Conditioned Activities, specific reference is made as to which portions of the ordinance apply.
<i>Land divisions:</i> Concern raised that land partitions could be made that would result in the loss of additional habitat.	No mention of partitions. Subdivisions are required to set aside a portion of the HCA in an unbuildable tract in Section 6.	Preserve treatment of subdivisions, requirements that partitions are created in a way that minimizes disturbance to the HCA.
<i>Discretionary review:</i> Concern was expressed that a full alternatives analysis would be too onerous for some of the less complex proposals that would have to use discretionary review, such as off-site mitigation.	One process included in the Discretionary Review section that required an applicant to include an impact and alternatives analysis for any project that did not meet the standards in Section 6.	Includes streamlined processes in discretionary review section for: partitions that cannot meet the standards in Section 6; off-site mitigation; and varying the size and number of plants for mitigation.
<i>Utilities:</i> Concerns have been raised that new utilities need a clear and objective standard and that the ordinance should not conflict with the requirements of permits complying with the federal Clean Water Act and/or the federal Safe Drinking Water Act.	Section 6 (clear and objective standards) did not include a standard for new underground utility lines. In Section 7, habitat-friendly development practices are included as part of the minimize requirement.	Added a development standard (in Section 6) for new underground utilities that are 25 feet wide or less, provided that the disturbance is completely restored. In Section 7, included reference that habitat-friendly development practices shall be used to minimize unless prohibited by a permit needed to comply with the federal CWA or SDWA.
<i>Map administration:</i> Concern that the process described would be complicated to administer and expensive for the applicant.	Three approaches to map verification, basic, intermediate, and detailed. Substantial notice requirements throughout. Applicant using detailed verification approach would be required to use discretionary review standards.	Two approaches to map verification: basic and detailed. Notice is required only for detailed approach. Applicant can use either approach for map verification, and then choose development standards in Section 6 or 7.
<i>On-site density transfers:</i> Concerns were raised that requiring a city or county to allow a 100% density transfer would not be appropriate in many instances.	Required cities and counties to allow an applicant to transfer 100% of maximum allowable density on-site to avoid or minimize impact to the HCA.	Requires cities and counties to allow an applicant to transfer density on-site to avoid or minimize impact to the HCA; allows cities and counties to establish the appropriate percentage of density to be transferred, provided that it is not less than 50% of the maximum allowable density.

0712056-05

DRAFT REVISION 7/07/05

ATTACHMENT NO. 1 TO
AMENDMENTS TO ORDINANCE NO. 05-1077A

REVISED EXHIBIT E

METRO CODE CHAPTER 3.07
URBAN GROWTH MANAGEMENT FUNCTIONAL PLAN

TITLE 13 MODEL ORDINANCE

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Section 1. Intent

The purpose of this ordinance is to comply with Section 4 of Title 13 of Metro's Urban Growth Management Functional Plan.

- A. To protect and improve the following functions and values that contribute to fish and wildlife habitat in urban streamside areas:
 - 1. Microclimate and shade;
 - 2. Stream-flow moderation and water storage;
 - 3. Bank stabilization, sediment and pollution control;
 - 4. Large wood recruitment and retention and channel dynamics; and
 - 5. Organic material sources.
- B. To protect and improve the following functions and values that contribute to upland wildlife habitat in new urban growth boundary expansion areas:
 - 1. Large habitat patches
 - 2. Interior habitat
 - 3. Connectivity and proximity to water; and
 - 4. Connectivity and proximity to other upland habitat areas
- C. To establish High, Moderate, and Low Habitat Conservation Areas (HCA) to implement the performance standards of Title 13 of the Urban Growth Management Functional Plan.
- D. To provide clear and objective standards and a discretionary review process, applicable to development in Habitat Conservation Areas, in accordance with Statewide Land Use Planning Goal 5.
- E. To allow and encourage habitat-friendly development, while minimizing the impact on fish and wildlife habitat functions.
- F. To provide mitigation standards for the replacement of ecological functions and values lost through development in Habitat Conservation Areas.

Section 2. Applicability

- A. This ordinance applies to all properties containing mapped Habitat Conservation Areas (HCA).
- B. All applicants must provide Construction Management Plans, in accordance with Section 5 of this ordinance.

- C. Where applicants are proposing development entirely outside of the HCA, but within 100 feet of its boundary, applicants must verify this boundary through the procedures outlined in Section 9 of this ordinance.
- D. Where applicants are proposing development within the HCA, they must comply with the Development Standards found in Section 6 and Section 7 of this ordinance, and the Map Verification procedures found in Section 9 of this ordinance. Conditioned Uses, and Activities that are exempt from these requirements, may be found in Section 3 of this ordinance.
- E. Applicants proposing to partition or subdivide properties containing HCA must comply with the partition and subdivision standards found in Section 6(F) of this ordinance, or the Discretionary standards in Section 7 of this ordinance; as well as the Map Verification procedure in Section 9 of this ordinance.
- F. The Development Standards found in Sections 6 and 7 of this ordinance do not apply to development that occurs entirely outside of any portion of the HCA.
- G. The requirements of this ordinance apply in addition to other applicable local, state, regional, and federal development requirements, including those for Water Quality Resource Areas and Flood Management Areas; except that:
 - 1. Applicants using the discretionary review process in Section 7 of this ordinance do not need to engage in any additional review process for Water Quality Resource Areas; and
 - 2. This ordinance shall not impose any mitigation requirements for wetlands beyond those required by federal and state law.
- H. "Development," "Partition," and "Subdivision" are defined in Section 11 of this ordinance.

Section 3. Exempt Uses and Conditioned Activities

The following uses and activities are exempt from the requirements of this chapter:

- A. Change of ownership.
- B. Where construction of a residence was completed before January 1, 2006, the owners or residents shall not be restricted from engaging in any development that was allowed prior to September 22, 2005; unless such development required obtaining a land use decision, or a building, erosion control, or grading permit.
- C. A building permit for a phased development project for which the applicant has previously met the application requirements, so long as the site for new construction was identified on the original permit and no new portion of the HCA will be disturbed.
- D. Where a property has been subdivided under section 6(F) of this ordinance, and the mitigation requirements of 6(E) have been completed for the subdivision, development on the individual lots may proceed without further review under this ordinance.
- E. Limited types of development, redevelopment, operations, and improvements, including the following:

DRAFT REVISION 7/07/05

1. Maintenance, alteration, expansion, repair and replacement of existing structures, provided that;
 - a. The rebuilding of existing residential and non-residential structures damaged by fire or other natural hazards occurs within the same foundation lines ("building footprint"); and
 - b. The alteration, expansion, or replacement of a structure will not intrude more than 500 sq. ft. into the HCA, and so long as the new intrusion is no closer to the protected water feature than the pre-existing structure or improvement.
2. Minor encroachments not to exceed 120 sq. ft. of impervious surface such as accessory buildings, eave overhangs, exterior building improvements for access and exiting requirements or other similar features.
3. Temporary and minor clearing not to exceed 200 square feet for the purpose of site investigations and pits for preparing soil profiles, provided that such areas are restored to their original condition when the investigation is complete.
4. Up to 10% of vegetative cover within the original mapped HCA on a lot or parcel may be removed, provided that no more than 20,000 square feet is removed; and provided that if more than 10% has been removed at the time of a development application, the review process shall use the original mapped HCA, subject to map verification, as the basis for determining the Maximum Disturbance Area in Section 6(C) of this ordinance and Mitigation standards in Sections 6(E) and 7(B), 7(C), 7(D)(1)(b) and 7(D)(2)(d) of this ordinance.
5. Maintenance of existing gardens, pastures, lawns and landscape perimeters, including the installation of new irrigation systems within existing gardens, pastures, lawns, and landscape perimeters.
6. Removal of plants identified as nuisance or prohibited plants on the *Metro Native Plant List* and the planting or propagation of plants identified as native plants on the *Metro Native Plant List*. Handheld tools must be used to remove nuisance or prohibited plants, and after such removal all open soil areas greater than 25 square feet must be replanted.
7. Farming practices and the construction of farm structures on farm use land situated outside the Metro UGB and within an exclusive farm use zone established under ORS 215.203 or within an area designated as marginal land under ORS 197.247 (1991 Edition). "Farming practice" as used in this subsection shall have the meaning set out in ORS 30.930.
8. Forest practices on forestlands situated outside the Metro UGB, except as provided in ORS 527.722(2), (3), and (4). "Forest practices" and "forestlands" as used in this subsection shall have the meaning set out in ORS 30.930.
9. Maintenance, alteration, repair, and replacement of roads and utilities when no additional incursion into the HCA is proposed.
10. Maintenance and repair of existing streets, railroads, shipping terminals, and utilities within rights-of-way, easements, and access roads.

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11. Existing water-dependent uses that can only be carried out on, in, or adjacent to water because they require access to the water for waterborne transportation or recreation.
 12. Operation, maintenance, and repair of manmade water control facilities such as irrigation and drainage ditches, constructed ponds or lakes, wastewater facilities, and stormwater pretreatment facilities.
 13. Projects with the sole purpose of restoring or enhancing wetlands, streams, or fish and wildlife habitat areas, provided that the project is part of an approved local, state, or federal restoration or enhancement plan.
 14. Low-impact outdoor recreation facilities for public use, outside of Water Quality Resource Areas, including, but not limited to, multi-use paths, access ways, trails, picnic areas, or interpretive and educational displays and overlooks that include benches and outdoor furniture, provided that the facility meets the following requirements:
 - a. It contains less than 500 sq. ft. of new impervious surface; and,
 - b. Its trails shall be constructed using non-hazardous, pervious materials, with a maximum width of four feet.
- F. Emergency procedures or activities undertaken which are necessary to remove or abate hazards and nuisances or for the protection of public health, safety and welfare; provided that such remedial or preventative action must take place within a timeframe too short to allow for compliance with the requirements of this ordinance. After the emergency, the person or agency undertaking the action shall fully restore any impacts to the HCA resulting from the emergency action. Hazards that may be removed or abated include those required to maintain aircraft safety.
- G. Multnomah County Drainage District - Within Habitat Conservation Areas located in Multnomah County Drainage District No. 1, Peninsula Drainage District No. 1, Peninsula Drainage District No. 2, and the area managed by the Sandy Drainage Improvement Company, routine operations, repair, maintenance, reconfiguration, rehabilitation, or replacement of existing drainage and flood control facilities, and existing related facilities, including any structures, pump stations, water control structures, culverts, irrigation systems, roadways, utilities, accessory uses (such as off-load facilities that facilitate water-based maintenance), erosion control projects, levees, soil and bank stabilization projects, dredging and ditch clearing within the hydraulic cross-section in existing storm water conveyance drainageways, or other water quality and flood storage projects applicable to existing facilities and required to be undertaken pursuant to ORS chapters 547 or 554 or Titles 33 or 44 of the Code of Federal Regulations, shall be allowed, provided that:
1. The project is consistent with all other applicable local, state, and federal laws and regulations;
 2. The project does not encroach closer to a surface stream or river, wetland, or other body of open water than existing operations and development;
 3. Disturbed areas are replanted with vegetation and no bare soils remain after project completion; the planting of native vegetation and removal of invasive non-native or noxious vegetation is encouraged; invasive non-native or noxious vegetation shall not be planted; and,

4. Each district submits an annual report, to all local permitting agencies in which the district operates, describing the projects the district completed in the previous year and how those projects complied with all applicable federal and state laws and requirements.
- H. **Wildlife Hazard Management Areas** - Any activity that is required to implement a Federal Aviation Administration (FAA)-compliant Wildlife Hazard Management Plan (WHMP) on property owned by the Port of Portland within 10,000 feet of an Aircraft Operating Area, as defined by the FAA, shall not have to comply with subsections 6(B-D), 7(D)(1)(a)(3) and (4), or 7(D)(2)(b), (c) and (e) of this ordinance. For disturbance within the HCA on property owned by the Port of Portland within 10,000 feet of an Aircraft Operating Area, as defined by the FAA, the applicant shall choose, at its sole discretion, between complying with subsection 6(E) of this ordinance or complying with subsection 7(C), or (D)(1)(b) and D(2)(d) of this ordinance. Mitigation required pursuant to subsection 6(E) or 7(C), or (D)(1)(b) and D(2)(d) of this ordinance as part of any development within the HCA on property owned by the Port of Portland within 10,000 feet of an Aircraft Operating Area, as defined by the FAA, shall be permitted at any property located:
1. Within the same 6th Field Hydrologic Unit Code subwatershed as delineated by the United States Department of Agriculture's Natural Resources Conservation Service (NRCS) if on-site mitigation would conflict with FAA-compliant WHMP; or
 2. Outside of the same 6th Field Hydrologic Unit Code subwatershed as delineated by the United States Department of Agriculture's Natural Resources Conservation Service (NRCS) only if the applicant follows the discretionary review process in section 7 of this ordinance.

Section 4. Prohibitions

- A. The planting of any invasive non-native or noxious vegetation is prohibited within the HCA.
- B. Outside storage of materials is prohibited within the HCA, unless such storage began before the effective date of this ordinance; or, unless such storage is approved during development review under either Section 6 or Section 7 of this ordinance.

Section 5. Construction Management Plans

In order to ensure that trees and vegetation within HCAs are not damaged during construction, all applicants, even those not developing within an HCA, shall provide a construction management plan that includes the following information:

- A. Location of site access and egress that construction equipment will use;
- B. Equipment and material staging and stockpile areas;
- C. Erosion and sediment control measures; and
- D. Measures to protect trees and other vegetation located within the HCA, but outside of the disturbance area approved under the provisions of section 6 or section 7 of this ordinance.

Section 6. Development Standards

The development standards described in this section apply to all development and redevelopment that occurs entirely, or partially, within Habitat Conservation Areas, unless such development is exempt under Section 3, or, unless the applicant chooses to follow the discretionary process in Section 7 of this ordinance. This section also applies to subdivisions and partitions of properties that contain HCAs.

Application for a land use, building, grading, land division, or other development permit through the clear and objective process may be an administrative decision. *[Insert city/county decision-type here.]*

A. Application Requirements. Applications for a building permit or development permit must provide a development plan and accompanying narrative explanation that includes the following information in addition to any other building permit or development permit requirements. All of the application requirements must be met prior to approval of a building or development permit.

1. Applicants must verify the HCA on their property as described in Section 9 of this ordinance.
2. For the entire subject property (HCA and non-HCA), applicants must submit a scale map of the property that includes:
 - a. Location of all High, Moderate, and Low HCAs on the property;
 - b. Outline of any existing disturbance area, including the location of existing adjacent streets and paved areas, utilities, culverts, stormwater management facilities, or bridges;
 - c. Location of any wetlands or water bodies on the property, including a delineation of the Water Quality Resource Area;
 - d. Location of 100 year floodplain and floodway boundary as defined by the Federal Emergency Management Agency (FEMA) and the area of the 1996 flood inundation; and
 - e. Topography shown by contour lines of 2-ft. intervals for slopes less than 15% and by 10 ft. intervals for slopes 15% or greater. On properties that are two acres or larger, such a contour map is required only for the portion of the property to be developed.
3. Detailed site plan of proposed development outlining total disturbance area, including, proposed building footprints, site property improvements, utilities and landscaping.
4. The following additional information shall be provided about the HCA:
 - a. For properties containing less than one acre of HCA, the location of all trees within the HCA that are greater than six inches diameter at breast height (DBH), shall be identified by size and species. For properties containing one acre or more of HCA, the applicant may approximate the number of trees and the diameter range, and provide a listing of the dominant species;
 - b. For proposed disturbance areas containing less than one acre of HCA, all trees with a diameter of six inches or greater that will be removed shall be specifically identified as to diameter at breast height (DBH) and species. For proposed disturbance areas containing one acre or more of HCA an approximate of the number of trees, their diameters and the dominant species; and

- c. If grading will occur within the HCA, a grading plan showing the proposed alteration of the ground at 1-ft. vertical contours in areas of slopes less than 5%, and 2-ft. vertical contours in areas of slopes 6-15%, and at 5-ft. vertical contours of slopes 15% or greater.

B. Methods for avoiding Habitat Conservation Areas. The following habitat-friendly development practices may be used to avoid or minimize development within HCAs by allowing flexible site design. *[Cities/counties shall allow the following methods to avoid, or minimize, development within HCAs]:*

1. ***Building setback flexibility*** to avoid, or minimize, development within HCAs. The minimum building setback of the base zone may be reduced to any distance between the base zone minimum and zero, unless this reduction conflicts with applicable fire or life safety requirements.
2. ***Flexible landscaping requirements*** to avoid, or minimize, development within HCAs.
 - a. Landscaping requirements, apart from those required for parking lots or street berms, may be met by preserving the HCA.
 - b. Facilities that infiltrate stormwater onsite, including the associated piping, may be placed within the HCA so long as the forest canopy and the areas within the driplines of the trees are not disturbed. Such facilities may include, but are not limited to, vegetated swales, rain gardens, vegetated filter strip, and vegetated infiltration basins. Only native vegetation may be planted in these facilities.
3. ***Flexible Site Design (On-site Density Transfer)*** to avoid or minimize development within HCAs.
 - a. ***Residential.*** For residential development proposals on lands with a HCA, a transfer of density within the property site is permitted. *[Cities/counties may establish the appropriate percentage of density that may be transferred, provided that it is not less than 50% of the maximum density that would have been permitted under the applicable zoning code requirements.]*
 - b. In order to accommodate the transferred density, dimensional standards and lot sizes may be adjusted by no more than 30 percent. *[Cities/counties may set the percentage of the adjustment, provided that it is no lower than 20%.]*
 - c. ***Commercial and Industrial Zones.*** For on-site density transfers in Commercial or Industrial zones, the transfer credit is 10,000 sq. ft floor area ratio (FAR) per acre of land within the HCA.
 - d. ***Mixed-Use Zones.*** Within mixed-use zones the density transfer credit can be factored using either 3(a) or 3(b) above, depending on the type of development proposed.
 - e. All remaining HCA shall be permanently restricted from development and maintained for habitat functions, such as by making a public dedication or executing a restrictive covenant.
4. ***Site Capacity Incentives.*** The following site capacity standards provide flexibility in the design of land divisions in order to allow ways to better protect HCAs.

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- a. Density bonus if HCA is protected. In multi-family residential zones, a 25 percent density bonus may be allowed for any development of four (4) or more dwelling units if 75 percent or more of the HCA on a site is permanently preserved, such as by making a public dedication or executing a restrictive covenant. The bonus density shall be in addition to the base density allowed in the applicable zoning district.
- b. All area within a HCA, or any portion of it, may be subtracted from the calculations of net size for purposes of determining minimum density provided that such area is protected, such as by making a public dedication or executing a restrictive covenant. This provision may only be applied to properties that were inside the Metro UGB on January 1, 2002.

5. *[Cities/Counties may allow the following tools for avoiding or minimizing development in HCAs]:*

Transfer of development rights (off-site) in residential zones. Transfer of development rights preserves development opportunities and reduces development pressure on environmentally-sensitive properties. The regulations described below allow development rights to be transferred from properties with HCAs to off-site areas that can accommodate the additional density without environmental conflict. Transfer of development rights between properties is allowed as follows. "Development rights" are the number of potential dwelling units that would be allowed on the property by the base zone.

- a. Sending properties. Properties where at least 50 percent of the property is within a HCA may transfer development rights.
- b. Receiving Properties.

Option 1: All properties in 2040 Mixed-Use areas may receive development rights from sending properties except:

- i. Where any portion of the receiving property is within an HCA; or
- ii. Where any portion of the receiving property is in the undeveloped 100-year floodplain as currently defined by the Federal Emergency Management Agency (FEMA).

Option 2: City or county may identify receiving properties upon adoption of this ordinance to be selected using the criteria in Option 1. The resulting map or criteria to identify receiving properties may include fewer properties than Option 1.

- a. Maximum density. The density of the receiving property may not exceed 200 percent of the allowable density of the receiving property.
- b. In order to accommodate the transferred density, dimensional standards and lot sizes may be adjusted by no more than 30 percent.
- c. Transfer procedure. Transfer of development rights is allowed as follows:
 - i. Covenant required. The owner of the sending property must execute a covenant with the authorizing authority that reflects the reduced development potential on the sending property. The covenant must be recorded before approval of the final plan. Density

transfers shall be recorded on the title of the sending lot in the HCA and on the title of the transfer (receiving) property.

- ii. Sending property included. The sending property must be a part of the application for development on the receiving property. A copy of the covenant for the sending property must be included with the application.
- iii. City or county may purchase development rights from sending properties to place in a development rights bank for later sale to developers to use on receiving properties.

C. Development within HCAs. The following development standards apply to all development that occurs within the HCA except for exempt uses and conditioned activities addressed in Section 3 of this ordinance and utility facilities addressed in subsection 6(D) of this ordinance. If all development occurs outside of an HCA on a property, these standards do not apply. These standards also do not apply to development that occurs pursuant to the standards established by the alternative discretionary development standards in Section 7 of this ordinance. (Note: Applicants seeking to develop within a Water Quality Resource Area must utilize either the discretionary standards located in Section 7 of this ordinance or the review standards for Metro's Title 3 Water Quality Resource Areas).

1. *Disturbance area limitations* to minimize impact to HCA.

- a. *Single-family residential.* The maximum disturbance area (MDA) allowed within HCAs is determined by subtracting the area of the lot or parcel outside of the HCAs from the total disturbance area (TDA) calculated as described in Table 1 below.
(TDA – Area outside the HCA = MDA)

- i. Moderate and Low HCAs are subject to the same disturbance area limitations.
- ii. Calculation of maximum disturbance area. If a lot or parcel includes both High and Moderate/Low HCAs then:
 - (A) If there is more High HCA than Moderate/Low HCA on the lot or parcel, then the MDA shall be calculated as if all of the Moderate/Low and High HCA were High, per Table 1 below; or
 - (B) If there is more Moderate/Low HCA than High HCA on the lot or parcel, then the MDA shall be calculated as if all of the Moderate/Low and High HCA were Moderate/Low, per Table 1 below.

- iii. Location of MDA. If a lot or parcel includes different types of HCAs, then:

- (A) The amount of development that may occur within the High HCA is equal to the total disturbance area minus the area of the lot or parcel outside of the High HCA (TDA – non-High HCA = MDA). If the area of the lot or parcel outside the High HCA is greater than the total disturbance area, then development shall not occur within the High HCA:

(Area outside High HCA > TDA = no development in High HCA);

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- (B) The amount of development that may occur within the Moderate HCA is equal to the total disturbance area minus the area of the lot or parcel outside of the High and Moderate HCA ($TDA - (Low\ HCA + non-HCA) = MDA$). If the area of the lot or parcel outside the Moderate HCA is greater than the total disturbance area, then development shall not occur within the Moderate HCA:

(Area outside Moderate HCA > TDA = no development in Moderate HCA);

and

- (C) The amount of development that may occur within the Low HCA is equal to the total disturbance area minus the area of the lot or parcel outside of the High, Moderate and Low HCA ($TDA - non-HCA = MDA$). If the area of the lot or parcel outside the Low HCA is greater than the total disturbance area, then development shall not occur within the Low HCA:

(Area outside Low HCA > TDA = no development in Low HCA).

Table 1. HCA Total Disturbance Area Limitations for SFR.

HCA type	Total Disturbance Area
High	50 percent of the lot area, up to maximum of 5,000 sq. ft.
Moderate/Low	65 percent of the lot area, up to maximum of 6,000 sq. ft.

- b. *All other zones.* The maximum disturbance area (MDA) allowed by right within Low, Moderate and High HCAs in these zones is found in Table 2 below; this MDA is subject to the mitigation requirements described in subsection 6(E) of this ordinance.

Table 2. HCA Disturbance Area Limitations for all zones other than SFR.

HCA type	Maximum Disturbance Area
High	10 percent of HCA on site
Moderate	15 percent of HCA on site
Low	50 percent of HCA on site

- c. Development within an HCA in accordance with the provisions of this ordinance shall not result in a change of the HCA status of such developed areas on a property. In the case of a later development request seeking to develop within previously undisturbed HCAs on a property where a prior development request was subject to the provisions of this ordinance, the calculation of the MDA allowed on the property shall be based on the location of the HCA, notwithstanding the location of any authorized development within the HCA.
2. **Protection of habitat during site development.** During development of any site containing a HCA, the following standards apply:
- f. Work areas shall be marked to reduce potential damage to the HCA.
 - g. Trees in HCAs shall not be used as anchors for stabilizing construction equipment.
 - h. Native soils disturbed during development shall be conserved on the property.

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- i. An erosion and sediment control plan is required and shall be prepared in compliance with requirements set forth in the [*locally adopted Title 3 erosion control regulations*];
- j. Prior to construction, the HCA that is to remain undeveloped shall be flagged, fenced, or otherwise marked and shall remain undisturbed.
- k. All work on the property shall conform to the Construction Management Plan described in Section 5 of this ordinance.

D. Utility facility standards. The following disturbance area limitations apply to new utilities, private connections to existing or new utility lines, and upgrade

- a. The disturbance area for utility facility connections to utility facilities is no greater than 10 feet wide.
- b. The disturbance area for the upgrade of existing utility facilities is no greater than 15 feet wide.
- c. The disturbance area for new underground utility facilities is no greater than 25 feet wide and disturbs no more than 200 linear feet of Water Quality Resource Area, within any 1,000 linear foot stretch of Water Quality Resource Area; provided that this disturbance area shall be restored with the exception of necessary access points to the utility facility.
- d. No fill or excavation is allowed within the ordinary high water mark of a stream, unless a permit is obtained from the US Army Corps of Engineers through the Standard Local Operating Procedures for Endangered Species (SLOPES) process.
- e. Mitigation is required as described in subsection E below.

E. Mitigation requirements for disturbance in HCAs. In order to achieve the goal of reestablishing forested canopy that meets the ecological values and functions described in section 1(A) of this ordinance, tree replacement and vegetation planting are required when development intrudes into a HCA according to the following standards, except for wetlands mitigation requirements imposed by state and federal law.

- 1. ***Required plants and plant densities.*** All trees, shrubs and ground cover must be native plants selected from the *Metro Native Plant List*. An applicant must meet Mitigation Option 1 or 2, whichever results in more tree plantings; except that where the disturbance area is one acre or more, the applicant shall comply with Mitigation Option 2:
 - a. ***Mitigation Option 1.*** In this option, the mitigation requirement is calculated based on the number and size of trees that are removed from the site. Trees that are removed from the site must be replaced as shown in Table 3. Conifers must be replaced with conifers. Bare ground must be planted or seeded with native grasses or herbs. Non-native sterile wheat grass may also be planted or seeded, in equal or lesser proportion to the native grasses or herbs.

Table 3. Tree Replacement

Size of tree to be removed (inches in diameter)	Number of trees and shrubs to be planted
6 to 12	2 trees and 3 shrubs

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13 to 18	3 trees and 6 shrubs
19 to 24	5 trees and 12 shrubs
25 to 30	7 trees and 18 shrubs
over 30	10 trees and 30 shrubs

- b. **Mitigation Option 2.** In this option, the mitigation requirement is calculated based on the size of the disturbance area within a HCA. Native trees and shrubs are required to be planted at a rate of five (5) trees and twenty-five (25) shrubs per every 500 square feet of disturbance area. Bare ground must be planted or seeded with native grasses or herbs. Non-native sterile wheat grass may also be planted or seeded, in equal or lesser proportion to the native grasses or herbs.
2. **Plant size.** Replacement trees must be at least one-half inch in caliper, measured at 6 inches above the ground level for field grown trees or above the soil line for container grown trees (the one-half inch minimum size may be an average caliper measure, recognizing that trees are not uniformly round), unless they are oak or madrone which may be one gallon size. Shrubs must be in at least a 1-gallon container or the equivalent in ball and burlap and must be at least 12 inches in height.
 3. **Plant spacing.** Trees shall be planted between 8 and 12 feet on-center and shrubs shall be planted between 4 and 5 feet on center, or clustered in single species groups of no more than four (4) plants, with each cluster planted between 8 and 10 feet on center. When planting near existing trees, the dripline of the existing tree shall be the starting point for plant spacing measurements.
 4. **Plant diversity.** Shrubs must consist of at least two (2) different species. If 10 trees or more are planted, then no more than 50% of the trees may be of the same genus.
 5. **Location of mitigation area.** All vegetation must be planted on the applicant's site within the HCA or in an area contiguous to the HCA; provided, however, that if the vegetation is planted outside of the HCA then the applicant shall preserve the contiguous area by executing a deed restriction, such as a restrictive covenant. (*Note: an off-site mitigation option is provided in a streamlined discretionary review process*).
 6. **Invasive vegetation.** Invasive non-native or noxious vegetation must be removed within the mitigation area prior to planting.
 7. **Tree and shrub survival.** A minimum of 80% of the trees and shrubs planted shall remain alive on the fifth anniversary of the date that the mitigation is completed.
 8. **Monitoring and reporting.** Monitoring of the mitigation site is the ongoing responsibility of the property owner. Plants that die must be replaced in kind. For a period of five years, the property owner must submit an annual report to (list appropriate city or county department) documenting the survival of the trees and shrubs on the mitigation site. [*Optional: the city or county may require the property owner to post a performance bond in the amount sufficient to cover costs of plant material and labor associated with site preparation, planting, and maintenance in lieu of the monitoring and reporting requirement.*]
 9. To enhance survival of the mitigation plantings, the following practices are required:

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- a. **Mulching.** Mulch new plantings a minimum of three inches in depth and 18 inches in diameter to retain moisture and discourage weed growth.
 - b. **Irrigation.** Water new plantings one inch per week between June 15th to October 15th, for the three years following planting.
 - c. **Weed control.** Remove, or control, non-native or noxious vegetation throughout maintenance period.
10. To enhance survival of tree replacement and vegetation plantings, the following practices are recommended:
- a. **Planting season.** Plant bare root trees between December 1st and February 28th, and potted plants between October 15th and April 30th.
 - b. **Wildlife protection.** Use plant sleeves or fencing to protect trees and shrubs against wildlife browsing and resulting damage to plants.

F. Standards for Partitions and Subdivisions standards. The purpose of this section is to allow for partitions in a manner that limits the total amount of allowable development within HCAs on the partitioned parcels; and to require that new subdivision plats delineate and show the Moderate and High HCAs as a separate unbuildable tract.

1. *Standards for Partitions containing HCAs:*

- a. When partitioning a property into parcels, an applicant shall verify the boundaries of the HCA on the property according to Section 9 of this ordinance.
- b. Applicants who are partitioning, but are not simultaneously developing their property, do not need to comply with Section 5 of this ordinance.
- c. When partitioning a property into parcels there shall be no more than a 30% percentage point difference in the percentage of HCA on the parcels; for example, a partition that produces two parcels, one that is 55% HCA and the other that is 35% HCA is permissible; whereas a partition that produces two parcels, one that is 75% HCA and the other that is 30% HCA is not permissible. However, an applicant may partition a property such that at least 90% of the original property's High HCA and 80% of its moderate HCA is on a separate unbuildable parcel, protected by a restrictive covenant or a public dedication.
- d. Subsequent development on any parcels containing HCAs shall comply with Section 5, and the development standards of either section 6 or section 7 of this ordinance.

2. *Standards for Subdivisions:*

- a. Applicants who are sub-dividing, but not developing, must verify the location of the HCA boundary according to Section 9 of this ordinance, and comply with this subsection 6(F); such applicants do not need to comply with Section 5 of this ordinance. Applicants who are sub-dividing, but not developing, property may:

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- i. Complete the mitigation requirements of section 6(E) and thereby exempt all subsequent development on lots containing HCA from further review under this ordinance; or
 - ii. Not complete the mitigation requirements of section 6(E), thus requiring that any subsequent development within an HCA be subject to this ordinance.
- b. Applicants who are sub-dividing and developing properties must comply with Sections 5, 6, and 9 of this ordinance.
- c. When a property containing any HCA is subdivided, this ordinance requires that new subdivision plats delineate and show the Moderate and High HCA as a separate unbuildable tract according to the following process:
 - i. The applicant must place at least 90% of the High HCA and 80% of the Moderate HCA in a separate tract.
 - (A) If over 50% of the HCA on a property is of a High designation, the entire calculation is for High (i.e., 90% of the HCA must be placed within a separate tract).
 - (B) If over 50% of the HCA on a property is of a Moderate designation, the entire calculation is for Moderate (i.e., 80% of the HCA must be placed within a separate tract).
 - ii. If the tract is adjacent to the backyard for residences, the minimum backyard requirement is reduced to 10 ft.
 - iii. The standards for land divisions in Moderate and High HCAs shall apply in addition to the requirements of the city/county land division ordinance and zoning ordinance.
 - iv. Prior to preliminary plat approval, the Moderate and/or High HCA shall be shown as a separate tract, which shall not be a part of any lot used for construction of a dwelling unit.
 - v. Prior to final plat approval, ownership of the HCA tract shall be identified to distinguish it from lots intended for sale. The tract may be identified as any one of the following:
 - (A) Private natural area held by the owner or homeowners association by a restrictive covenant; or
 - (B) For residential land divisions, private natural area subject to an easement conveying storm and surface water management rights to the city/county and preventing the owner of the tract from activities and uses inconsistent with the purpose of this ordinance; or
 - (C) At the owner's option, public natural area where the tract has been dedicated to the city/county or other governmental unit, or a private non-profit with the mission of land conservation.

Section 7. Alternative Discretionary Development Standards

Applicants may choose to use the alternative discretionary development standards provided in this section rather than the development standards provided in section 6 of this ordinance. There are four discretionary review processes provided in this section: subsection A provides discretionary review for an applicant seeking only to partition a property; subsection B provides discretionary review for an applicant who will comply with the development standards in section 6 of this ordinance, except that the applicant seeks to meet the mitigation requirements of that section on a different property from the property on which a HCA will be disturbed; subsection C provides discretionary review for an applicant who will comply with the development standards in section 6 of this ordinance, except that the applicant seeks to meet the mitigation requirements of that section by proportionally varying the number and size of plants required to be planted; and subsection D provides general discretionary review standards applicable to an applicant seeking some other type of discretionary approval of development that will disturb an HCA.

A. Discretionary Review for Partitions. An applicant seeking to partition land in ways that do not accord with the standards established in Section 6(F)(1) may seek review under this subsection 7(A).

1. The applicant shall verify the boundaries of the HCAs on the property according to Section 9 of this ordinance.
2. The applicant shall submit the following application materials:
 - a. A scale map of the entire property that includes:
 - i. Location of all High, Moderate, and Low HCA on the property;
 - ii. Location of any wetlands or water bodies on the property, including a delineation of the Water Quality Resource Area;
 - iii. Location of 100 year floodplain and floodway boundary as defined by the Federal Emergency Management Agency (FEMA) and the area of the 1996 flood inundation; and
 - iv. A delineation of the proposed partition.
 - b. A written and documented explanation of how and why the proposed partition satisfies the approval criteria in subsection 7(A)(3). Such written documentation shall include an alternatives analysis of different possible partition plans, based on the characteristics and zoning of the property.
3. **Approval Criteria.** A partition shall be approved under this subsection 7(A) provided that the applicant demonstrates that it is not practicable to comply with the partition standards in Section 6(F)(1) of this ordinance, and that the applicant's partition plan will result in the smallest practicable percentage point difference in the percentage of HCA on the parcels created by the partition (this will minimize the amount of allowable disturbance areas within HCAs on the parcels, assuming that the development standards in this Section 6 were applied to future development on such parcels).
4. Subsequent development on any parcels created by the partition and containing HCAs shall comply with all provisions of this ordinance, except that the map verification completed and

approved as part of the partition may be used to satisfy the requirements of section 9 of this ordinance for any such development.

B. Discretionary Review To Approve Off-Site Mitigation. An applicant seeking discretionary approval only for off-site mitigation within the same subwatershed (6th Field Hydrologic Unit Code), but who will comply with all other provisions of Section 6 of this ordinance, may seek review under this subsection 7(B). (An applicant who seeks to conduct the mitigation in a different subwatershed may apply for such approval under subsection 7(D) of this ordinance.)

1. The applicant shall submit:
 - a. A calculation of the number of trees and shrubs the applicant is required to plant under Section 6(E) of this ordinance; and
 - b. A map and accompanying narrative that details the following:
 - i. The number of trees and shrubs that can be planted on-site;
 - ii. The on-site location where those trees and shrubs can be planted;
 - iii. An explanation of why it is not practicable for the remainder of the mitigation to occur on-site; and
 - iv. The proposed location for off-site mitigation and documentation that the applicant can carry out and ensure the success of the mitigation, including documentation that the applicant possesses legal authority to conduct and maintain the mitigation, such as having a sufficient ownership interest in the mitigation site, and, if the mitigation is not within a HCA, documentation that the mitigation site will be protected after the monitoring period expires, such as through the use of a restrictive covenant.
2. Approval Criteria. Off-site mitigation shall be approved under this subsection 7(B) provided that the applicant has demonstrated that it is not practicable to complete the mitigation on-site and that the applicant has documented that it can carry out and ensure the success of the off-site mitigation on a property within the same subwatershed (6th Field Hydrologic Unit Code) as the related disturbed HCA.
3. Mitigation approved under this subsection 7(B) of this ordinance shall be subject to all of the requirements of subsection 6(E) of this ordinance, except for the requirements of subsection 6(E)(5) of this ordinance.

C. Discretionary Review To Approve Mitigation That Varies the Number and Size of Trees and Shrubs. An applicant seeking discretionary approval only to proportionally vary the number and size of trees and shrubs required to be planted under subsection 6(E), for example to plant fewer larger trees and shrubs or to plant more smaller trees and shrubs, but who will comply with all other provisions of Section 6 of this ordinance, may seek review under this subsection 7(C).

1. The applicant shall submit:
 - a. A calculation of the number of trees and shrubs the applicant would be required to plant under Section 6(E) of this ordinance;

- b. The numbers and sizes of trees and shrubs that the applicant proposes to plant;
 - c. An explanation of why the numbers and sizes of trees and shrubs that the applicant proposes to plant will achieve, at the end of the fifth year after initial planting, comparable or better mitigation results as the results that would be achieved if the applicant complied with all of the requirements of subsection 6(E) of this ordinance. Such explanation shall be prepared and signed by a knowledgeable and qualified natural resources professional or a certified landscape architect and shall include discussion of plant diversity, plant spacing, site preparation including removal of invasive and noxious vegetation and soil additives, planting season, and immediate post-planting care including mulching, irrigation, wildlife protection, and weed control; and
 - d. The applicant's mitigation site monitoring and reporting plan.
- 2. **Approval Criteria.** A request to vary the numbers and sizes of trees and shrubs to be planted shall be approved if the applicant demonstrates that its planting will achieve, at the end of the fifth year after initial planting, comparable or better mitigation results as the results that would be achieved if the applicant complied with all of the requirements of subsection 6(E) of this ordinance. Such determination shall take into consideration all of the information required to be submitted under subsection 7(C)(1) of this ordinance.
 - 3. Mitigation approved under this subsection 7(C) of this ordinance shall be subject to the requirements of subsections 6(E)(4) through 6(E)(9) of this ordinance, and it is recommended that such mitigation also follow the practices recommended in subsection 6(E)(10) of this ordinance.
- D. Discretionary Review.** An applicant seeking discretionary approval to undertake any development activity within a HCA that does not comply with subsection 6 of this ordinance and is not described in subsections 7(A), (B), or (C) of this ordinance may file an application under this section 7(D) of this ordinance.
- 1. **Application Requirements.** The applicant shall provide all items described in subsection 6(A) of this ordinance and the following, except that for utility projects undertaken by public utilities across property that is not owned by the utility, the utility shall not be required to map or provide any information about the property except for the area within 300 feet of the location of the proposed disturbance area of the utility's project:
 - a. **Impact Evaluation and Alternatives Analysis.** An impact evaluation and alternatives analysis is required to determine compliance with the approval criteria and to evaluate development alternatives for a particular property. The alternatives must be evaluated on the basis of their impact on the HCA, the ecological functions provided by the HCA on the property, and off-site impacts within the subwatershed (6th Field Hydrologic Unit Code) where the property is located. The impact evaluation shall include all of the following items:
 - i. Identification of the ecological functions of riparian habitat found on the property as described in Table 4 of this ordinance and the habitat connectivity ecological functions described in subsection 7(D)(1)(a)(ii)(C) and (D) of this ordinance.

Table 4. Ecological functional values of riparian corridors.

Ecological function	Landscape features providing functional values
Microclimate and shade	Forest canopy or woody vegetation within 100 feet of a stream; a wetland ¹ ; or a flood area ² .
Streamflow moderation and water storage	A wetland or other water body ³ with a hydrologic connection to a stream; or a flood area ² .
Bank stabilization, sediment and pollution control	All sites within 50 feet of a surface stream; Forest canopy, woody vegetation, or low structure vegetation/open soils within 100 feet of a stream or a wetland; or forest canopy, woody vegetation, or low structure vegetation/open soils within a flood area; and, Forest canopy, woody vegetation, or low structure vegetation/open soils within 100-200 feet of a stream if the slope is greater than 25%.
Large wood and channel dynamics	Forest canopy within 150 feet of a stream or wetland; or within a flood area; and The channel migration zone is defined by the floodplain, but where there is no mapped floodplain a default of 50 feet is established to allow for the channel migration zone.
Organic material sources	Forest canopy or woody vegetation within 100 feet of a stream or wetland; or within a flood area.

¹Refers to "hydrologically-connected wetlands," which are located partially or wholly within ¼ mile of a surface stream or flood area.

²Developed floodplains are not identified as HCAs because they do not provide primary ecological functional value.

³"Other water body" could include lakes, ponds, reservoirs, or manmade water feature that is not a water quality facility or farm pond.

- ii. For upland habitat in areas to be added to the Metro urban growth boundary areas after October 1, 2005, identification of the impact the proposed development would have on the following ecological functions provided by upland wildlife habitat:
 - (A) Habitat patch size;
 - (B) Interior habitat;
 - (C) Connectivity of the habitat to water; and
 - (D) Connectivity of the habitat to other habitat areas.
- iii. Evaluation of alternative locations, design modifications, or alternative methods of development to determine which options reduce the significant detrimental impacts on the HCAs and the ecological functions provided on the property. At a minimum, the following approaches must be considered:
 - (A) The techniques described in subsection 6(B) of this ordinance;
 - (B) Multi-story construction;

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- (C) Minimizing building and development footprint;
 - (D) Maximizing the use of native landscaping materials; and
 - (E) Minimal excavation foundation systems (e.g., pier, post or piling foundation).
- iv. Determination of the alternative that best meets the applicable approval criteria and identification of significant detrimental impacts that are unavoidable.
- b. **Mitigation Plan.** The purpose of a mitigation plan is to compensate for unavoidable significant detrimental impacts to ecological functions that result from the chosen development alternative as identified in the impact evaluation. However, when development occurs within delineated wetlands, then the mitigation required under subsection 7(D)(2)(d) shall not require any additional mitigation than the mitigation required by state and federal law for the fill or removal of such wetlands.
- i. An applicant may choose to develop a mitigation plan consistent with the requirements of subsection 6(E) of this ordinance. If an applicant so chooses, then the applicant shall submit a mitigation plan demonstrating such compliance.
 - ii. If an applicant chooses to develop an alternative mitigation plan that would not comply with the requirements of subsection 6(E) of this ordinance, including, for example, a proposal to create an alternative plant community type such as an oak savannah or a low-structure plant community, or where an applicant demonstrates that a portion of identified HCA on its property provides only impaired ecological functions, then the applicant shall submit a mitigation plan that includes all of the following:
 - (A) An explanation of how the proposed mitigation will adequately compensate for the impacts to ecological functions described in the impact evaluation required by subsection 7(C)(1)(a). The applicant may use the mitigation that would be required under subsection 6(E) of this ordinance as the baseline mitigation required to compensate for disturbance to a HCA that provides an average level of ecological functions. Such explanation shall include:
 - (1) If the applicant uses the mitigation that would be required under subsection 6(E) of this ordinance as the baseline mitigation required to compensate for disturbance to a HCA, then the applicant shall submit a calculation of the number of trees and shrubs the applicant would be required to plant under subsection 6(E) of this ordinance;
 - (2) A site plan showing where the specific mitigation activities will occur and the numbers and sizes of trees and shrubs that the applicant proposes to plant; and
 - (3) A discussion of plant diversity, plant spacing, site preparation including removal of invasive and noxious vegetation and soil additives, planting season, and immediate post-planting care including mulching, irrigation, wildlife protection, and weed control.

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- (B) Documentation of coordination with appropriate local, regional, special district, state, and federal regulatory agencies.
 - (C) A list of all responsible parties.
 - (D) The applicant's mitigation site monitoring and reporting plan.
 - (E) If the proposed mitigation will not be conducted on-site, the applicant shall submit a map and accompanying narrative that details the following:
 - (1) The number of trees and shrubs that can be planted on-site;
 - (2) The on-site location where those trees and shrubs can be planted;
 - (3) An explanation of why it is not practicable for the remainder of the mitigation to occur on-site; and
 - (4) The proposed location for off-site mitigation and documentation that the applicant can carry out and ensure the success of the mitigation, including documentation that the applicant possesses legal authority to conduct and maintain the mitigation, such as having a sufficient ownership interest in the mitigation site, and, if the mitigation is not within a HCA, documentation that the mitigation site will be protected after the monitoring period expires, such as through the use of a restrictive covenant.
 - (F) If the mitigation area is off-site and not within the same subwatershed (6th Field Hydrologic Unit Code) as the related disturbed HCA, the applicant shall submit an explanation of why it is not practicable to conduct the mitigation within the same subwatershed and of why and how, considering the purpose of the mitigation, the mitigation will provide more ecological functional value if implemented outside of the subwatershed.
 - (G) An implementation schedule, including timeline for construction, mitigation, mitigation maintenance, monitoring, reporting and a contingency plan. If the applicant is proposing any in-stream work in fish-bearing streams as part of the mitigation project, then the applicant shall submit documentation that such work will be done in accordance with the Oregon Department of Fish and Wildlife in-stream work timing schedule.
- c. The Impact Evaluation and Alternatives Analysis required by subsection 7(D)(1)(a) and the Mitigation Plan required by subsection 7(D)(1)(b) shall be prepared and signed by either (1) a knowledgeable and qualified natural resource professional, such as a wildlife biologist, botanist, or hydrologist, or (2) a civil or environmental engineer registered in Oregon to design public sanitary or storm systems, storm water facilities, or other similar facilities. The application shall include a description of the qualifications and experience of all persons that contributed to the Impact Evaluation and Alternatives Analysis and to the Mitigation Plan, and, for each person that contributed, a description of the elements of such reports to which the person contributed.

2. Approval Criteria.

- a. All application requirements in subsection 7(D)(1) shall be met.
- b. ***Avoid.*** An applicant shall first avoid the intrusion of development into the HCA to the extent practicable. The development that is proposed must have less detrimental impact to HCAs than other practicable alternatives, including significantly different practicable alternatives that propose less development within HCAs. If there is more than one type of HCA on a property then the applicant shall first avoid the intrusion of development into the higher-valued HCA, to the extent practicable, and the development that is proposed must have less detrimental impact to the higher-valued HCAs than other practicable alternatives. To avoid development in HCAs, and to the extent practicable, applicants shall use the approaches described in subsection 7(D)(1)(a)(iii).
- c. ***Minimize.*** If the applicant demonstrates that there is no practicable alternative that will not avoid disturbance of the HCA, then the development proposed by the applicant within the HCA shall minimize detrimental impacts to the extent practicable. If there is more than one type of HCA on a property then the development within higher-valued HCAs shall be considered more detrimental than development within lower-valued HCAs.
 - i. Development must minimize detrimental impacts to ecological functions and loss of habitat consistent with uses allowed by right under the base zone, to the extent practicable;
 - ii. To the extent practicable within the HCA, the proposed development shall be designed, located, and constructed to:
 - (A) Minimize grading, removal of native vegetation, and disturbance and removal of native soils by using the approaches described in subsection 6(C)(2), reducing building footprints, and using minimal excavation foundation systems (e.g., pier, post or piling foundation);
 - (B) Minimize adverse hydrological impacts on water resources such as by using the techniques described in Part (a) of Table 5, unless their use is prohibited by an applicable and required State or Federal permit issued to a unit of local government having jurisdiction in the area, such as a permit required under the federal Clean Water Act, 33 U.S.C. §§1251 et seq., or the federal Safe Drinking Water Act, 42 U.S.C. §§300f et seq., and including conditions or plans required by such permit;
 - (C) Minimize impacts on wildlife corridors and fish passage such as by using the techniques described in Part (b) of Table 5; and
 - (D) Consider using the techniques described in Part (c) of Table 5 to further minimize the impacts of development in the HCA.

Table 5. Habitat-friendly development practices.¹

Part (a): Design and Construction Practices to Minimize Hydrologic Impacts

1. Amend disturbed soils to original or higher level of porosity to regain infiltration and stormwater storage capacity.
2. Use pervious paving materials for residential driveways, parking lots, walkways, and within centers of cul-de-sacs.
3. Incorporate stormwater management in road right-of-ways.
4. Landscape with rain gardens to provide on-lot detention, filtering of rainwater, and groundwater recharge.
5. Use green roofs for runoff reduction, energy savings, improved air quality, and enhanced aesthetics.
6. Disconnect downspouts from roofs and direct the flow to vegetated infiltration/filtration areas such as rain gardens.
7. Retain rooftop runoff in a rain barrel for later on-lot use in lawn and garden watering.
8. Use multi-functional open drainage systems in lieu of more conventional curb-and-gutter systems.
9. Use bioretention cells as rain gardens in landscaped parking lot islands to reduce runoff volume and filter pollutants.
10. Apply a treatment train approach to provide multiple opportunities for storm water treatment and reduce the possibility of system failure.
11. Reduce sidewalk width and grade them such that they drain to the front yard of a residential lot or retention area.
12. Reduce impervious impacts of residential driveways by narrowing widths and moving access to the rear of the site.
13. Use shared driveways.
14. Reduce width of residential streets, depending on traffic and parking needs.
15. Reduce street length, primarily in residential areas, by encouraging clustering and using curvilinear designs.
16. Reduce cul-de-sac radii and use pervious vegetated islands in center to minimize impervious effects, and allow them to be utilized for truck maneuvering/loading to reduce need for wide loading areas on site.
17. Eliminate redundant non-ADA sidewalks within a site (i.e., sidewalk to all entryways and/or to truck loading areas may be unnecessary for industrial developments).
18. Minimize car spaces and stall dimensions, reduce parking ratios, and use shared parking facilities and structured parking.
19. Minimize the number of stream crossings and place crossing perpendicular to stream channel if possible.
20. Allow narrow street right-of-ways through stream corridors whenever possible to reduce adverse impacts of transportation corridors.

Part (b): Design and Construction Practices to Minimize Impacts on Wildlife Corridors and Fish Passage

1. Carefully integrate fencing into the landscape to guide animals toward animal crossings under, over, or around transportation corridors.
2. Use bridge crossings rather than culverts wherever possible.
3. If culverts are utilized, install slab, arch or box type culverts, preferably using bottomless designs that more closely mimic stream bottom habitat.
4. Design stream crossings for fish passage with shelves and other design features to facilitate terrestrial wildlife passage.
5. Extend vegetative cover through the wildlife crossing in the migratory route, along with sheltering areas.

¹ These development practices represent the state of scientific knowledge at the time of this ordinance's enactment, if more effective habitat-friendly practices become available, they should be used.

Part (c): Miscellaneous Other Habitat-Friendly Design and Construction Practices

1. Use native plants throughout the development (not just in HCA).
2. Locate landscaping (required by other sections of the code) adjacent to HCA.
3. Reduce light-spill off into HCAs from development.

- d. **Mitigate.** If the applicant demonstrates that there is no practicable alternative that will not avoid disturbance of the HCA, then development must mitigate for adverse impacts to the HCA. All proposed mitigation plans must meet the following standards.
- i. The mitigation plan shall demonstrate that it compensates for detrimental impacts to ecological functions provided by HCAs, after taking into consideration the applicant's efforts to minimize such detrimental impacts through the use of the techniques described in Table 5 and through any additional or innovative techniques. A mitigation plan that requires the amount of planting that would be required under subsection 6(E) of this ordinance based on the amount of proposed disturbance area within the HCA, and that otherwise complies with all of the mitigation requirements in subsection 6(E) of this ordinance, shall be considered to have satisfied the requirements of this subsection 7(D)(2)(d) of this ordinance.
 - ii. Mitigation shall occur on the site of the disturbance, to the extent practicable. Off-site mitigation shall be approved if the applicant has demonstrated that it is not practicable to complete the mitigation on-site and that the applicant has documented that it can carry out and ensure the success of the off-site mitigation, as described in subsection 7(B)(1)(b)(iv) of this ordinance. In addition, if the off-site mitigation area is not within the same subwatershed (6th Field Hydrologic Unit Code) as the related disturbed HCA, the applicant shall demonstrate that it is not practicable to complete the mitigation within the same subwatershed and that, considering the purpose of the mitigation, the mitigation will provide more ecological functional value if implemented outside of the subwatershed. Mitigation shall not be allowed outside of the Metro jurisdictional boundary.
 - iii. All re-vegetation plantings shall be with native plants listed on the *Metro Native Plant List*.
 - iv. All in-stream work in fish-bearing streams shall be done in accordance with the Oregon Department of Fish and Wildlife in-stream work-timing schedule.
 - v. A mitigation maintenance plan shall be included and shall be sufficient to ensure the success of the planting, and compliance with the plan shall be a condition of development approval.
- e. **Municipal Water Utility Facilities Standards.** Except as provided within this subsection, in addition to all other requirements of subsection 7(D)(2) of this ordinance, municipal potable water, storm water (drainage) and wastewater utility facilities may be built, expanded, repaired, maintained, reconfigured, rehabilitated, replaced or upsized if not exempted in Section 3 of this ordinance. These facilities may include but are not limited to water

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treatment plants, wastewater treatment plants, raw water intakes, pump stations, transmission mains, conduits or service lines, terminal storage reservoirs, and outfall devices provided that:

- i. Such projects shall not have to comply with the requirements of subsection 7(D)(2)(b) of this ordinance, provided that, where practicable, the project does not encroach closer to a water feature than existing operations and development, or for new projects where there are no existing operations or development, that the project does not encroach closer to a water feature than practicable;
- ii. Best management practices will be employed that accomplish the following:
 - (A) Account for watershed assessment information in project design;
 - (B) Minimize the trench area and tree removal within the HCA;
 - (C) Utilize and maintain erosion controls until other site stabilization measures are established, post-construction;
 - (D) Replant immediately after backfilling or as soon as effective;
 - (E) Preserve wetland soils and retain soil profiles;
 - (F) Minimize compactions and the duration of the work within the HCA;
 - (G) Complete in-water construction during appropriate seasons, or as approved within requisite Federal or State permits;
 - (H) Monitor water quality during the construction phases, if applicable; and
 - (I) Implement a full inspection and monitoring program during and after project completion, if applicable.

Section 8. Variances

- A. The purpose of this Section is to ensure that compliance with this ordinance does not cause unreasonable hardship. To avoid such instances, the requirements of this ordinance may be varied. Variances are also allowed when strict application of this ordinance would deprive an owner of all economically viable use of land.
- B. This Section applies in addition to the standards governing proposals to vary the requirements of the base zone.
- C. Notice of variance applications shall be provided:
 1. Upon receiving an application to vary the requirements of this ordinance, the notice shall be provided to all property owners within *[insert appropriate distance consistent with state law and other local notice provisions]* of the subject property inside the urban growth boundary, and within *[insert appropriate distance consistent with state law and other local notice provisions]* feet of the subject property outside the urban growth boundary, to Metro, to any neighborhood or

community planning organization recognized by the Oregon Watershed Enhancement Board and whose boundaries include the property.

2. Within seven (7) days of a decision on the variance, notice of the decision shall be provided to Metro, to any neighborhood or community planning organization recognized by the governing body and whose boundaries include the property, and to any watershed council recognized by the Oregon Watershed Enhancement Board and whose boundaries include the property, and to any other person required to receive notice of such a decision under state law.

D. Hardship Variance. Variances to avoid unreasonable hardship caused by the strict application of this ordinance are permitted subject to the criteria set forth in this section. To vary from the requirements of this ordinance, the applicant must demonstrate the following:

1. The variance is the minimum necessary to allow the proposed use or activity;
2. Unless the proposed variance is from mitigation under Section 6(E) or mitigation under Section 7(B), (C), or (D)(1)(b) and D(2)(d), the proposed use will comply with those standards, as applicable; and
3. The proposed use complies with the standards of the base zone.

E. Buildable Lot Variance. A variance to avoid the loss of all economically viable use of a lot that is partially inside a HCA is permitted. Applicants must demonstrate the following:

1. Without the proposed variance, the applicant would be denied economically viable use of the subject property. To meet this criterion, the applicant must show that:
 - a. The proposed use cannot meet the standards in Section 8(D) (hardship variance); and
 - b. No other application could result in permission for an economically viable use of the subject property. Evidence to meet this criterion shall include a list of uses allowed on the subject property.
2. The proposed variance is the minimum necessary to allow for the requested use;
3. The proposed variance will comply with Section 6(E) or 7(B), (C), or D(1)(b) and D(2)(d) (mitigation); and
4. The proposed use complies with the standards of the base zone.

F. Variance Conditions. Conditions may be imposed to limit any adverse impacts that may result from granting any variance.

Section 9. Map Administration and HCA Verification

A. Exempt development. Development that is outside of any HCA and no closer than 100 feet to the border of an HCA (including all impervious surfaces and landscaping), based on the HCA map, may proceed without having to comply with this section or any other portion of this ordinance except for Section 5, Construction Management Plan. *[Note: At the time a city or county adopts this model*

ordinance and its HCA map, such city or county may decrease the 100 feet "safe harbor" distance provided in this section to no fewer than 25 feet provided that it conducts additional analysis to correct any misalignment errors of the type described in section 9(E)(2) of this ordinance and adopts sufficient findings of fact to justify such corrections.]

- B. Verification of the location of HCAs as described in this section shall not be considered a comprehensive plan amendment. *[Note: Adjustment of the mapped HCA shall only proceed as provided in this ordinance.]*
- C. Map verification is available to correct for mistakes in the location of HCAs on properties. Map verification shall not be used to dispute whether identified HCAs provide the ecological functions that they are assumed to provide based on the ecological criteria used to identify them. If an applicant believes that a properly identified HCA does not provide the ecological functions that it has been identified as providing, then the applicant may use the discretionary review process to decrease its mitigation responsibilities for disturbing such an area.
- D. Except for applicants seeking approval to undertake any exempt activities or conditioned uses described in section 3 of this ordinance, the map verification requirements described in this section 9 of this ordinance shall be met at the time an applicant requests a building permit, grading permit, tree removal permit, land division approval, or some other land use decision. A property owner, or another person with the property owner's consent, may request to verify the location of HCAs on a real property lot or parcel pursuant to this section 3 of this ordinance at other times, but whether the *[city/county]* processes such request shall be at the Planning Director's sole discretion, based on staff availability, funding resources, and policy priorities. If a person receives a verification separate from a simultaneous request for a building permit, grading permit, tree removal permit, land division approval, or some other land use decision, then the person may use the verification to satisfy the requirements of this section at any time up until five years after the date the verification was issued.
- E. Notwithstanding any other provisions of this Section 9 of this ordinance, for utility projects undertaken by public utilities across property that is not owned by the utility, the utility shall not be required to map or provide any information about the property except for the area within 300 feet of the location of the proposed disturbance area of the utility's project.
- F. Basic Verification Approaches. The basic verification approaches described in subsections 9(F)(1) through (3) of this ordinance are available for applicants who believe either (1) that the HCA map is accurate, (2) that there is a simple incongruity between the HCA map and the boundary lot lines of a property, or (3) that the property was developed prior to *[insert date—either the effective date of this ordinance or two years after acknowledgement of the regional program, whichever is earlier]*.
 - 1. *Applicant Believes HCA Map is Accurate.* An applicant who believes that the HCA map is accurate may comply with this subsection 9(F)(1) of this ordinance. The applicant shall submit the following information regarding the real property lot or parcel:
 - a. A detailed property description;
 - b. A copy of the applicable HCA map;
 - c. A summer 2005 aerial photograph of the property, with lot lines shown, at a scale of at least 1 map inch equal to 50 feet for lots of 20,000 or fewer square feet, and a scale of 1 map inch

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equal to 100 feet for larger lots (available from the Metro Data Resource Center, 600 N.E. Grand Ave., Portland, OR 97232; 503-797-1742);

- d. The information required to be submitted under Section 6 or 7 of this ordinance if the applicant proposes development within any HCA under those provisions; and
 - e. Any other information that the applicant wishes to provide to support the assertion that the HCA map is accurate.
2. *Obvious Misalignment Between Mapped Habitat and Property Lot Lines.* In some cases, the mapped vegetative cover layer in the GIS database might not align precisely with the tax lot layer that shows property lines, resulting in a HCA map that is also misaligned with tax lot lines. An applicant who believes that the HCA map is inaccurate based on such an obvious misalignment may comply with this subsection 9(F)(2) of this ordinance. The applicant shall submit the following information regarding the real property lot or parcel:
- a. The information described in subsections 9(F)(1)(a) through (d) of this ordinance; and
 - b. A documented demonstration of the misalignment between the HCA map and the property's tax lot boundary lines. For example, an applicant could compare the boundary lot lines shown for roads within 500 feet of a property with the location of such roads as viewed on the aerial photograph of the area surrounding a property to provide evidence of the scale and amount of incongruity between the HCA maps and the property lot lines, and the amount of adjustment that would be appropriate to accurately depict habitat on the property.
3. *Property Developed Between Summer 2002 and [Insert date of Approval of Regional Program].* Where a property was developed between the summer of 2002 (when the aerial photo used to determine the regional habitat inventory was taken) and *[insert date that the regional program was approved]*, the applicant shall submit the following information regarding the real property lot or parcel:
- a. The information described in subsection 9(F)(1)(a) through (d) of this ordinance;
 - b. A summer 2002 aerial photograph of the property, with lot lines shown, at a scale of at least 1 map inch equal to 50 feet for lots of 20,000 or fewer square feet, and a scale of 1 map inch equal to 100 feet for larger lots (available from the Metro Data Resource Center, 600 N.E. Grand Ave., Portland, OR 97232; 503-797-1742);
 - c. Any approved building permits or other development plans and drawings related to the development of the property that took place between summer 2002 and *insert date that the regional program was approved*; and
 - d. A clear explanation and documentation, such as supporting maps or drawings or an more recent aerial photograph, indicating the new development that has occurred and where previously identified habitat no longer exists because it is now part of a developed area.
4. *Decision Process.* The Planning Director's map verification decision made pursuant to this subsection 9(F) of this ordinance may be an administrative decision. The Planning Director's decision shall be based on consideration of the information submitted by the applicant, any information collected during a site visit to the lot or parcel, any information generated by prior

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map verifications that have occurred on adjacent properties, and any other objective factual information that has been provided to the Planning Director.

G. Detailed Verification Approach. All applicants who believe that the HCA map is inaccurate for a reason other than as described in subsections 9(F)(2) and (3) may file a verification request consistent with this subsection 9(G) of this ordinance.

1. *Application requirements.* The applicant shall submit a report prepared and signed by either (1) a knowledgeable and qualified natural resource professional, such as a wildlife biologist, botanist, or hydrologist, or (2) a civil or environmental engineer registered in Oregon to design public sanitary or storm systems, storm water facilities, or other similar facilities. Such report shall include:
 - a. A description of the qualifications and experience of all persons that contributed to the report, and, for each person that contributed, a description of the elements of the analysis to which the person contributed;
 - b. The information described in subsections 9(F)(1)(a) through (e) of this ordinance;
 - c. The information described in subsections 9(F)(2)(b) and 9(F)(3)(b) through (d) of this ordinance, if the applicant believes such information is relevant to the verification of habitat location on the subject lot or parcel;
 - d. Additional aerial photographs if the applicant believes they provide better information regarding the property, including documentation of the date and process used to take the photos and an expert's interpretation of the additional information they provide;
 - e. A map showing the topography of the property shown by contour lines of 2 foot intervals for slopes less than 15% and by 10 foot intervals for slopes 15% or greater; and
 - f. Any additional information necessary to address each of the verification criteria in subsection 9(G)(4) of this ordinance, a description of where any HCAs are located on the property based on the application of the verification criteria in subsection 9(G)(4) of this ordinance, and factual documentation to support the analysis.
2. *Notice requirements.* Upon receipt of a completed application pursuant to this subsection 9(G) of this ordinance, the Planning Director shall provide notice of the map verification application to Metro, to the owners of record of property on the most recent property tax assessment roll where such property is located within 100 feet of the subject property, [*Note: A city or county may increase the 100 feet neighbor notification requirement if it so chooses*] to any neighborhood or community planning organization recognized by the governing body and whose boundaries include the property, and to any watershed council recognized by the Oregon Watershed Enhancement Board and whose boundaries include the property. The notice provided by the jurisdiction shall comply with the notice requirements of ORS 197.763. The Planning Director shall accept written public comments regarding the matter during a public comment period.
3. *Decision process.* The Planning Director shall apply the verification criteria in subsection 9(G)(4) of this ordinance to confirm the location of any HCAs based on the HCA map, the information submitted by the applicant, any information received during the public comment period, and any additional information readily available, including information collected during a

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site visit to the lot or parcel. The applicant and all persons that submitted written comments shall be provided with a written explanation of the Planning Director's decision.

4. *Verification Criteria.* The verification of the location of HCAs shall be according to the four-step process described in this subsection 9(G)(4) of this ordinance. A verification application shall not be considered complete and shall not be granted unless all the information required to be submitted with the verification application has been received.
 - a. *Step 1. Verifying boundaries of inventoried riparian habitat.* Locating habitat and determining its riparian habitat class is a four-step process:
 - i. Locate the Water Feature that is the basis for identifying riparian habitat.
 - (A) Locate the top of bank of all streams, rivers, and open water within 200 feet of the property.
 - (B) Locate all flood areas within 100 feet of the property..
 - (C) Locate all wetlands within 150 feet of the property based on the Local Wetland Inventory map (if completed) and on the Metro 2002 Wetland Inventory Map (available from the Metro Data Resource Center, 600 N.E. Grand Ave., Portland, OR 97232; 503-797-1742). Identified wetlands shall be further delineated consistent with methods currently accepted by the Oregon Division of State Lands and the U.S. Army Corps of Engineers.
 - ii. 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.
 - (A) Vegetative cover status shall be as identified on the Metro Vegetative Cover Map (available from the Metro Data Resource Center, 600 N.E. Grand Ave., Portland, OR 97232; 503-797-1742).
 - (B) 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 (see subsection 9(F)(3) of this ordinance, above), 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 definitions of the different vegetative cover types provided in Section 11 of this ordinance.
 - iii. 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 methodology as described in *[insert a reference to the city or county code section that describes the methodology used to identify Water Quality Resource Areas pursuant to Title 3 of the Urban Growth Management Functional Plan]*); and
 - iv. Identify the riparian habitat classes applicable to all areas on the property using Table 6 and the data identified in subsections 9(G)(4)(a)(i) through (iii).

- b. *Step 2. Verifying boundaries of inventoried upland habitat in future urban growth boundary expansion areas.* 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 HCA map unless corrected as provided in this subsection.
- i. Except as provided in subsection 9(G)(4)(b)(ii), vegetative cover status shall be as identified on the Metro Vegetative Cover Map used to inventory habitat at the time the area was brought within the urban growth boundary (available from the Metro Data Resource Center, 600 N.E. Grand Ave., Portland, OR 97232; 503-797-1742).
 - ii. The only allowed corrections to the vegetative cover status of a property are as follows:
 - (A) 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 at the time the area was brought within the urban growth boundary. For example, an area may have been identified as "forest canopy" when it can be shown that such area has less than 60% canopy crown closure, and therefore should not have been identified as "forest canopy." 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 at the time the area was brought within the urban growth boundary and the definitions of the different vegetative cover types provided in Section 11 of this ordinance; and
 - (B) 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.
 - iii. If the vegetative cover status of any area identified as upland habitat is corrected pursuant to subsection 9(G)(4)(b)(ii)((A)) 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.

Table 6: Method for Locating Boundaries of Class I and II Riparian Areas.

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

¹The 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.

²Areas 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.

- c. **Step 3. Urban Development Value of the Property.** The urban development value of property designated as regionally significant habitat is depicted on the Metro Habitat Urban Development Value Map (available from the Metro Data Resource Center, 600 N.E. Grand Ave., Portland, OR 97232; 503-797-1742).
- A property's urban development value designation shall be adjusted upward if the Metro 2040 Design Type designation for the property lot or parcel has changed from a category designated as a lower urban development value category to one designated as a higher urban development value category. 2040 Design Type designations are identified on the Metro 2040 Applied Concept Map (also available from the Metro Data Resource Center, 600 N.E. Grand Ave., Portland, OR 97232; 503-797-1742).
 - Properties in areas designated on the 2040 Applied Concept Map as the Central City, Regional Centers, Town Centers, and Regionally Significant Industrial Areas are considered to be of high urban development value; properties in areas designated as Main Streets, Station Communities, Other Industrial Areas, and Employment Centers are of medium urban development value; and properties in areas designated as Inner and Outer Neighborhoods and Corridors are of low urban development value.

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- iii. As designated in Title 13 of Metro's Urban Growth Management Functional Plan, properties owned by a regionally significant educational or medical facility are designated as high urban development value.
- d. *Step 4. Cross-Reference Habitat Class With Urban Development Value.* City and county verification of the locations of High, Moderate, and Low Habitat Conservation Areas shall be consistent with Tables 7 and 8.

Table 7: Method for Identifying Habitat Conservation Areas ("HCA")

Fish & wildlife habitat classification	High Urban development value ¹	Medium Urban development value ²	Low Urban development value ³	Other areas: Parks and Open Spaces, no design types outside UGB
Class I Riparian	Moderate HCA	High HCA	High HCA	High HCA / High HCA+ ⁴
Class II Riparian	Low HCA	Low HCA	Moderate HCA	Moderate HCA / High HCA+ ⁴
Class A Upland Wildlife	No HCA	No HCA	No HCA	No HCA / High HCA ⁵ / High HCA+ ⁴
Class B Upland Wildlife	No HCA	No HCA	No HCA	No HCA / High HCA ⁵ / High HCA+ ⁴

NOTE: The default urban development value of property is as depicted on the Metro Habitat Urban Development Value Map. The Metro 2040 Design Type designations provided in the following footnotes are only for use when a city or county is determining whether to make an HCA adjustment.

¹Primary 2040 design type: Regional Centers, Central City, Town Centers, and Regionally Significant Industrial Areas

²Secondary 2040 design type: Main Streets, Station Communities, Other Industrial areas, and Employment Centers

³Tertiary 2040 design type: Inner and outer neighborhoods, Corridors

⁴Cities and counties shall give Class I and II riparian habitat and Class A and B upland wildlife habitat in parks designated as natural areas even greater protection than that afforded to High Habitat Conservation Areas.

⁵All Class A and B upland wildlife habitat in publicly-owned parks and open spaces, except for parks and open spaces where the acquiring agency clearly identified that it was acquiring the property to develop it for active recreational uses, shall be considered High HCAs.

Table 8: Method for Identifying Habitat Conservation Areas ("HCA") in Future Urban Growth Boundary Expansion Areas

Fish & wildlife habitat classification	High Urban development value¹	Medium Urban development value²	Low Urban development value³	Other areas: Parks and Open Spaces, no design types outside UGB
Class I Riparian	Moderate HCA	High HCA	High HCA	High HCA / High HCA+ ⁴
Class II Riparian	Low HCA	Low HCA	Moderate HCA	Moderate HCA / High HCA+ ⁴
Class A Upland Wildlife	Low HCA	Moderate HCA	Moderate HCA	High HCA / High HCA ⁵ / High HCA+ ⁴
Class B Upland Wildlife	Low HCA	Low HCA	Moderate HCA	Moderate HCA / High HCA ⁵ / High HCA+ ⁴

NOTE: The default urban development value of property is as depicted on the Metro Habitat Urban Development Value Map. The Metro 2040 Design Type designations provided in the following footnotes are only for use when a city or county is determining whether to make an HCA adjustment.

¹Primary 2040 design types: Regional Centers, Central City, Town Centers, and Regionally Significant Industrial Areas

²Secondary 2040 design types: Main Streets, Station Communities, Other Industrial areas, and Employment Centers

³Tertiary 2040 design types: Inner and outer neighborhoods, Corridors

⁴Cities and counties shall give Class I and II riparian habitat and Class A and B upland wildlife habitat in parks designated as natural areas even greater protection than that afforded to High Habitat Conservation Areas.

⁵All Class A and B upland wildlife habitat in publicly-owned parks and open spaces, except for parks and open spaces where the acquiring agency clearly identified that it was acquiring the property to develop it for active recreational uses, shall be considered High HCAs.

Section 10. Severability

The provisions of this ordinance are severable. If any section, clause, or phrase of this ordinance is adjudged to be invalid by a court of competent jurisdiction, the decision of that court shall not affect the validity of the remaining portions of this ordinance.

Section 11. Definitions

Unless specifically defined below, words or phrases used in this section shall be interpreted to give them the same meaning as they have in common usage and to give this classification its most reasonable application.

Building site - The area on a lot or parcel that is designated to contain a structure, impervious surface, or non-native landscaping.

Building footprint - The area that is covered by buildings or other roofed structures. A roofed structure includes any structure more than 6 feet above grade at any point, and that provides an impervious cover over what is below. Building footprint also includes uncovered horizontal structures such as decks, stairways and entry bridges that are more than 6 feet above grade. Eaves are not included in building coverage. Underground facilities and structures are defined based on the foundation line.

Developed areas not providing vegetative cover - are areas that lack sufficient vegetative cover to meet the one-acre minimum mapping units of any other type of vegetative cover.

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Developed floodplain - Any man-made change to improved or unimproved lands within a FEMA defined floodplain, including but not limited to buildings or other structures, dredging, filling, grading, paving, excavation, or storage of equipment and materials.

Development - Any man-made change defined as buildings or other structures, mining, dredging, paving, filling, or grading in amounts greater than ten (10) cubic yards on any lot or excavation. In addition, any other activity that results in the removal of more than: either 10 percent or 20,000 square feet of the vegetation in the Habitat Conservation Areas on the lot is defined as development. When individual trees are removed, the area contained within the tree's drip line shall be the basis for calculating the square footage of vegetation removed.

Development does not include the following: a) Stream enhancement or restoration projects approved by cities and counties; b) Farming practices as defined in ORS 30.930 and farm use as defined in ORS 215.203, except that buildings associated with farm practices and farm uses are subject to the requirements of Titles 3 and 13.

Disturb - Man-made changes to the existing physical status of the land, which are made in connection with development. The following uses are excluded from the definition:

- enhancement or restoration of the Water Quality Resource Area;
- planting native cover identified in the Metro Native Plant List.

Disturbance Area - An area that contains all temporary and permanent development, exterior improvements, and staging and storage areas on the site. For new development the disturbance area must be contiguous. The disturbance area does not include agricultural and pasture lands or naturalized areas.

Dripline - The outermost edge of a tree's canopy; when delineating the drip line on the ground, it will appear as an irregularly shaped circle defining the canopy's perimeter.

Ecological functions - The primary biological and hydrologic characteristics of healthy fish and wildlife habitat. Riparian ecological functions include microclimate and shade, streamflow moderation and water storage, bank stabilization and sediment/pollution control, sources of large woody debris and natural channel dynamics, and organic material sources. Upland wildlife ecological functions include size of habitat area, amount of habitat with interior conditions, connectivity of habitat to water resources, connectivity to other habitat areas, and presence of unique habitat types.

Effective Impervious Area - A subset of total impervious area that is hydrologically connected via sheet flow or discrete conveyance to a drainage system or receiving body of water

Emergency - Any man-made or natural event or circumstance causing or threatening loss of life, injury to person or property, and includes, but is not limited to, fire, explosion, flood, severe weather, drought earthquake, volcanic activity, spills or releases of oil or hazardous material, contamination, utility or transportation disruptions, and disease.

Engineer - A registered professional engineer licensed by the State of Oregon.

Enhancement - The process of improving upon the natural functions and/or values of an area or feature that has been degraded by human activity. Enhancement activities may or may not return the site to a pre-disturbance condition, but create/recreate beneficial processes and features that occur naturally.

Erosion - Erosion is the movement of soil particles resulting from actions of water or wind.

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Fill - Any material such as, but not limited to, sand, gravel, soil, rock or gravel that is placed in a Title 3 wetland or floodplain for the purposes of development or redevelopment.

Floodplain - The land area identified and designated by the United States Army Corps of Engineers, the Oregon Division of State Lands, FEMA, or (identify name) county/city that has been or may be covered temporarily by water as a result of a storm event of identified frequency. It is usually the flat area of land adjacent to a stream or river formed by floods.

Floodway - The portion of a watercourse required for the passage or conveyance of a given storm event as identified and designated by the (identify name) city/county pursuant to this Ordinance. The floodway shall include the channel of the watercourse and the adjacent floodplain that must be reserved in an unobstructed condition in order to discharge the base flood without flood levels by more than one foot.

Flood Management Areas - All lands contained within the 100-year floodplain, flood area and floodway as shown on the Federal Emergency Management Agency Flood Insurance Maps and the area of inundation for the February 1996 flood. In addition, all lands which have documented evidence of flooding.

Flood areas - Those areas contained within the 100-year floodplain, flood area and floodway as shown on the Federal Emergency Management Agency Flood Insurance Maps and all lands that were inundated in the February 1996 flood (note that areas that were mapped as flood areas but were filled to a level above the base flood level prior to September 30, 2005, consistent with all applicable local, state, and federal laws shall no longer be considered habitat based on their status as flood areas).

Floor Area Ratio (FAR) - The amount of floor area in relation to the amount of site area, expressed in square feet. For example, a floor area ratio of 2 to 1 means two square feet of floor area for every one square foot of site area.

Forest canopy - 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.

Habitat Conservation Area or HCA - An area identified on the Habitat Conservation Areas Map and subject to the development standards.

Habitat-friendly development - A method of developing property that has less detrimental impact on fish and wildlife habitat than does traditional development methods. Examples include clustering development to avoid habitat, using alternative materials and designs such as pier, post, or piling foundations designed to minimize tree root disturbance, managing storm water on-site to help filter rainwater and recharge groundwater sources, collecting rooftop water in rain barrels for reuse in site landscaping and gardening, and reducing the amount of effective impervious surface created by development.

Invasive non-native or noxious vegetation - Plant species that are listed as nuisance plants or prohibited plants on the Metro Native Plant List as adopted by Metro Council resolution because they are plant species that have been introduced and, due to aggressive growth patterns and lack of natural enemies in the area where introduced, spread rapidly into native plant communities.

Lot - Lot means a single unit of land that is created by a subdivision of land. (ORS 92.010).

Low structure vegetation or open soils - 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).

Mitigation - The reduction of adverse effects of a proposed project by considering, in the order: a) avoiding the impact all together by not taking a certain action or parts of an action; b) minimizing impacts by limiting the degree or magnitude of the action and its implementation; c) rectifying the impact by repairing, rehabilitating or restoring the affected environment; d) reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action by monitoring and taking appropriate measures; and e) compensating for the impact by replacing or providing comparable substitute water quality resource areas or habitat conservation areas.

Native vegetation or native plant - Vegetation listed as a native plant on the Metro Native Plant List as adopted by Metro Council resolution and any other vegetation native to the Portland metropolitan area provided that it is not listed as a nuisance plant or a prohibited plant on the Metro Native Plant List.

Open space - Land that is undeveloped and that is planned to remain so indefinitely. The term encompasses parks, forests and farmland. It may also refer only to land zoned as being available to the public, including playgrounds, watershed preserves and parks.

Owner or property owner - The person who is the legal record owner of the land, or where there is a recorded land sale contract, the purchaser thereunder.

Parcel - Parcel means a single unit of land that is created by a partitioning of land. (ORS 92.010).

Partition - Partition means to divide land into two or three parcels of land within a calendar year. (ORS 92.010)

Phased development project - A phased development plan includes the following:

- A site plan showing the proposed final development of the site and phases, including the initial and interim phases.
- A written statement describing each phase, including the potential uses, and the approximate timeline for each phase of development.

Practicable - means available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purpose and probable impact on ecological functions. The practicability of a development option shall include consideration of the type of HCA that will be affected by the proposed development. For example, High HCAs have been so designated because they are areas that have been identified as having lower urban development value and higher-valued habitat, so it should be more difficult to show that alternative development options that avoid the habitat are not practicable. On the other hand, Low HCAs have been so designated because they are areas that have been identified as having higher urban development value and lower-valued habitat, so it should be less difficult to show that alternative development options that avoid the habitat are not practicable.

Redevelopment – Development that occurs on sites that have previously been developed.

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Restoration - The process of returning a disturbed or altered area or feature to a previously existing natural condition. Restoration activities reestablish the structure, function, and/or diversity to that which occurred prior to impacts caused by human activity.

Riparian - Those areas associated with streams, lakes and wetlands where vegetation communities are predominately influenced by their association with water.

Routine repair and maintenance - Activities directed at preserving an existing allowed use or facility, without expanding the development footprint or site use.

Set-back adjustment - The placement of a building a specified distance away from a road, property line or protected resource.

Significant negative impact - An impact that affects the natural environment, considered individually or cumulatively with other impacts on the HCA, to the point where existing fish and wildlife habitat functional values are degraded.

Statewide Land Use Planning Goal 5 - Oregon's statewide planning goal that addresses open space, scenic and historic areas, and natural resources. The purpose of the goal is to conserve open space and protect natural and scenic resources.

Steep slopes - Steep slopes are those slopes that are equal to or greater than 25%. Steep slopes have been removed from the "buildable lands" inventory and have not been used in calculations to determine the number of acres within the urban growth boundary that are available for development.

Stormwater pre-treatment facility - Any structure or drainage way that is designed, constructed, and maintained to collect and filter, retain, or detain surface water run-off during and after a storm event for the purpose of water quality improvement.

Stream - A body of running water moving over the earth's surface in a channel or bed, such as a creek, rivulet or river. It flows at least part of the year, including perennial and intermittent streams. Streams are dynamic in nature and their structure is maintained through build-up and loss of sediment.

Structure - A building or other major improvement that is built, constructed or installed, not including minor improvements, such as fences, utility poles, flagpoles or irrigation system components, that are not customarily regulated through zoning codes.

Subdivision - A Subdivision of land means to divide land into four or more lots within a calendar year. (ORS 92.010).

Top of Bank - The same as "bankful stage" defined in OAR 141-85-010.

Urban Development Value - The economic value of a property lot or parcel as determined by analyzing three separate variables: assessed land value, value as a property that could generate jobs ("employment value"), and the Metro 2040 design type designation of property. The urban development value of all properties containing regionally significant fish and wildlife habitat is depicted on the Metro Habitat Urban Development Value Map

Urban Growth Boundary or UGB - means an urban growth boundary adopted pursuant to ORS chapter 197.

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Utility facilities - Buildings, structures or any constructed portion of a system which provides for the production, transmission, conveyance, delivery or furnishing of services including, but not limited to, heat, light, water, power, natural gas, sanitary sewer, stormwater, telephone and cable television. Utility facilities do not include stormwater pre-treatment facilities.

Variance - means a discretionary decision to permit modification of the terms of an implementing ordinance based on a demonstration of unusual hardship or exceptional circumstances unique to a specific property.

Water-dependent - A use which can be carried out only on, in, or adjacent to water because it requires access to the water for waterborne transportation or recreation. Water-dependent also includes development, which by its nature, can be built only on, in, or over water. Bridges supported by piers or pillars, as opposed to fill, are water-dependent development.

Water feature - All rivers, streams (regardless of whether they carry year-round flow, i.e., including intermittent streams), springs which feed streams and wetlands and have year-round flow, Flood Management Areas, wetlands, and all other bodies of open water.

Water Quality Resource Area - is an area identified by a city or county as a Water Quality Resource Area in order to comply with Title 3 of Metro's Urban Growth Management Functional Plan, Metro's code provision's 3.07.310- 3.07.370.

Watershed - A watershed is a geographic unit defined by the flows of rainwater or snowmelt. All land in a watershed drains to a common outlet, such as a stream, lake or wetland.

Wetlands - Wetlands are those areas inundated or saturated by surface or ground water at a frequency and duration sufficient to support and 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 are those areas identified and delineated by a qualified wetland specialist as set forth in the 1987 Corps of Engineers Wetland Delineation Manual.

Woody vegetation - 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.

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Habitat Friendly Design Solutions

Title 13 Model Code: Examples of Development Standards
Under Clear and Objective Approach

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Examples of Single Family Development on Single Lots

Legend



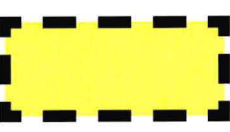
High Conservation Area



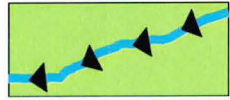
Moderate Conservation Area



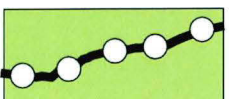
Low Conservation Area



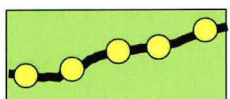
Disturbance area



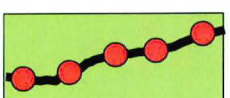
Stream direction of flow



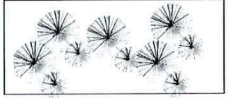
Low HCA Boundary



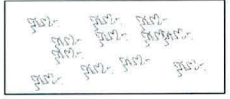
Moderate HCA Boundary



High HCA Boundary



Forest canopy

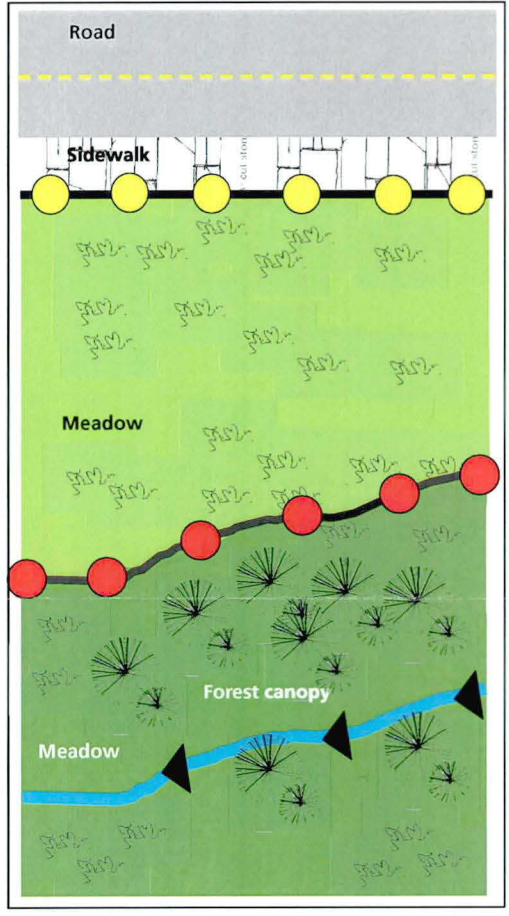


Meadow



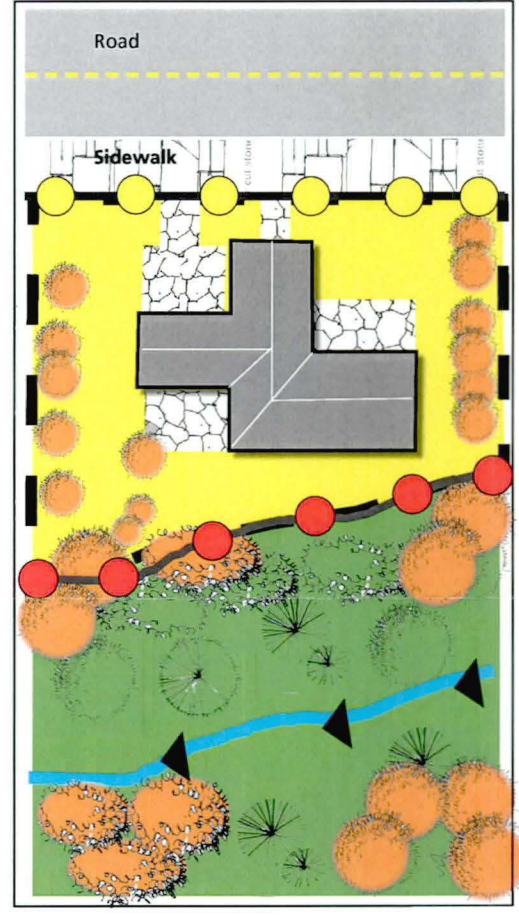
Mitigation plantings

Before



80 ft x 125 ft
10,000 Sq. Ft Lot

After



80 ft x 125 ft
10,000 Sq. Ft Lot

Example 1.

- 10,000 square foot lot located completely within a Habitat Conservation Area (HCA)
- 60% (6,000 square feet) of the lot within a High HCA
- 40 % (4,000 square feet) of the lot within a Moderate HCA
- Maximum Disturbance Area allowed is 5,000 square feet
- Locate disturbance area in the Moderate HCA first
- Mitigation for development requires 50 trees and 250 shrubs per 5,000 square foot disturbance area
- Mitigation on-site first in existing meadow areas, and under existing forest canopy then off-site under streamlined discretionary review

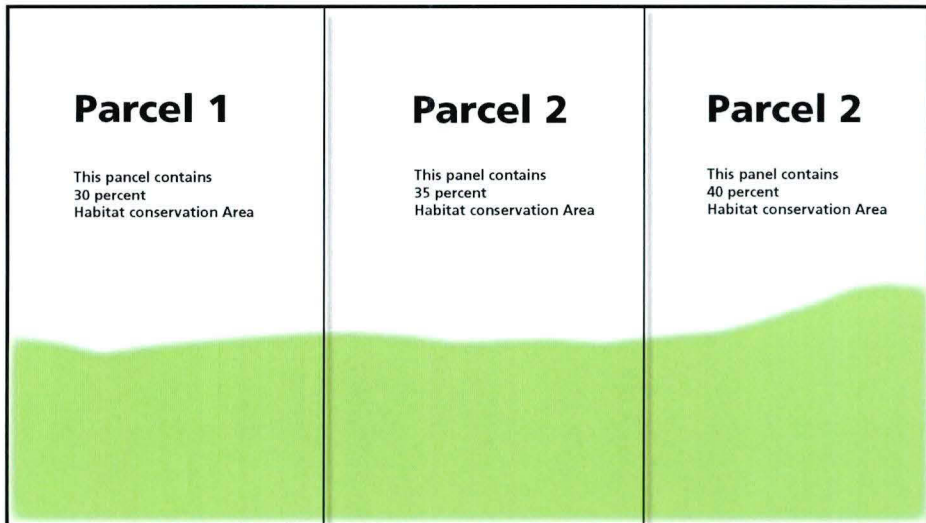


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Under Clear and Objective Approach

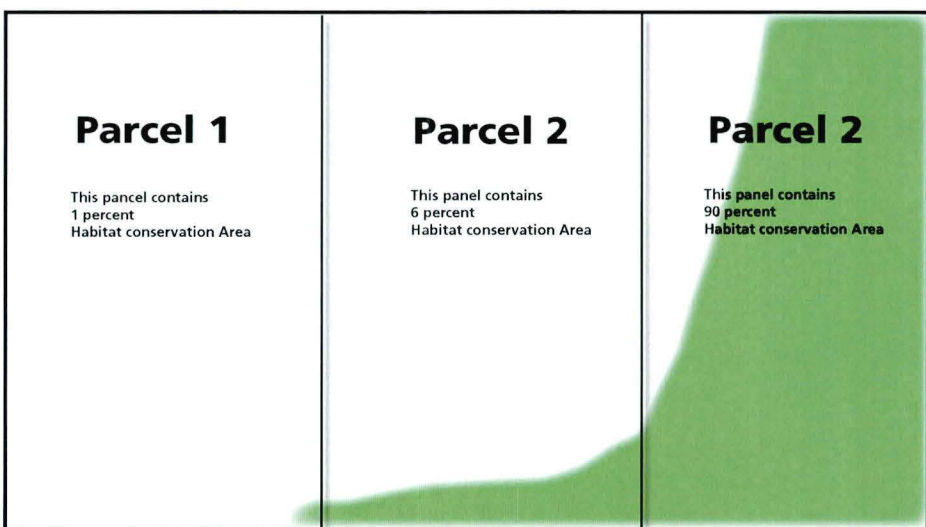
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Partitions of Properties



Example 1

- This partition meets the clear and objective approach because the Habitat Conservation Area is distributed somewhat equally among the three parcels
- The maximum difference in the percentage of HCA on the three parcels is 10% (HCA ranges from 30% to 40%), a range allowed under the Model Code



Example 2

- This partition does not meet the clear and objective approach because the Habitat Conservation Area is distributed very disproportionately among the three parcels
- The maximum difference is 89% between the three parcels (1% HCA on parcel one and 90% of HCA on parcel three)
- To achieve this partition, the applicant must go through discretionary review to demonstrate that this is the only practicable way to partition
- Alternatively, the applicant could designate the HCA located on parcel 3 as unbuildable and develop the other two lots

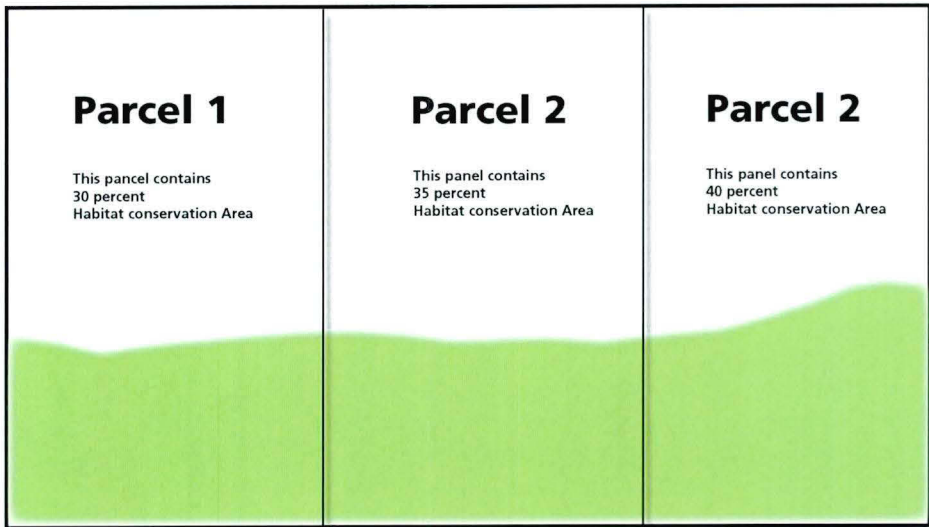


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Title 13 Model Code: Examples of Development Standards
Under Clear and Objective Approach

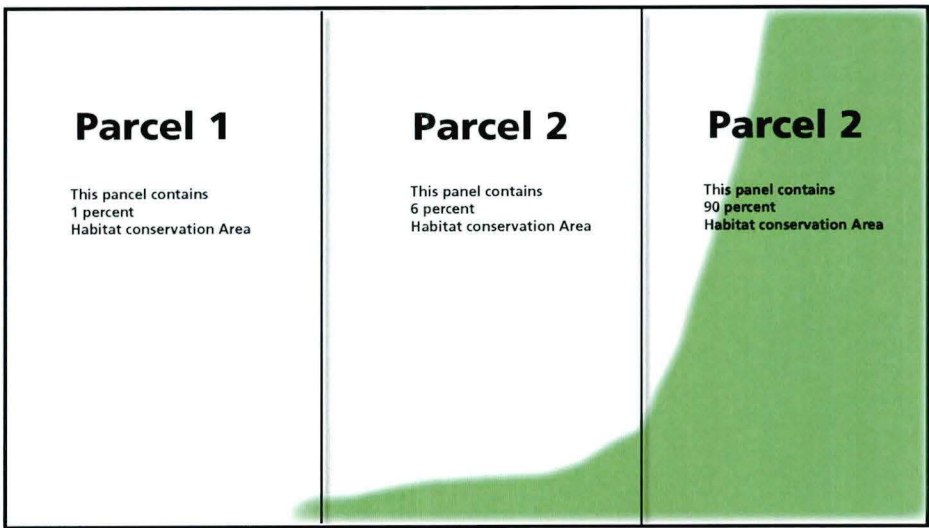
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Partitions of Properties



Example 1

- This partition meets the clear and objective approach because the Habitat Conservation Area is distributed somewhat equally among the three parcels
- The maximum difference in the percentage of HCA on the three parcels is 10% (HCA ranges from 30% to 40%), a range allowed under the Model Code



Example 2

- This partition does not meet the clear and objective approach because the Habitat Conservation Area is distributed very disproportionately among the three parcels
- The maximum difference is 89% between the three parcels (1% HCA on parcel one and 90% of HCA on parcel three)
- To achieve this partition, the applicant must go through discretionary review to demonstrate that this is the only practicable way to partition
- Alternatively, the applicant could designate the HCA located on parcel 3 as unbuildable and develop the other two lots



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Title 13 Model Code: Examples of Development Standards
Under Clear and Objective Approach

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Mixed Use, Commercial, Industrial Zones on Single Lots

Legend



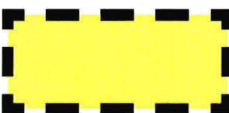
High Conservation Area



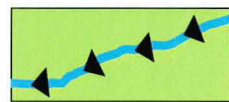
Moderate Conservation Area



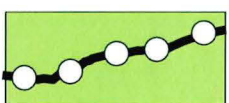
Low Conservation Area



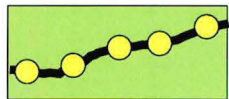
Disturbance area



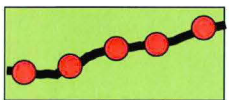
Stream direction of flow



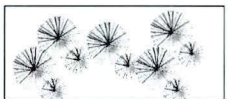
Low HCA Boundary



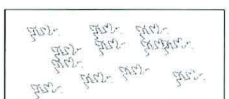
Moderate HCA Boundary



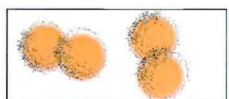
High HCA Boundary



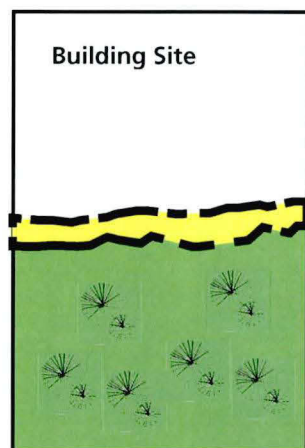
Forest canopy



Meadow

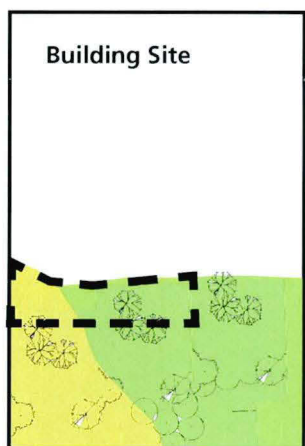


Mitigation plantings



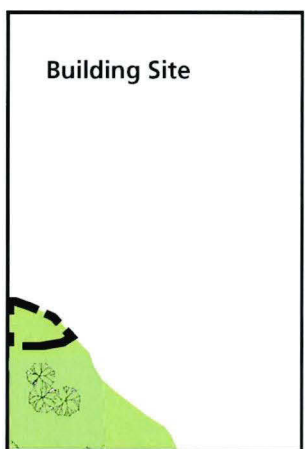
Example 1

- 1 acre lot located partially within a HCA
- Half of the lot (20,000 square feet) is located within a High HCA
- 10% disturbance (2,000 square feet) of the High HCA is allowed by right
- Mitigation for development requires 20 trees and 100 shrubs per 2,000 square foot disturbance area
- Mitigation on-site, then off-site under streamlined discretionary review



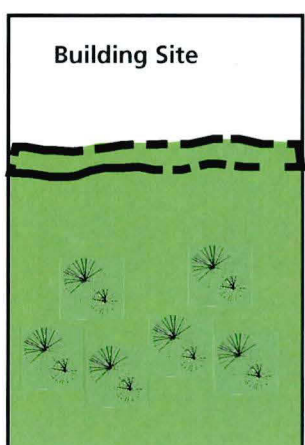
Example 2

- 1 acre lot located partially within a HCA
- 28% (12,000 square feet) of lot is within Moderate HCA; 23% (10,000 square feet) of the lot is within Low HCA
- 6,800 square feet of disturbance area is allowed by right (15% of Moderate HCA and 50% of Low HCA)
- Mitigation for development requires 68 trees and 340 shrubs per 6,800 square foot disturbance area
- Mitigation on-site, then off-site under streamlined discretionary review



Example 3

- 1 acre lot located partially within a HCA
- 20% (8,700 square feet) of lot is within Moderate HCA
- 1,300 square feet of disturbance area is allowed by right (15% of Moderate HCA)
- Mitigation for development requires 13 trees and 65 shrubs per 1,300 square foot disturbance area
- Mitigation on-site, then off-site under streamlined discretionary review



Example 4

- 1 acre lot located partially within a HCA
- 70% (30,500 square feet) of lot is within High HCA
- 3,050 square feet of disturbance area is allowed by right (10% of High HCA)
- Mitigation for development requires 31 trees and 153 shrubs per 3,050 square foot disturbance area
- Mitigation on-site, then off-site under streamlined discretionary review
- Possible for multi-family development; not practical for commercial or industrial



Habitat Friendly Design Solutions

Title 13 Model Code: Examples of Development Standards
Under Clear and Objective Approach

DRAFT

Application of Title 13 Model Ordinance to any property with a mapped Habitat Conservation Area

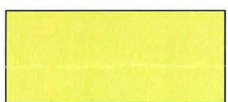
Legend



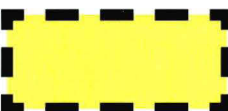
High Conservation Area



Moderate Conservation Area



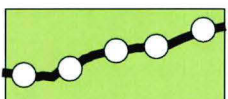
Low Conservation Area



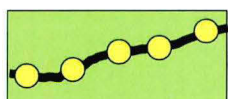
Disturbance area



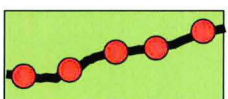
Stream direction of flow



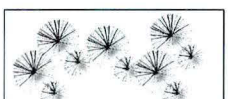
Low HCA Boundary



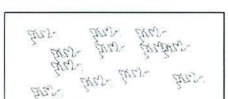
Moderate HCA Boundary



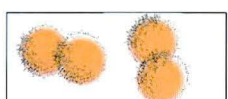
High HCA Boundary



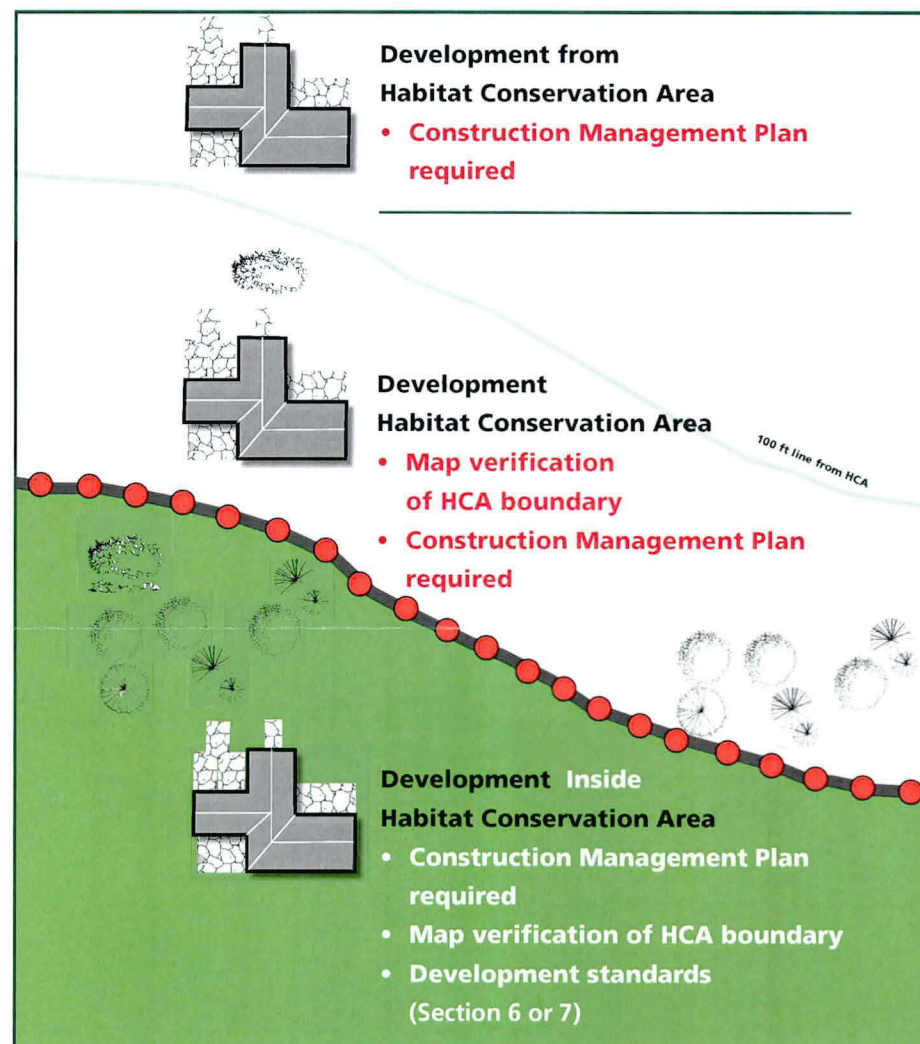
Forest canopy



Meadow



Mitigation plantings



Example Map

- Construction Management Plan required for any development occurring on a property containing a mapped HCA
- Map verification of the boundary of the HCA is required for any development proposed within 100 feet of a mapped HCA
- Development standards (clear and objective approach or discretionary approach) apply to any development proposed within a mapped HCA



Habitat Friendly Design Solutions

Title 13 Model Code: Examples of Development Standards
Under Clear and Objective Approach

 **DRAFT**

Examples of Single Family Development on Single Lots

Legend



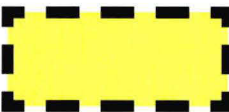
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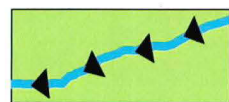
Moderate Conservation Area



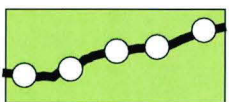
Low Conservation Area



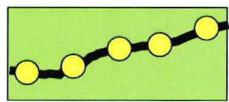
Disturbance area



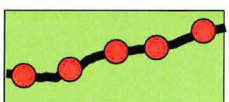
Stream direction of flow



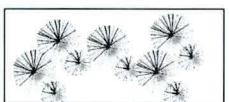
Low HCA Boundary



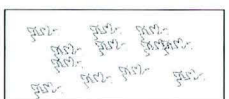
Moderate HCA Boundary



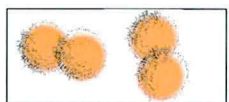
High HCA Boundary



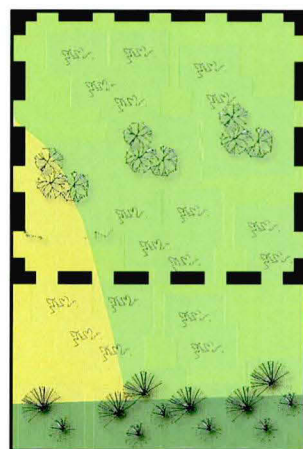
Forest canopy



Meadow



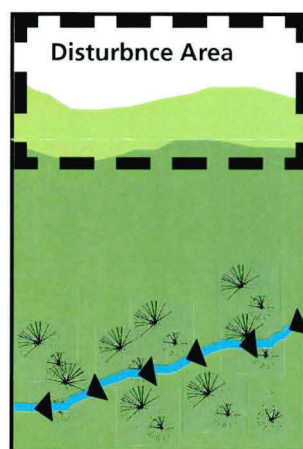
Mitigation plantings



80 ft x 125 ft Lot

Example 2.

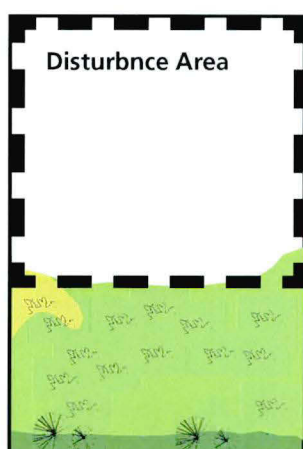
- 10,000 square foot lot located completely within a Habitat Conservation Area (HCA)
- 15% High HCA; 65% Moderate HCA; 20% Low HCA
- **Maximum Disturbance Area allowed is 6,000 square feet**
- Locate disturbance area in Low and Moderate HCA first
- Mitigation for development requires 60 trees and 300 shrubs per 6,000 square foot disturbance area
- Mitigation on-site, then off-site under streamlined discretionary review



80 ft x 125 ft Lot

Example 3.

- 10,000 square foot lot located partially within a Habitat Conservation Area (HCA)
- 85% High HCA; 15% Moderate HCA
- 2,000 square feet of the lot is outside of HCA
- **Maximum Disturbance Area allowed is 5,000 square feet; only 3,000 square feet may be located within the HCA**
- Locate disturbance area in area outside of HCA first, then in Moderate HCA, and last in High HCA
- Mitigation for development requires 30 trees and 150 shrubs per 3,000 square foot disturbance area
- Mitigation on-site, then off-site under streamlined discretionary review



80 ft x 125 ft Lot

Example 4

- 10,000 square foot lot located partially within a Habitat Conservation Area (HCA)
- 5% High HCA; 75% Moderate HCA; 20% Low HCA
- 6,000 square feet of the lot is located outside of HCA
- **Maximum Disturbance Area allowed is 6,000 square feet; no disturbance allowed within the HCA**
- No mitigation required

Division 12
Transportation Planning
660-012-0000
Purpose

The purpose of this Division is to implement Statewide Planning Goal 12 (Transportation) and promote the development of safe, convenient and economic transportation systems that are designed to reduce reliance on the automobile so that the air pollution, traffic and other livability problems faced by urban areas in other parts of the country might be avoided. It is also the purpose of this Division to explain how local governments and state agencies responsible for transportation planning demonstrate compliance with other statewide planning goals and to identify how transportation facilities are provided on rural lands consistent with the goals. The division sets requirements or coordination among affected levels of government for preparation, adoption, refinement, implementation and amendment of transportation system plans. Transportation system plans adopted pursuant to this Division fulfill the requirements for public facilities planning required under ORS 197.712(2)(e), Goal 11 and ORA Chapter 660, Division 11, as they relate to transportation facilities. Through measures designed to reduce reliance on the automobile, this division is also intended to assure that the planned transportation system supports a pattern of travel and land use in urban areas which will avoid the air pollution, traffic and livability problems faced by other areas of the country. This portion of the rule aims to improve the livability of urban areas by promoting changes in and use patterns and the transportation system that make it more convenient for people to walk, bicycle and use transit, and drive less to meet their daily needs. Changing land use and travel patterns will also complement state and local efforts to meet other objectives, including containing urban development, reducing the cost of public services, protecting farm and forest land, reducing air, water and noise pollution, conserving energy and reducing emissions of greenhouse gases that contribute to global climate change. The result of applying these portions of the rule will vary within urban areas. Some parts of urban areas, such as downtowns, pedestrian districts, transit-oriented developments and other mixed-use, pedestrian-friendly centers, will be highly convenient for a variety of modes, including walking, bicycling and transit, while others will be auto-oriented and include more modest measures to accommodate access and circulation by other modes. The rules in this Division are not intended to make local government determination "land use decisions" under ORS 197.015(10). The rules recognize, however, that, under existing statutory and case law, many determinations relating to the adoption and implementation of transportation plans will be land use decisions.

**Transportation Planning Rule
Purpose Statement
WORK GROUP DISCUSSION DRAFT
June 10, 2005**

OAR 660-012-0000

Purpose

- (1) This division implements Statewide Planning Goal 12 (Transportation) and provisions of other statewide planning goals related to transportation planning. The purposes of this division are to coordinate and direct land use and transportation planning to:
 - (a) Promote the development of transportation systems adequate to serve statewide, regional and local transportation needs;
 - (b) Encourage and support the availability of a variety of transportation choices that balances vehicular use with other critical transportation needs;
 - (c) Provide for safe and convenient vehicular, pedestrian, and bicycle access and circulation;
 - (d) Ensure that the planned transportation system supports a pattern of travel and land use in urban areas that will avoid the air pollution, traffic and livability problems faced by other areas of the country;
 - (e) Facilitate freight mobility and the economic flow of goods and services within regions and throughout the state;
 - (f) Protect existing and planned transportation facilities, corridors and sites for their identified functions;
 - (g) Provide for the construction and implementation of transportation facilities, improvements and services necessary to support acknowledged comprehensive plans;
 - (h) Identify how transportation facilities are provided on rural lands consistent with the goals;
 - (i) Ensure coordination among affected local governments and transportation service providers and consistency between state, regional and local transportation plans; and
 - (j) Ensure that changes to comprehensive plans are supported by adequate planned transportation facilities.
- (2) The extent of planning required by this division and the outcome of individual transportation plans will vary depending on the size of the community and upon community needs and circumstances. Generally, larger and faster growing communities will need to prepare more comprehensive and detailed plans, while smaller cities and rural areas will have more general plans. For all communities, the mix of planned transportation facilities and services should be sufficient to ensure economic, sustainable and environmentally sound mobility and accessibility for all Oregonians. Changing land use and travel patterns will also complement efforts to meet other state and local objectives, including containing urban development, reducing the cost of public services, protecting farm and forest land, reducing air, water and noise pollution, conserving energy and reducing emissions of greenhouse gases that contribute to global climate change.

- (a) Within metropolitan areas comprehensive plans and transportation system plans shall improve livability and accessibility by promoting changes in the transportation system and land use patterns. A key outcome of this effort is a reduction in reliance on single occupant automobile use, particularly during peak commute periods. To accomplish this outcome, this division promotes increased planning for alternative modes of transportation, changing land use patterns and improving street connectivity to make it more convenient for people to walk, bicycle, use transit, use automobile travel more efficiently, and drive less to meet their daily needs. The result of applying these portions of the rule will vary within urban areas. Some parts of urban areas, such as downtowns, pedestrian districts, transit-oriented developments and other mixed-use, pedestrian-friendly centers, will be highly convenient for a variety of modes, including walking, bicycling and transit, while others will be auto-oriented and include more modest measures to accommodate access and circulation by other modes.
 - (b) Outside of metropolitan areas comprehensive plans and transportation system plans shall be designed to provide safe and convenient vehicular circulation and to enhance, promote and facilitate safe and convenient pedestrian and bicycle travel by planning a well-connected network of streets and supporting improvements for all travel modes.
- (3) This division sets requirements for coordination among affected levels of government and transportation service providers for preparation, adoption, refinement, implementation and amendment of transportation system plans. Transportation system plans adopted pursuant to this division fulfill the requirements for public facilities required under ORS 197.712(2)(e), Goal 11 and OAR Chapter 660, Division 011, as they relate to transportation facilities. The rules in this division are not intended to make local government determinations "land use decisions" under ORS 197.015(10). The rules recognize, however, that under existing statutory and case law, many determinations relating to the adoption and implementation of transportation plans will be land use decisions.

July 14, 2005

John VanLandingham, Chair
Land Conservation and Development Commission
635 Capitol St., NE
Suite 150
Salem, OR 97301-2540

Dear Chair VanLandingham:

Thank you for the opportunity to comment on update to the Oregon Transportation Planning Rule (TPR). We commend the joint OTC/LCDC Transportation Subcommittee for producing these amendments in such a short time frame, and support the Commission's effort to remedy the critical issues raised by the Jaqua vs. City of Springfield case. When the Commission adopted the first round of TPR amendments addressing the Jaqua case earlier this year, you encouraged local agencies to work with the Commission to fine-tune the rule to best meet this new challenge.

We have since engaged our local and regional partners in the Metro region in a review of the new TPR provisions, and are proposing following comments on Section 660-012-0060 in the spirit of fine tuning the TPR. We believe that these amendments build on existing strengths of the TPR, while also recognizing the complexity of planning in larger urban settings.

The comments focus on the "1/2 mile rule", in particular. While we are proposing amendments to this set of provisions, the changes are offered with a commitment from our region that public investments in highway interchanges are guarded carefully against inappropriate land use actions.

While we have a small share of the state's highway interchanges, they also serve as gateways to the state's most important marine and air terminals, and provide primary access to public facilities like the Oregon Convention Center, Oregon Health and Science University, Central Post Office, Portland State University, Oregon Zoo, Metro Expo Center and many other cultural, commercial, medical and recreational destinations that serve residents of the entire state. Thus, we are keenly aware of the need to protect these access points over the long term.

Clarifying Funding Plans vs. Funding Mechanisms

The recent amendments to the TPR resulted in a confusing mix of transportation funding terminology that requires clarification in order to avoid invalidating currently acknowledged transportation system plans (TSP) in the Metro region. For the purpose of the rule, we recommend that "funding plans" be defined as a TSP element where a strategy, or range of strategies,

establish a road map for funding transportation revenue shortfalls during the 20-year plan period. Conversely, "funding mechanisms" would be identified as adopted or approved sources of transportation revenue that can be used to fund projects and programs identified in TSPs.

The proposed amendments in Attachment 'A' distinguish between these terms, and clarify how they apply to plan amendments in "Interchange" areas and other areas within a locality. We recently learned of DLCD staff's new interpretation of what a "funding plan" constitutes, and strongly disagree that the recent TPR amendments were intended to change this definition as it was applied in the acknowledgement of our regional transportation plan in 2000. The sharp difference of opinion between state agencies and local jurisdictions on the current language is evidence of the need to clarify the terminology. The proposed amendments would confirm the original interpretation of a "funding plan" to be part of shaping a long-range planning process, and not the state of current funding policies.

The amendments would also reduce the need to rely on ODOT interpretations of "reasonably likely" transportation improvements, which will introduce great uncertainty and ambiguity (and resulting litigation), as well as a new step in the already complicated local planning process. Local officials in the Metro region expressed concern over placing the role of an ODOT administrator above that of elected policy makers in making land use decisions, a significant departure from current practice. Instead, we believe that better interchange protections are possible through improved consultation and coordination between ODOT and local governments, as suggested below.

Interchange Management Strategy

We continue to oppose the "1/2 mile rule", a new layer of planning regulations intended to protect interstate highway interchanges from overdevelopment. As you know, Metro shares the state's concern for protecting the capacity and function of interstate interchanges. But the 1/2-mile rule is overly simplistic, particularly for urban areas where even the definition for measuring this radius cannot be applied to many interchanges. Instead, we support the use of interchange area management plans (IAMPs) in these areas, an existing tool that offers the best protection for interchanges, but has been largely unfunded by ODOT.

Our recommendation is based on a review of the interchanges located within the Metro region, and upon consultation with the Oregon MPO Consortium, which includes members from the Salem-Keizer, Eugene-Springfield, Rogue Valley, Corvallis and Bend MPOs. Our finding is that the 1/2 mile rule would not only block desired land use plans in existing urban areas, where compact development is proposed near interchanges, but also have the subsequent effect of pushing development toward the urban fringe, where the greatest interchange capacity exists in the state's larger urban areas. This effect is

clearly in conflict with statewide planning goals to limit sprawl and promote compact development. The ½ mile rule also ignores the reality that, in larger urban areas, a much larger area might necessarily be managed as part of protecting interchanges. For example, in the Metro region, the Marine Drive interchange on Interstate-5 serves the major marine terminals of the Portland Harbor, yet all are located outside the ½ mile area. We believe that IAMPs provide a better alternative for customizing a strategy that meets the needs of each interchange, such as Marine Drive.

The proposed amendments to the TPR shown in Attachment 'A' would require Metropolitan Planning Organizations (MPOs) to develop an interchange management strategy as part of adopting a regional TSP. The strategy would establish priorities and timing for completion of interchange area managements plans for areas governed by MPOs, and is modeled after the existing "refinement planning" provisions of the TPR. The approach is also based on the notion that the TPR already calls out MPOs as unique in their transportation needs, and thus ties the interchange management responsibility to the regional TSPs that are required for the six MPOs.

ODOT would be strongly encouraged to participate in the completion of IAMPs for these areas, since the investment in completing this work represents a fraction of what just one interchange construction project could cost in the event of an inappropriate land use decision in an interchange area. It should be noted, however, that much of the corridor planning, and even some capital improvements to ODOT highways in the Metro region are now being funded with local or regional dollars. We strongly recommend that ODOT make a meaningful investment in protecting interchanges by funding the IAMP efforts for critical facilities. ODOT has already begun this effort in the Metro region by preparing an analysis of "at risk" interchanges, but the Region 1 office will need funding support from the OTC to complete this work.

Conclusion

We look forward to continued participation and comment as the remaining portions of the TPR are reviewed by the Commission in coming months. We are committed to finding a workable solution to better protecting our interchange investments, and appreciate the opportunity to comment on this important effort.

Sincerely,

Rex Burkholder
JPACT Chair

Jack Hoffman
MPAC Chair

David Bragdon
Metro Council President

Attachment 'A'

660-012-0005 - Definitions

(7) "Funding Plan" means a reasonable strategy or range of strategies adopted in a local transportation system plan that addresses identified funding shortfalls during the planning period."

(8) "Funding Mechanism" means an adopted or approved transportation revenue source used to finance projects and programs included in local transportation system plans.

(9) "Interchange Management Strategy" means an adopted strategy for developing interchange management plans in MPO areas.

660-012-0060 - Plan and Land Use Regulation Amendments

(1) Where an amendment to a functional plan, an acknowledged comprehensive plan, or a land use regulation would significantly affect an existing or planned transportation facility, the local government shall put in place measures as provided in section (2) of this rule to assure that allowed land uses are consistent with the identified function, capacity, and performance standards (e.g. level of service, volume to capacity ratio, etc.) of the facility. A plan or land use regulation amendment significantly affects a transportation facility if it would:

(a) Change the functional classification of an existing or planned transportation facility (exclusive of correction of map errors in an adopted plan);

(b) Change standards implementing a functional classification system; or

(c) As measured at the end of the planning period identified in the adopted transportation system plan:

(A) Allow land uses or levels of development that would result in types or levels of travel or access that are inconsistent with the functional classification of an existing or planned transportation facility;

(B) Reduce the performance of an existing or planned transportation facility below the minimum acceptable performance standard identified in the TSP or comprehensive plan; or

(C) Worsen the performance of an existing or planned transportation facility that is otherwise projected to perform below the minimum acceptable performance standard identified in the TSP or comprehensive plan.

(2) Where a local government determines that there would be a significant effect, compliance with section (1) shall be accomplished through one or a combination of the following:

(a) Adopting measures that demonstrate allowed land uses are consistent with the planned function, capacity, and performance standards of the transportation facility.

(b) Amending the TSP or comprehensive plan to provide transportation facilities, improvements or services adequate to support the proposed land uses consistent with the requirements of this division; such amendments shall include a funding plan or funding mechanisms consistent with section (4) or include an amendment to the transportation finance plan so that the facility, improvement, or service will be provided by the end of the planning period.

(c) Altering land use designations, densities, or design requirements to reduce demand for automobile travel and meet travel needs through other modes.

(d) Amending the TSP to modify the planned function, capacity or performance standards of the transportation facility.

(e) Providing other measures as a condition of development or through a development agreement or similar funding method, including transportation system management measures, demand management or minor transportation improvements. Local governments shall as part of the amendment specify when measures or improvements provided pursuant to this subsection will be provided.

(3) Notwithstanding sections (1) and (2) of this rule, a local government may approve an amendment that would significantly affect an existing transportation facility without assuring that the allowed land uses are consistent with the function, capacity and performance standards of the facility where:

(a) The facility is already performing below the minimum acceptable performance standard identified in the TSP or comprehensive plan on the date the amendment application is submitted;

(b) In the absence of the amendment, planned transportation facilities, improvements and services as set forth in section (4) of this rule would not be adequate to achieve consistency with the identified function, capacity or performance standard for that facility by the end of the planning period identified in the adopted TSP;

(c) Development resulting from the amendment will, at a minimum, mitigate the impacts of the amendment in a manner that avoids further degradation to the performance of the facility by the time of the development through one or a combination of transportation improvements or measures;

(d) The amendment does not involve property located in an interchange area as defined in paragraph (4)(d)(C); and

(e) For affected state highways, ODOT provides a written statement that the proposed funding and timing for the identified mitigation improvements or measures are, at a minimum, sufficient to avoid further degradation to the performance of the affected state highway. However, if a local government provides the appropriate ODOT regional office with written notice of a proposed amendment in a manner that provides ODOT reasonable opportunity to submit a written statement into the record of the local government proceeding, and ODOT does not provide a written statement, then the local government may proceed with applying subsections (a) through (d) of this section.

(4) Determinations under sections (1)-(3) of this rule shall be coordinated with affected transportation facility and service providers and other affected local governments.

(a) In determining whether an amendment has a significant effect on an existing or planned transportation facility under subsection (1)(c) of this rule, local governments shall rely on existing transportation facilities and services and on the planned transportation facilities, improvements and services set forth in subsections (b) and (c) below.

(b) Outside of interstate interchange areas, the following are considered planned facilities, improvements and services:

(A) Transportation facilities, improvements or services that are funded for construction or implementation in the Statewide Transportation Improvement Program or a locally or regionally adopted transportation improvement program or capital improvement plan or program of a transportation service provider.

(B) Transportation facilities, improvements or services that are authorized in a local transportation system plan and for which a funding plan or funding mechanism is in place or approved. ~~These~~ Funding mechanisms include, but are not limited to, transportation facilities, improvements or services for which: transportation systems development charge revenues are being collected; a local improvement district or reimbursement district has been established or will be established prior to development; a development agreement has been adopted; or conditions of approval to fund the improvement have been adopted.

(C) Transportation facilities, improvements or services in a metropolitan planning organization (MPO) area that are part of the area's federally-approved, financially constrained regional transportation system plan.

(D) Improvements to state highways that are included as planned improvements in a regional or local transportation system plan or comprehensive plan when

ODOT provides a written statement that the improvements are reasonably likely to be provided by the end of the planning period.

(E) Improvements to regional and local roads, streets or other transportation facilities or services that are included as planned improvements in a regional or local transportation system plan or comprehensive plan when the local government(s) or transportation service provider(s) responsible for the facility, improvement or service provides a written statement that the facility, improvement or service is reasonably likely to be provided by the end of the planning period.

(c) Within interstate interchange areas, the improvements included in (b)(A)-(B) and those provided through funding mechanisms in (C) are considered planned facilities, improvements and services, except where one of the following applies:

(A) ODOT provides a written statement that the proposed funding and timing of mitigation measures are sufficient to avoid a significant adverse impact on the Interstate Highway system, then local governments may also rely on the improvements identified in paragraphs (b)(D) and (E) of this section; or

(B) There is an adopted interchange area management plan, then local governments may also rely on the improvements identified in that plan and which are also identified in paragraphs (b)(D) and (E) of this section.

(C) There is an adopted interchange management strategy in a regional transportation system plan in MPO areas.

(d) As used in this section and section (3):

(A) Planned interchange means new interchanges and relocation of existing interchanges that are authorized in an adopted transportation system plan or comprehensive plan;

(B) Interstate highway means Interstates 5, 82, 84, 105, 205 and 405; and

(C) Interstate interchange area means:

(i) Property within one-half mile of an existing or planned interchange on an Interstate Highway as measured from the center point of the interchange; or

(ii) The interchange area as defined in the Interchange Area Management Plan adopted as an amendment to the Oregon Highway Plan.

(D) Interchange management strategy means an adopted strategy for developing interchange management plans in MPO areas. Interchange management strategies

establish priorities and timing for completion of interchange managements plans for areas governed by MPOs.

(e) For purposes of this section, a written statement provided pursuant to paragraphs (b)(D), (b)(E) or (c)(A) provided by ODOT, a local government or transportation facility provider, as appropriate, shall be conclusive in determining whether a transportation facility, improvement or service is a planned transportation facility, improvement or service. In the absence of a written statement, a local government can only rely upon planned transportation facilities, improvements and services identified in paragraphs (b)(A)-(C) to determine whether there is a significant effect that requires application of the remedies in section (2).

(5) The presence of a transportation facility or improvement shall not be a basis for an exception to allow residential, commercial, institutional or industrial development on rural lands under this division or OAR 660-004-0022 and 660-004-0028.

(6) In determining whether proposed land uses would affect or be consistent with planned transportation facilities as provided in 0060(1) and (2), local governments shall give full credit for potential reduction in vehicle trips for uses located in mixed-use, pedestrian-friendly centers, and neighborhoods as provided in (a)-(d) below;

(a) Absent adopted local standards or detailed information about the vehicle trip reduction benefits of mixed-use, pedestrian-friendly development, local governments shall assume that uses located within a mixed-use, pedestrian-friendly center, or neighborhood, will generate 10% fewer daily and peak hour trips than are specified in available published estimates, such as those provided by the Institute of Transportation Engineers (ITE) Trip Generation Manual that do not specifically account for the effects of mixed-use, pedestrian-friendly development. The 10% reduction allowed for by this section shall be available only if uses which rely solely on auto trips, such as gas stations, car washes, storage facilities, and motels are prohibited;

(b) Local governments shall use detailed or local information about the trip reduction benefits of mixed-use, pedestrian-friendly development where such information is available and presented to the local government. Local governments may, based on such information, allow reductions greater than the 10% reduction required in (a);

(c) Where a local government assumes or estimates lower vehicle trip generation as provided in (a) or (b) above, it shall assure through conditions of approval, site plans, or approval standards that subsequent development approvals support the development of a mixed-use, pedestrian-friendly center or neighborhood and provide for on-site bike and pedestrian connectivity and access to transit as provided for in 0045(3) and (4). The provision of on-site bike and pedestrian connectivity and access to transit may be accomplished through application of acknowledged ordinance provisions which comply with 0045(3) and (4) or through conditions of approval or

findings adopted with the plan amendment that assure compliance with these rule requirements at the time of development approval; and

(d) The purpose of this section is to provide an incentive for the designation and implementation of pedestrian-friendly, mixed-use centers and neighborhoods by lowering the regulatory barriers to plan amendments which accomplish this type of development. The actual trip reduction benefits of mixed-use, pedestrian-friendly development will vary from case to case and may be somewhat higher or lower than presumed pursuant to (a) above. The Commission concludes that this assumption is warranted given general information about the expected effects of mixed-use, pedestrian-friendly development and its intent to encourage changes to plans and development patterns. Nothing in this section is intended to affect the application of provisions in local plans or ordinances which provide for the calculation or assessment of systems development charges or in preparing conformity determinations required under the federal Clean Air Act.

(7) Amendments to acknowledged comprehensive plans and land use regulations which meet all of the criteria listed in (a)-(c) below shall include an amendment to the comprehensive plan, transportation system plan the adoption of a local street plan, access management plan, future street plan or other binding local transportation plan to provide for on-site alignment of streets or accessways with existing and planned arterial, collector, and local streets surrounding the site as necessary to implement the requirements in Section 0020(2)(b) and Section 0045(3) of this division:

(a) The plan or land use regulation amendment results in designation of two or more acres of land for commercial use;

(b) The local government has not adopted a TSP or local street plan which complies with Section 0020(2)(b) or, in the Portland Metropolitan Area, has not complied with Metro's requirement for street connectivity as contained in Chapter 6 of the Regional Transportation Plan Title 6, Section 3 of the Urban Growth Management Functional Plan; and

(c) The proposed amendment would significantly affect a transportation facility as provided in 0060(1).

(8) A "mixed-use, pedestrian-friendly center or neighborhood" for the purposes of this rule, means:

(a) Any one of the following:

(A) An existing central business district or downtown;

(B) An area designated as a central city, regional center, town center or main street in the Portland Metro 2040 Regional Growth Concept;

(C) An area designated in an acknowledged comprehensive plan as a transit oriented development or a pedestrian district; or

(D) An area designated as a special transportation area as provided for in the Oregon Highway Plan.

(b) An area other than those listed in (a) which includes or is planned to include the following characteristics:

(A) A concentration of a variety of land uses in a well-defined area, including the following:

(i) Medium to high density residential development (12 or more units per acre);

(ii) Offices or office buildings;

(iii) Retail stores and services;

(iv) Restaurants; and

(v) Public open space or private open space which is available for public use, such as a park or plaza.

(B) Generally include civic or cultural uses;

(C) A core commercial area where multi-story buildings are permitted;

(D) Buildings and building entrances oriented to streets;

(E) Street connections and crossings that make the center safe and conveniently accessible from adjacent areas;

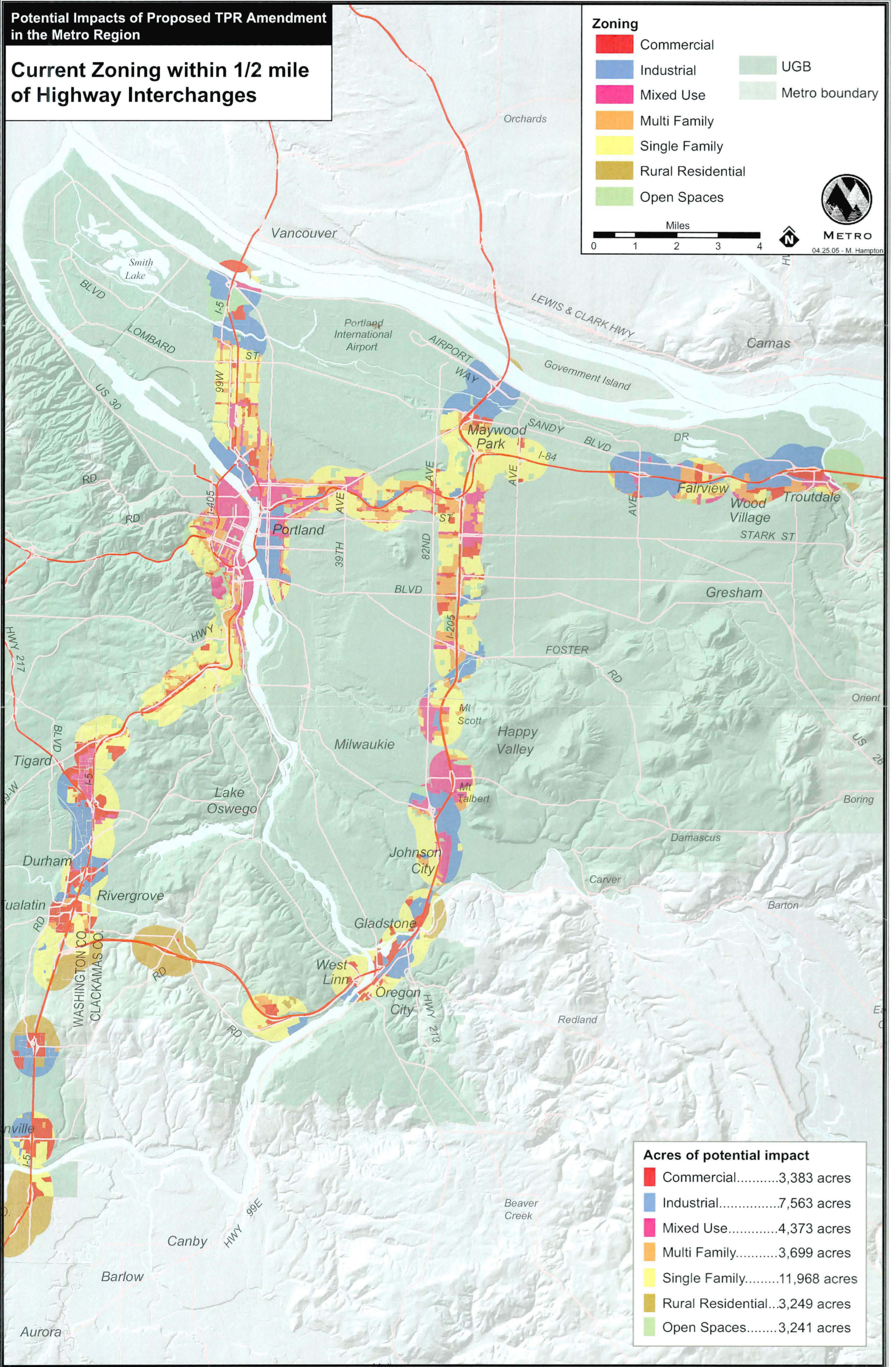
(F) A network of streets and, where appropriate, accessways and major driveways that make it attractive and highly convenient for people to walk between uses within the center or neighborhood, including streets and major driveways within the center with wide sidewalks and other features, including pedestrian-oriented street crossings, street trees, pedestrian-scale lighting and on-street parking;

(G) One or more transit stops (in urban areas with fixed route transit service); and

(H) Limit or do not allow low-intensity or land extensive uses, such as most industrial uses, automobile sales and services, and drive-through services.

Potential Impacts of Proposed TPR Amendment
in the Metro Region

Current Zoning within 1/2 mile
of Highway Interchanges



Potential Impacts of Proposed TPR Amendment in the Metro Region

Taxlots and 2040 Design Types within 1/2 mile of Highway Interchanges

Potentially impacted taxlots (PITs)
(1/2 mile from highway interchange)

PITs in 2040 Centers

PITs in Station Communities

Existing and Proposed
LRT stops and alignments

UGB

Metro boundary

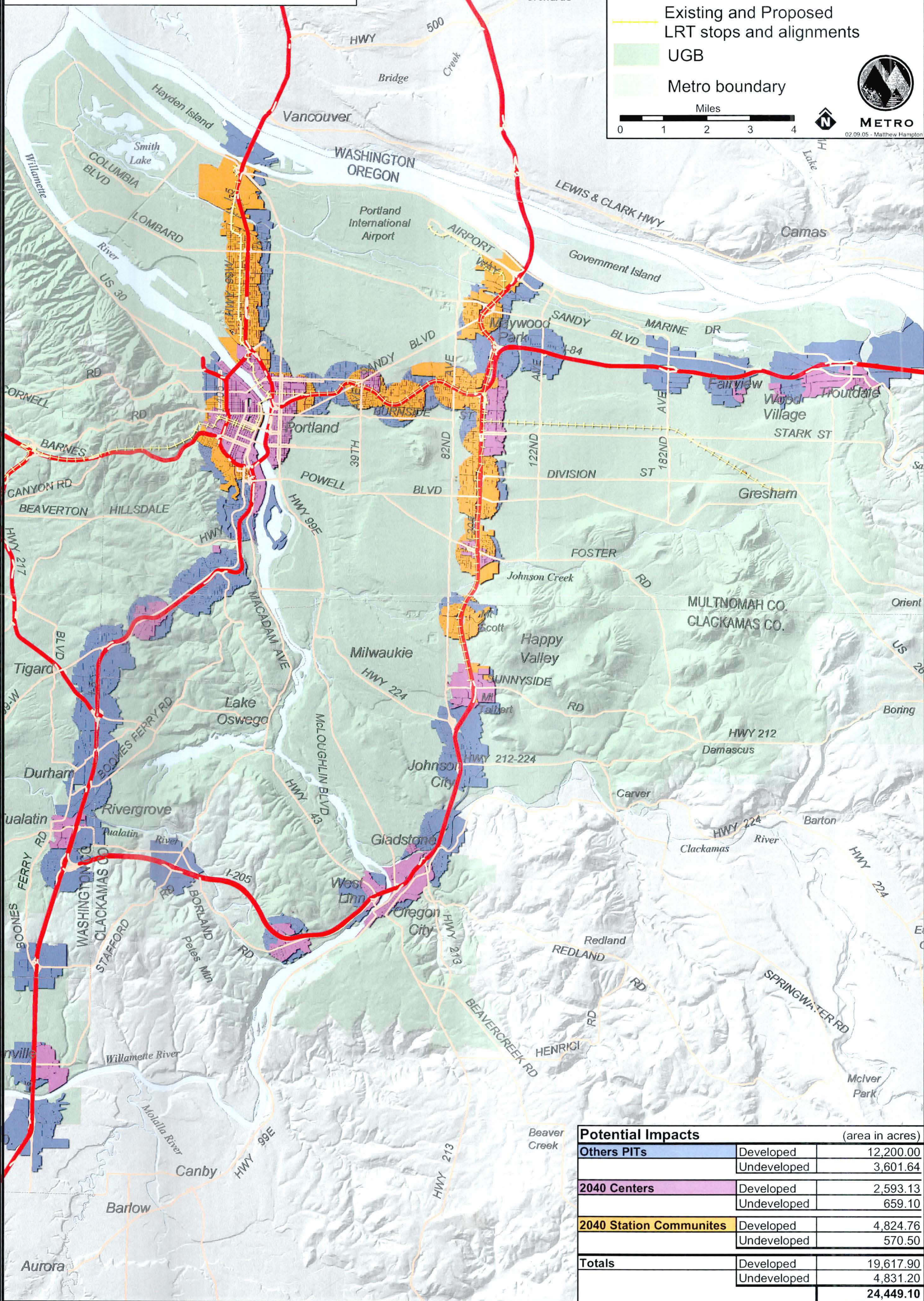
01234

Miles

N

METRO

02.09.05 - Matthew Hampton



Potential Impacts			(area in acres)
Others PITs	Developed		12,200.00
	Undeveloped		3,601.64
2040 Centers	Developed		2,593.13
	Undeveloped		659.10
2040 Station Communities	Developed		4,824.76
	Undeveloped		570.50
Totals	Developed		19,617.90
	Undeveloped		4,831.20
			24,449.10

METRO'S PERS UNFUNDED ACTUARIAL LIABILITY

Presented July 12, 2005

Bill Stringer
Kathy Rutkowski
Brian Williams

DEFINITION: UNFUNDED ACTUARIAL LIABILITY

- Actuarial liability is the present value of the plan's current and expected benefits payments (plus administrative expenses).
- If a fund's actuarial liability exceeds its current assets, then the fund has a shortfall that is known as an unfunded actuarial liability ("UAL").
- The UAL is the difference between what the fund has "in the bank" right now and what it expects to pay in current and future benefits.

METRO'S UAL

When Metro joined a pool it entered with a \$7.1 million actuarial surplus. However, significant losses were incurred in Metro's portion of the PERS portfolio in 2000, 2001, 2002 and 2003.

METRO'S OUTSTANDING UAL BALANCE

Remaining 1999 UAL	\$(7,036,321)
Remaining 2000 Loss	3,171,354
Remaining 2001 Loss	26,452,706
Remaining 2002 Loss	39,182,032
Remaining 2003 Loss	7,947,053
2003 PERS Reform Legislation	<u>(51,640,261)</u>
UAL as of 12/31/2003	\$18,076,563

UAL by the end of October of 2005 is expected to be \$23,935,891

IMPACT OF 2003 LEGISLATIVE CHANGES

In 2003 the Legislature made substantial changes to avoid catastrophic financial consequences:

- 8% guarantee provided over career, not annually
- 6% employee contribution deposited in 401(k)-type account, not subject to money match
- Mortality tables updated
- PERS board completely revamped
- New system (OPSRP) created for employees hired after August 29, 2003.

Note that the PERS actuary credited savings equal to \$51,640,563 attributable to the package of reforms passed by the Oregon Legislature in 2003. We know that the State court has not upheld some of those reforms and another court is deciding a case in Eugene (the Lipscomb case). It is not known at this time what the impact might be on the UAL by these decisions—loosing all or part of the \$51.6 million savings.

CALCULATION OF PERS RATES

Ultimately, the actuary bases a rate upon a complex calculation involving current and past statistics and future projections of Metro's:

- Total payroll,
- Earnings within the pool,
- Demographics--including the age and seniority of Metro employees, the number of retiree and potential retirees in Tier 1 and Tier 2, and
- The unfunded actuarial liability

OPTIONS TO MITIGATE PERS RATES

OPERS requires Metro to eliminate its unfunded liability over a period of 23 years and charges Metro eight percent per annum on the unfunded balance. Thus, there is little that Metro can do to moderate the increase other than to reduce the UAL by:

1. Paying into a reserve that can either reduce Metro's liability or buy down future PERS rates, or
2. Fund the Unfunded Actuarial Liability with money that is borrowed at a rate less than the 8% per annum charged by PERS.

OPTION 1: A RESERVE

Metro has set aside 6.5 percent of payroll against future increases due to adverse court findings. It currently has about \$5 million of reserves set aside for this purpose and will add another \$2.4 million by the end of FY2005-06.

- ☐ Last year those funds earned about 1.8% for the fiscal year and are currently earning only 2.8% per annum.
- ☐ PERS will reduce the payroll rate 0.171 percentage points for every \$1 million that the UAL is reduced—4.10 percentage points if the entire \$23 million is eliminated.
- ☐ Because PERS charges 8% per annum on the UAL, the benefit of bonding only \$18 million and using the \$5 million reserve is tantamount to investing the \$5 million at 8% per annum rather than the current 2.9%.
- ☐ The reserve is comprised of funds contributed and attributed to each of Metro's Departments.

COMPARISON OF EARNINGS POTENTIAL ON \$5.0 MILLION RESERVE

Assumptions:

- Initial investment equal to \$5.0 million reserve currently on hand
- Lump sum depositing with PERS earns 8.0%
- Metro cash investment earns current rate of 2.9%

Investment Scenario	Total Earnings	Net Present Value Earnings
\$5.0 million deposit with PERS	\$11,760,479	\$5,938,211
\$5.0 million Metro cash investment	\$8,226,249	\$3,132,502
Difference	\$3,534,230	\$2,805,709

OPTION 2: BONDING THE UNFUNDED LIABILITY

Under current bond market conditions, Metro could finance its portion of the liability at approximately 6% instead of the 8% charged by PERS.

- ☐ The rate is a taxable rate because under federal law, these must be sold on a taxable basis.
- ☐ If the PERS funds earn more than the cost of the borrowing, a jurisdiction that chooses to refinance will have lower PERS costs than a jurisdiction that does not make that choice.
- ☐ If the 8% earnings rates proves accurate, the savings to a jurisdiction at a 6% borrowing rate equal approximately 20% on a present value basis of the amount borrowed. Other earnings rates and borrowing rates were examined with expected changes in amounts saved.

(CONTINUED) OPTION 2: BONDING THE UNFUNDED LIABILITY

- ☐ Since 1970, PERS investments have averaged roughly 12% returns.
- ☐ the contributed revenue from the sale of Bonds now would reduce PERS rates throughout the 23 year actuarial cycle. The jurisdiction that borrows “too much” would be in a surplus position, with payroll rates reduced still further by the surplus amount available.
- ☐ If any level of bonding is selected, to ensure that the rate of interest on the Bonds will be less than the rate of interest that OPERS currently expects to earn, and given that there is a cost of issuance equal to about \$330,000 (1.5% of the total bond size) the Bonds should not be sold if the true interest cost would be more than 6.50% per annum.

(CONTINUED) OPTION 2: BONDING THE UNFUNDED LIABILITY

Success from borrowing depends on the market returning more than the cost of the bond.

- o If returns equal 8% over 23 year period (as assumed by PERS) over the life of the bonds, costs will be reduced as estimated.
- o If returns are greater than 8%, cost reductions will be greater than projected.
- o If returns are less than 8% but more than the cost of borrowing PERS cost reductions will be less than projected.
- o If returns are less than the bond yield, borrowers will be worse off than those who do not borrow.
- o NOTE: Whereas the tax-exempt market consistently expects and frequently exercises call provisions within its bond covenants, the taxable market seldom has such provisions and, if they do, only at substantial cost.

REFINANCING ANALYSIS AT VARIOUS INTEREST RATES

Assumptions:

- bonding full estimated outstanding liability of approximately \$23.935 million
- lump sum deposit earns 8%

Scenario	Total Savings	Net Present Value Savings
5.50% TIC	\$9,947,067	\$5,946,231
6.00% TIC	\$7,562,982	\$4,473,214
6.50% TIC	\$5,067,201	\$3,065,757

REINVESTMENT ANALYSIS AT VARIOUS RATES OF RETURN

Assumptions:

- bonding full estimated outstanding liability of approximately \$23.935 million
- 6.00 % TIC borrowing cost

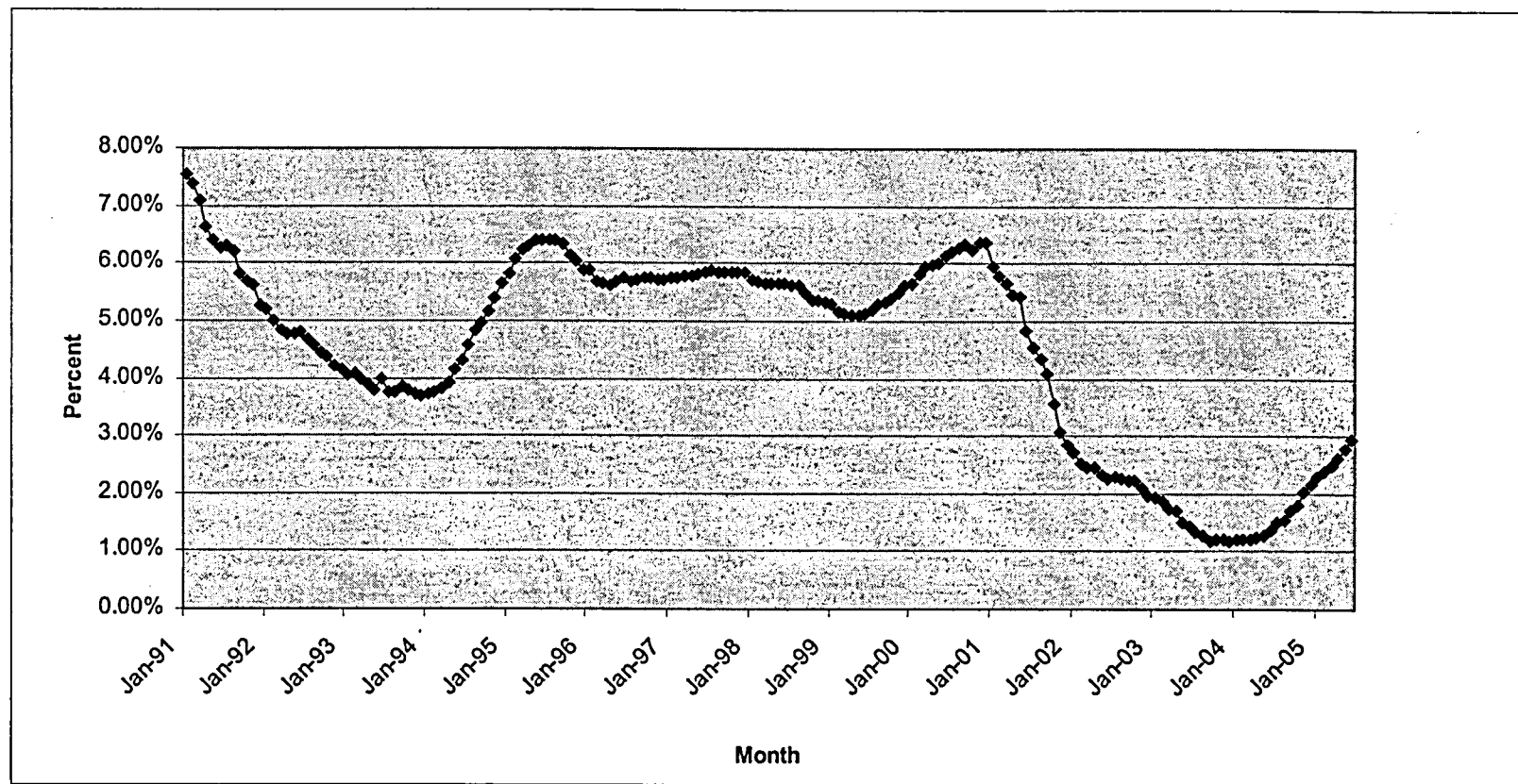
Reinvestment Scenario	Total Earnings	Net Present Value Earnings
12.00%	\$48,331,450	\$19,180,462
8.00%	\$7,562,982	\$4,473,213
4.00%	(\$13,777,481)	(\$4,113,796)

RISKS OF EITHER BONDING OR NOT BONDING THE PERS UNFUNDED LIABILITY

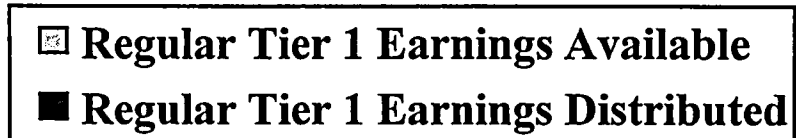
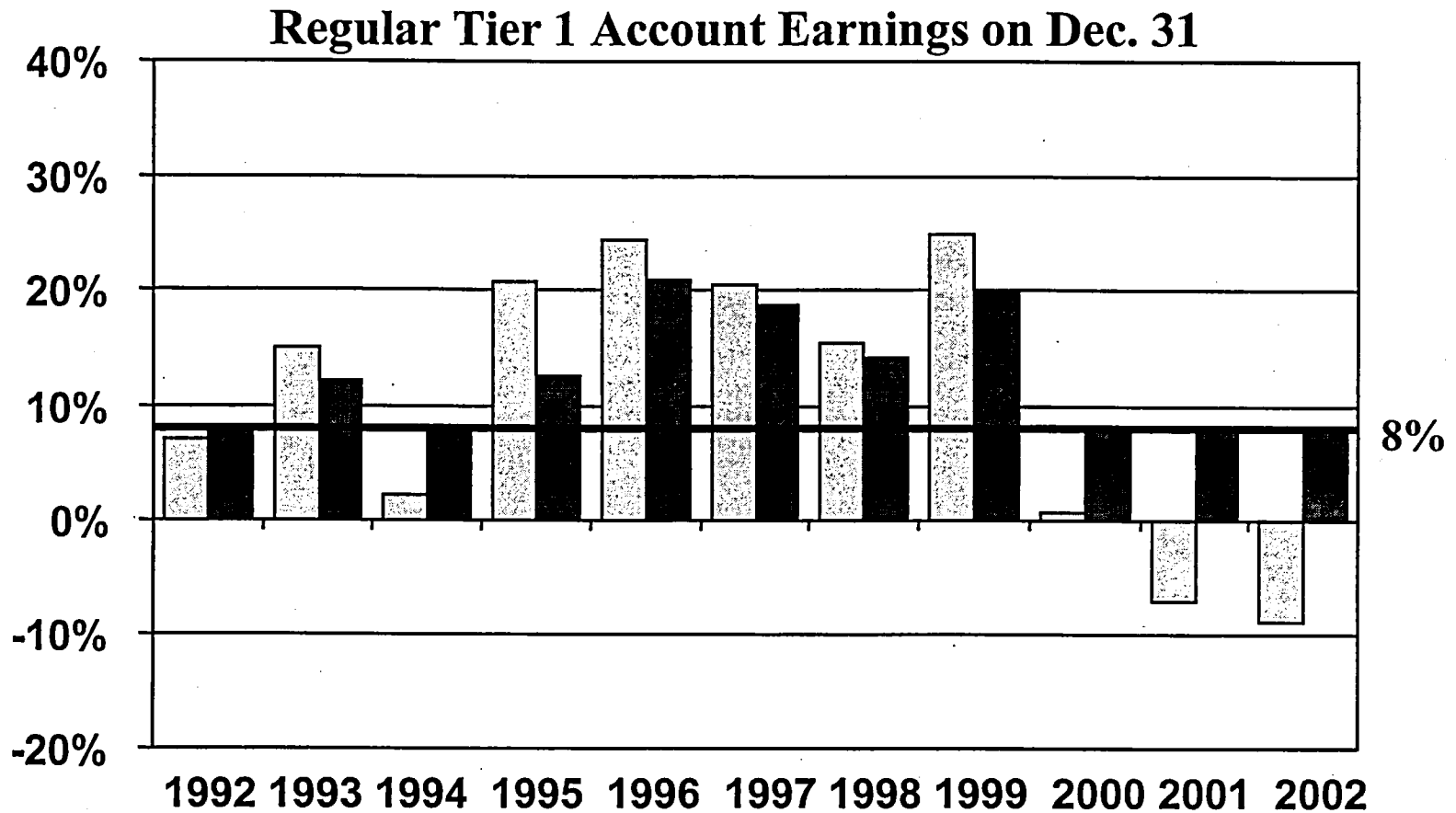
Risks of bonding / not bonding thus hinge on three unknown factors:

- What will happen to earnings of the PERS fund (specifically, Metro's pool) over the next 23 years and how might those earnings be used to offset Metro's current UAL?
- What might happen to the return on Metro's reserve over the next 23 years?
- What will be the impact of judicial decisions regarding the 2003 Legislative reforms?

METRO'S POOLED CASH YIELD



TIER 1 ACCOUNT EARNINGS



STAFF RECOMMENDATIONS

Staff recommends that:

- It be authorized to seek from OPERS an exact accounting of Metro's UAL and the rate reduction that would immediately follow the payment of that amount.
- It be authorized to continue to explore trends and factors that might argue for/against moving forward with a bond sale on or about September 29, 2005.
- Staff explore the options and consequences of continuing the 6.5 percent of payroll reserve to mitigate future increases.
- Council approve Resolution 05-3598 which permits the sale of bonds to fully fund the unfunded portion of Metro's Actuarial Liability.

KEY DATES FOR PERS UAL BONDS

July 21, 2005	If Council agrees, pass a resolution authorizing (but not requiring) the sale of bonds pledging Metro's General Fund to service the bonds.
July 22, 2005	Request a "payoff" letter from OPERS indicating the exact amount of the liability and the impact of paying off the UAL
August, 2005	Prepare materials for Metro's portion of the Official Statement
September 1, 2005	File a supplemental budget to account for the Funding of the Unfunded Actuarial Liability with the Council Office
September 6, 2005	Final Opt-out Date for Bond Pool
September 13, 2005	First Reading of the Supplemental Budget
September 13, 2005	Bond Pricing
Week of September 19, 2005	TSCC hearing regarding the Supplemental Budget
September 29, 2005	Bond Closing
September 30, 2005	Payment to OPERS
October 1, 2005	Reduced OPERS Rates take effect

COMPONENTS OF PERS RESERVE

	FY 2003-04 Actual	FY 2004-05 Actual	2-YEAR RESERVE TOTAL
General Fund			
Auditor	\$21,268	\$16,848	\$38,116
Council	\$47,070	\$55,277	\$102,347
Finance & Admin. Services ⁽¹⁾	\$206,985	\$209,596	\$416,581
Human Resources	\$35,369	\$37,273	\$72,642
Metro Attorney	\$45,741	\$49,009	\$94,750
Oregon Zoo	\$549,553	\$553,741	\$1,103,294
Planning	\$327,906	\$331,272	\$659,178
Public Affairs ⁽²⁾	\$37,990	\$50,236	\$88,226
Regional Parks ⁽³⁾	\$139,309	\$155,331	\$294,640
<i>Subtotal General Fund</i>	<i>\$1,411,191</i>	<i>\$1,458,583</i>	<i>\$2,869,774</i>
MERC Operating Fund			
Administration	\$36,628	\$40,154	\$76,782
Expo Center	\$54,696	\$54,433	\$109,129
Oregon Convention Center	\$314,787	\$316,034	\$630,821
PCPA	\$181,532	\$182,059	\$363,591
<i>Subtotal MERC Operating Fund</i>	<i>\$587,643</i>	<i>\$592,680</i>	<i>\$1,180,323</i>
Solid Waste Revenue Fund	\$394,462	\$399,242	\$793,704
Open Spaces Fund	\$25,491	\$25,896	\$51,387
Risk Management Fund	\$19,782	\$5,997	\$25,779
MERC Pooled Capital Fund	\$15,830	\$19,291	\$35,121
Zoo Capital Fund	\$3,098	\$2,985	\$6,083
<i>Subtotal All Other Funds</i>	<i>\$458,663</i>	<i>\$453,411</i>	<i>\$912,074</i>
TOTAL PERS RESERVE	\$2,457,497	\$2,504,674	\$4,962,171

NOTES:

⁽¹⁾ Includes Building Management Fund as well as Support Services Fund

⁽²⁾ Includes General Fund & Support Services Fund portions of Public Affairs

⁽³⁾ Smith & Bybee Lakes Fund portion to be paid from Regional Parks Operations

STAFF REPORT**IN CONSIDERATION OF RESOLUTION NO. 05-3598, FOR THE PURPOSE OF
AUTHORIZING A LIMITED TAX PENSION BOND, SERIES 2005 TO SATISFY METRO'S
UNFUNDED OREGON PUBLIC EMPLOYEE RETIREMENT SYSTEM ACTUARIAL
LIABILITY**

Date: July 21, 2005

Prepared by: Bill Stringer
Kathy Rutkowski
Brian Williams

BACKGROUND

Despite recent legislative reforms and positive market performance, the Oregon Public Employee Retirement System (OPERS) continues to be significantly underfunded. Prior to legislative action the OPERS actuary had estimated that the total unfunded liability of the fund was approximately \$17 billion. The reforms, even if they withstood court challenge, would not have eliminated the liability, and losses are still estimated to be \$8.5 billion (about half of the original amount) after 2002's investment losses are taken into account. As a result, every jurisdiction has seen its OPERS payroll rate increase beginning July 1, 2005 to cover these shortfalls.

Under a pension plan the actuarial liability is the present value of the plan's current and expected benefits payments (plus administrative expenses). If a fund's actuarial liability exceeds its current assets, then the fund has a shortfall that is known as an unfunded actuarial liability ("UAL"). This shortfall is the difference between what the fund has "in the bank" right now and what it expects to pay in current and future benefits. In other words, the UAL is the shortfall the fund would face if its assets were liquidated and the present value of the benefits was paid today.

Several factors contributed to this systemic OPERS problem:

- The increase in benefits provided in 1995 to offset taxation due to lawsuit by federal retirees
- Money Match and unequal earnings rates paid to employers and employees.
- 8% rate paid to Tier 1 employees when fund was losing money.
- More than 8% rate paid to Tier 1 employees during late 1990s.
- Inadequate reserves retained to cover Tier 1 distributions.
- Outdated mortality tables.

The Legislature made substantial changes to avoid catastrophic financial consequences:

- 8% guarantee provided over career, not annually
- 6% employee contribution deposited in 401(k)-type account, not subject to money match
- Mortality tables updated
- OPERS board completely revamped
- New system (OPSRP) created for employees hired after August 29, 2003.

In making these changes the Oregon Legislature was hugely successful in reducing the size of the UAL. We know now, however, that the State courts have indicated that the first two items overstepped the authority of the Legislature for some of its members: modifying the money match program going forward and changing the 8% guarantee to a career guarantee, rather than an annual one. The final outcome of the challenges is still unclear, however, and the actuarial impact upon rates for Metro's pool has not even been estimated. Indications are that it will be 8 to 18 months before court action is finalized and rates will be adjusted to account for the Courts' findings.

Even without taking into account any adverse impacts of the court challenges, OPERS costs to Metro are rising rapidly. Last year Metro paid 7.14% of salaries and wages to OPERS. That rate (based upon the 2003 valuation, which incorporated losses experienced in 2002) increased 4.66 percentage points on July 1, 2005 to 11.80 percent of salaries and wages. In two years, unless unforeseen earnings or losses intervene, it will increase another 4.66 percentage points to 16.46 percent of salaries and wages. These increases are caused only by poor earnings accruing to the OPERS investment portfolio and policy choices that had adverse impacts on payout and earnings and do not relate to adverse court rulings regarding the 2003 Legislative Reforms.

Every jurisdiction pays a different percentage of their payroll to cover OPERS-related costs. The rate paid depends in part on whether the jurisdiction participates (or participated at one time) in one of several actuarial "pools", or whether it is treated as a single, independent employer. To reduce volatility of earnings and losses, Metro chose in 1999 to join a pool within OPERS that included Multnomah County and the City of Portland. When Metro joined the pool it entered with a \$7.1 million actuarial surplus as seen in the table below. However, significant losses were incurred in Metro's portion of the OPERS portfolio in 2000, 2001, 2002 and 2003. The losses are shown in the following table:

METRO'S OUTSTANDING UAL BALANCE

Remaining 1999 UAL	\$ (7,036,321)
Remaining 2000 Loss	3,171,354
Remaining 2001 Loss	26,452,706
Remaining 2002 Loss	39,182,032
Remaining 2003 Loss	7,947,053
2003 OPERS Reform Legislation	(51,640,261)
UAL as of 12/31/2003	\$ 18,076,563

Additional losses have occurred since and are expected to occur over the next several months such that the unfunded actuarial liability by the end of October of 2005 is expected to be \$23,935,891.

Note, that the OPERS actuary has credited savings equal to \$51,640,563 attributable to the package of reforms passed by the Oregon Legislature in 2003. We know that the State court has not upheld some of those reforms and another court is deciding a case in Eugene (the Lipscomb case). It is not known at this time what the impact might be on the UAL by these decisions—losing all or part of the \$51.6 million savings.

Ultimately, the actuary bases a rate upon a complex calculation involving current and past statistics and future projections of Metro's

- Total payroll,
- Earnings within the pool,
- Demographics—including the age and seniority of Metro employees and the number of retiree and potential retirees in Tier 1 and Tier 2, and
- The Unfunded Actuarial Liability.

For jurisdictions with an unfunded actuarial liability (“UAL”), embedded within the total payroll rate is a portion dedicated to repayment of that shortfall, calculated at 8% interest. Thus, OPERS currently requires Metro make payments that would eliminate its unfunded liability over a period of approximately 23 years and charges Metro eight percent per annum on the unfunded balance because OPERS expects, over the long term, to earn eight percent on its investments. Thus, there is little that Metro can do to moderate the increase other than reduce payroll or reduce the UAL. It has, however, taken one action and by this resolution is contemplating another:

- *First, Metro has chosen to set aside 6.5 percent of payroll against future increases due to adverse court findings.* It currently has about \$5 million of reserves set aside for this purpose and will add another \$2.4 million by the end of FY 2005-06. The stated purpose of the reserve at the time it was created was to use if and when rates were increased due solely to adverse court findings—not to offset the unfunded actuarial liability of the fund which was assumed would be funded by increased rates over the next 23 years.
 - Note, however that last year those funds earned about 1.8% for the fiscal year and are currently earning only 2.8% per annum in Metro’s investment accounts.
 - OPERS is expected to reduce the payroll rate approximately 4.1 percentage points if the UAL is eliminated.
 - Because OPERS charges 8% per annum on the UAL, the benefit of bonding only \$18 million and using the \$5 million reserve is tantamount to investing the \$5 million at 8% per annum rather than the current 2.9%. However, the 2.9% could rise over the next few years, however, while the 8% will not.
 - Whereas Metro as a whole would benefit from the reduced rates, each Department within Metro has contributed to the Reserve over the last two fiscal years. [see attachment 1]
- *Second, under current bond market conditions, Metro could finance its portion of the liability at approximately 6% instead of the 8% charged by OPERS (a taxable rate – under federal law, these must be sold on a taxable basis) through the bond market, potentially minimizing some of the future cost increases.*
 - In order to achieve savings the funds deposited with OPERS must earn more than the cost of the borrowing over its life. If the funds earn more than the cost of the borrowing, a jurisdiction that chooses to refinance will have lower OPERS costs than a jurisdiction that does not make that choice.
 - Assuming the actuary’s expected return assumption of 8% proves accurate, the savings to a jurisdiction at a 6% borrowing rate equal approximately 20% on a present value basis of the amount borrowed. Other earnings rates and borrowing rates were examined. [see Appendix 2]
 - Since 1970, OPERS investments have averaged roughly 12% returns.
 - Barring any extraordinary payouts by the OPERS Commission, any earnings over 8% by the fund could be used to reduce Metro’s current liability. Nevertheless, if such an offset

did occur, the contributed revenue from the sale of Bonds now would reduce OPERS rates throughout the 23-year actuarial cycle. The jurisdiction that borrows "too much" would be in a surplus position, with payroll rates reduced still further by the surplus amount available.

- If any level of bonding is selected, to ensure that the rate of interest on the Bonds will be less than the rate of interest that OPERS currently expects to earn, and given that there is a cost of issuance equal to about \$360,000 (1.5% of the total bond size) the Bonds should not be sold if the true interest cost (TIC) would be more than 6.50% per annum.
- Success from borrowing depends on the return on OPERS investments exceeding the rate on the bond.
 - If returns equal 8% over 23-year period (as assumed by OPERS) over the life of the bonds, costs will be reduced as estimated.
 - If returns are greater than 8%, cost reductions will be greater than projected.
 - If returns are less than 8% but more than the cost of borrowing OPERS cost reductions will be less than projected.
 - If returns are less than the bond yield, borrowers will be worse off than those who do not borrow. [see Appendix 3]
 - NOTE: Whereas the tax-exempt market consistently expects and frequently exercises call provisions within its bond covenants, the taxable market seldom has such provisions and, if they do, only at substantial cost.

Payroll rate reductions are immediate upon payment to OPERS. If a jurisdiction sends funds to OPERS on September 22, 2005, rates will be adjusted downward immediately as of October 1, 2005. How much Metro's rates will be adjusted depends upon the specific demographic variables affecting Metro. However, OPERS will provide that information in advance for a fee of \$1,000.

The annual debt service costs will simply replace a portion of the existing payment you make to OPERS. Be aware, however, that the actuary projects the dollar costs of OPERS to rise as payrolls rise. Debt service that is structured to match the OPERS amortization structure will therefore increase over time as well, although hopefully by a lesser amount.

Risks of bonding / not bonding thus hinge on three unknown factors:

- What will happen to earnings of the OPERS fund (specifically, Metro's pool) over the next 23 years and how might those earnings be used to offset Metro's current UAL? [see Appendix 3]
- What might happen to the return on Metro's reserve over the next 23 years? [see Appendix 4]
- What will be the impact of judicial decisions regarding the 2003 Legislative reforms?

Key dates:

JULY 21

IF COUNCIL AGREES, PASSING A RESOLUTION AUTHORIZING (BUT NOT REQUIRING) THE SALE OF BONDS PLEDGING METRO'S GENERAL FUND TO SERVICE THE BONDS.

July 22

Request a "payoff" letter from OPERS indicating the exact amount of the liability and the impact of paying off the UAL

August

Preparation of materials for Metro's portion of the Official Statement

September 1	File a supplemental budget to account for the Funding of the Unfunded Actuarial Liability with the Council Office
September 6	Final Opt-out Date for Bond Pool
September 13	First Reading of the Supplemental Budget
September 13	Bond Pricing
Week of September 19	TSCC hearing regarding the Supplemental Budget
September 29	Bond Closing
September 30	Payment to OPERS
October 1	Reduced OPERS Rates take effect

ANALYSIS/INFORMATION

1. **Known Opposition** None that is known.
2. **Legal Antecedents** Sections 11 and 11b of Article XI of the Oregon Constitution and ORS 288.150
3. **Anticipated Effects** The resolution would authorize staff to issue a taxable bond pledging Metro's General Fund in repayment. The proceeds would be used to payoff the existing OPERS Unfunded Actuarial Liability in the amount of approximately \$23,935,891 in order to reduce the rate charged by OPERS to Metro about 4.0 percentage points (an impact that will be verified with the OPERS actuary). Total savings over the 23-year life of the bond would be about \$4,473,214 depending upon the rate of interest at which the bonds are sold. The rate is expected to be about 6% per annum. A rate above 6.5% would reduce savings to the extent that sale of the Bonds on about September 29th would not be sold. Metro may chose to finance a portion of the repayment itself with amounts currently set aside in its OPERS Reserve Fund which currently amounts to about \$4.9 million.
4. **Budget Impacts** Payment of the unfunded actuarial liability would reduce the percentage of payroll that is required at present to be paid to OPERS. Any amount of OPERS Reserve Fund used to augment the bonded amount would remove from Metro's accounts the amount accruing in Metro's Pooled Investment Fund to that amount but would reduce both the size of the bond and the current OPERS rate.

RECOMMENDED ACTION

Staff recommends that:

- It be authorized to seek from OPERS an exact accounting of Metro's UAL and the rate reduction that would immediately follow the payment of that amount.
- It be authorized to continue to explore trends and factors that might argue for/against moving forward with a bond sale on or about September 21, 2005. Because of the nature of the Taxable Bond market, a larger bond size is necessary to procure optimal bids for bonds, probably requiring a pool of other entities seeking to bond their UAL. A pool offered by Seattle Northwest Securities for pricing on or about September 13, 2005 is the only such pool currently being assembled and is the only firm that has assembled such pools in Oregon. We would propose to negotiate with that underwriter.

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- Staff explore the options and consequences of continuing the 6.5 percent of payroll reserve to mitigate future increases.
- Council approve Resolution 05-3598 which permits the sale of bonds to fully fund the unfunded portion of Metro's Actuarial Liability.

ATTACHMENT 1
Resolution No. 05-3598

Components of PERS Reserve
By Fund & Department (Consolidated Fund Structure)

	FY 2003-04 Actual	FY 2004-05 Actual	2-YEAR RESERVE TOTAL
General Fund			
Auditor	\$21,268	\$16,848	\$38,116
Council	\$47,070	\$55,277	\$102,347
Finance & Admin. Services ⁽¹⁾	\$206,985	\$209,596	\$416,581
Human Resources	\$35,369	\$37,273	\$72,642
Metro Attorney	\$45,741	\$49,009	\$94,750
Oregon Zoo	\$549,553	\$553,741	\$1,103,294
Planning	\$327,906	\$331,272	\$659,178
Public Affairs ⁽²⁾	\$37,990	\$50,236	\$88,226
Regional Parks ⁽³⁾	\$139,309	\$155,331	\$294,640
<i>Subtotal General Fund</i>	\$1,411,191	\$1,458,583	\$2,869,774
MERC Operating Fund			
Administration	\$36,628	\$40,154	\$76,782
Expo Center	\$54,696	\$54,433	\$109,129
Oregon Convention Center	\$314,787	\$316,034	\$630,821
PCPA	\$181,532	\$182,059	\$363,591
<i>Subtotal MERC Operating Fund</i>	\$587,643	\$592,680	\$1,180,323
Solid Waste Revenue Fund	\$394,462	\$399,242	\$793,704
Open Spaces Fund	\$25,491	\$25,896	\$51,387
Risk Management Fund	\$19,782	\$5,997	\$25,779
MERC Pooled Capital Fund	\$15,830	\$19,291	\$35,121
Zoo Capital Fund	\$3,098	\$2,985	\$6,083
<i>Subtotal All Other Funds</i>	\$458,663	\$453,411	\$912,074
TOTAL PERS RESERVE	\$2,457,497	\$2,504,674	\$4,962,171

NOTES:

⁽¹⁾ Includes Building Management Fund as well as Support Services Fund

⁽²⁾ Includes General Fund & Support Services Fund portions of Public Affairs

⁽³⁾ Smith & Bybee Lakes Fund portion to be paid from Regional Parks Operations

ATTACHMENT 2
Resolution 05-3598
PERS Bonding Liability Discussion
Council Work Session July 12, 2005

A. Refinancing analysis at various interest rates

Assumptions:

- bonding full estimated outstanding liability of approximately \$23.935 million
- lump sum deposit earns 8%

Scenario	Total Savings	Net Present Value Savings
5.50% TIC	\$9,947,067	\$5,946,231
6.00% TIC	\$7,562,982	\$4,473,214
6.50% TIC	\$5,067,201	\$3,065,757

B. Reinvestment analysis at various rates of return

Assumptions:

- bonding full estimated outstanding liability of approximately \$23.935 million
- 6.00 % TIC borrowing cost

Reinvestment Scenario	Total Earnings	Net Present Value Earnings
12.00%	\$48,331,450	\$19,180,462
8.00%	\$7,562,982	\$4,473,213
4.00%	(\$13,777,481)	(\$4,113,796)

C. Comparison of earnings potential on \$5.0 million reserve

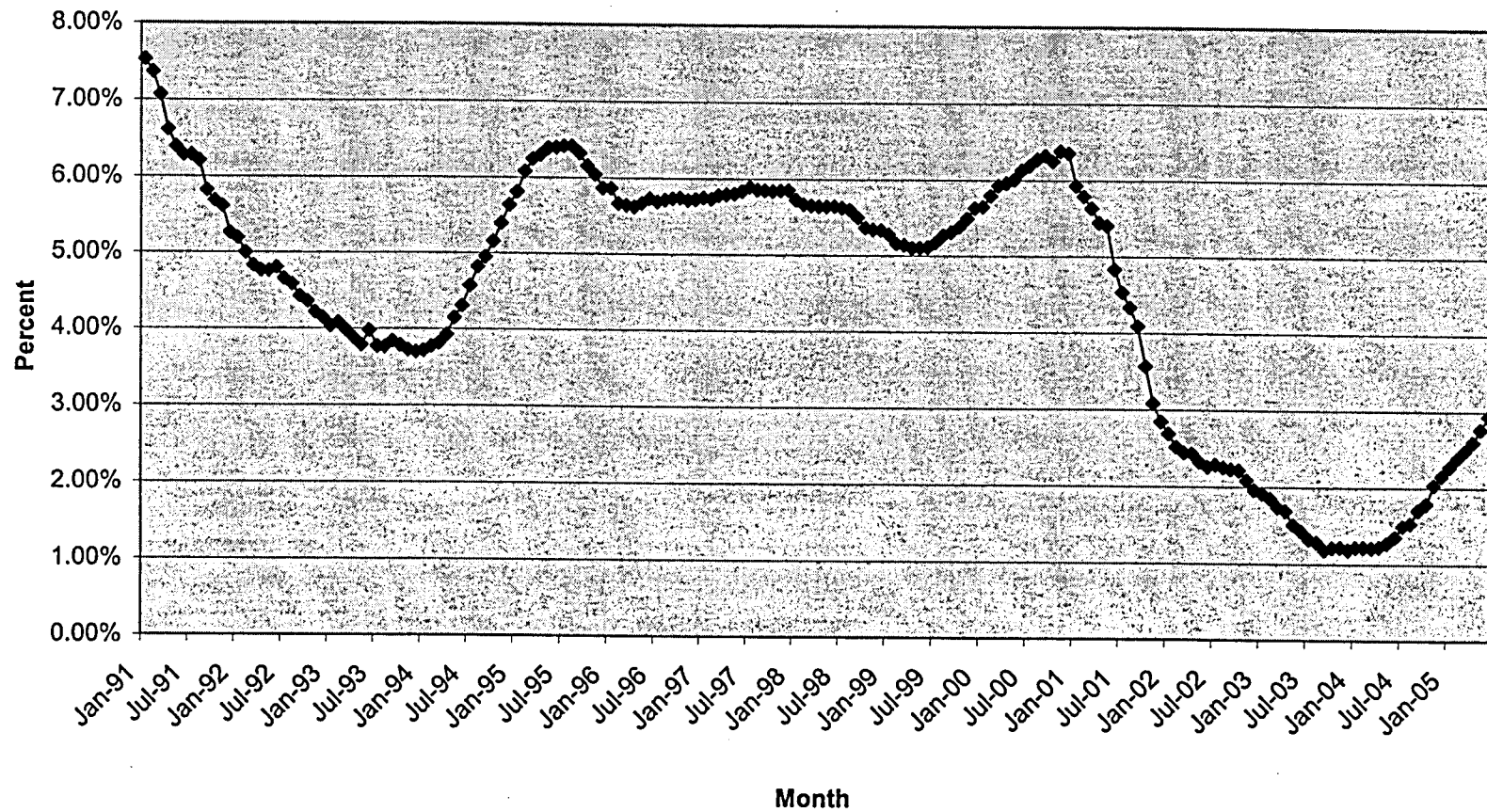
Assumptions:

- Initial investment equal to \$5.0 million reserve currently on hand
- Lump sum deposited with PERS earns 8.0%
- Metro cash investment earns current rate of 2.9%

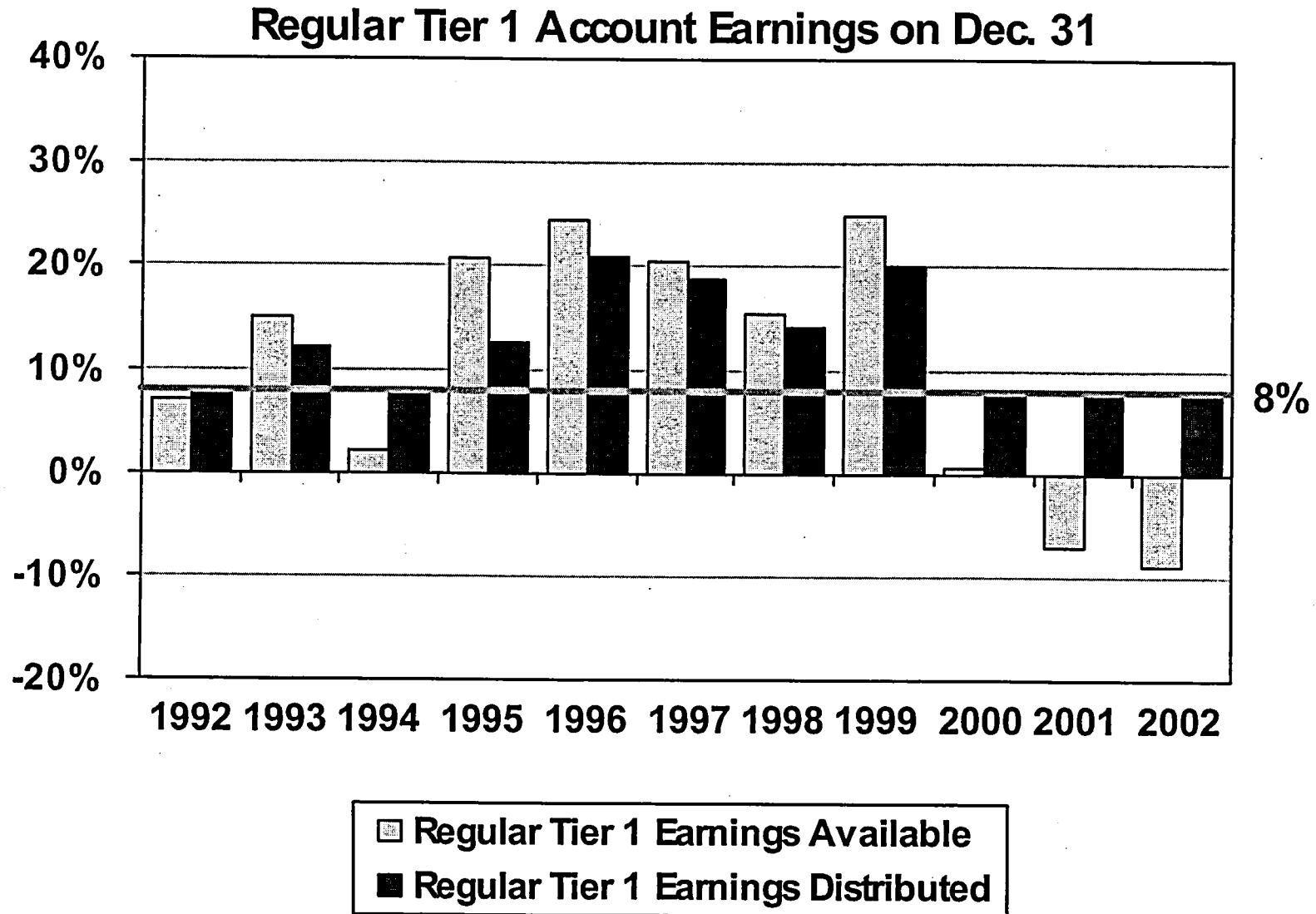
Investment Scenario	Total Earnings	Net Present Value Earnings
\$5.0 million deposit with PERS	\$11,760,479	\$5,938,211
\$5.0 million Metro cash investment	\$8,226,249	\$3,132,502
Difference	\$3,534,230	\$2,805,709

ATTACHMENT 3
Resolution No. 05-3598

Metro's Pooled Cash Yield



ATTACHMENT 4
Resolution 05-3598



BEFORE THE METRO COUNCIL

A RESOLUTION OF METRO, OREGON,)	RESOLUTION NO. 05-3598
AUTHORIZING A LIMITED TAX)	
PENSION BOND, SERIES 2005 TO)	Introduced by Michael Jordan, Chief
SATISFY METRO'S UNFUNDED)	Operating Officer with the concurrence of
OREGON PUBLIC EMPLOYEE)	the Council President
RETIREMENT SYSTEM ACTUARIAL)	
LIABILITY)	

WHEREAS, Metro is authorized by ORS 238.692 to 238.698 (the "Act") to issue limited tax bonds as defined in ORS 288.150 to finance its pension liability; and,

WHEREAS, the Act and ORS 288.150 permit Metro to pledge its full faith and credit and taxing power within the limitations of Sections 11 and 11b of Article XI of the Oregon Constitution to pay those bonds; and,

WHEREAS, Section 2 of ORS 238.694 of the Act provides "Notwithstanding any limitation on indebtedness or borrowing under state or local law, for the purpose of obtaining funds to pay the pension liability of a governmental unit, the governing body of a governmental unit may authorize and cause the issuance of limited tax bonds as defined in ORS 288.150..." and the Act therefore supersedes any state or local debt limitations of Metro; and,

WHEREAS, Metro has an unfunded pension liability to the Oregon Public Employees Retirement System ("OPERS") which was estimated to be \$18,461,566 as of December 31, 2003; and,

WHEREAS, OPERS currently requires Metro to pay this unfunded liability over a period of years with interest at eight percent per annum; and,

WHEREAS, current interest rates in the bond market create the opportunity for Metro to finance its unfunded pension liability and potentially reduce its costs; and,

WHEREAS, a pooled pension bond program ("Program") may reduce costs for participating governments; and,

WHEREAS, the Program does not require Metro to pay any portion of another government's pension bonds or liabilities to OPERS; now therefore,

THE METRO COUNCIL RESOLVES:

Section 1. Definitions.

Unless the context clearly requires otherwise, the following terms shall have the following meanings:

"Additional Charges" means the fees and other charges of the Program Trustee, as defined in the Program Trust Agreement and any indemnity payments due under Section 6(3) of this Resolution.

"Available General Funds" means: (i) all Metro's ad valorem property tax revenues received from levies under its permanent rate limit; and (ii) all other unrestricted taxes, fees, charges, revenues and receipts of Metro which Oregon law allows to be spent to make the Bond Payments.

“Bond Payments” means the principal and interest payments due under the Bond.

“Bond” means Metro’s Limited Tax Pension Bond, Series 2005, that is authorized by Section 2 of this Resolution.

“Business Day” means any day except a Saturday, a Sunday, a legal holiday, a day on which the offices of banks in Oregon or New York are authorized or required by law or executive order to remain closed, or a day on which the New York Stock Exchange or the Program Trustee is closed.

“Metro Official” means the Chief Operating Officer or the Chief Financial Officer of Metro, or the person designated by the Chief Operating Officer or the Chief Financial Officer to act as Metro Official under this Resolution.

“Metro” means Metro, Oregon.

“Event of Default” refers to an Event of Default listed in Section 8(1) of this Resolution.

“Government Obligations” means direct noncallable obligations of the United States, or obligations the principal of and interest on which are fully and unconditionally guaranteed by the United States, or any other security which the Program Trust Agreement allows to be used as a defeasance obligation.

“Payment Date” means a date on which Bond principal or interest is due, whether at maturity or prior redemption.

“Program” means the pooled pension bond program implemented through the Program Trust Agreement.

“Program Obligations” means the obligations issued by the Program Trustee under the Program Trust Agreement which are payable from the Bond Payments and similar pension bond payments made by other participants in the pension bond program.

“Program Trust Agreement” means the Trust Agreement between the Program Trustee, Metro and other issuers of pension bonds which are sold to the Program Trustee, in which the Program Trustee agrees to hold the Bond and to distribute the Bond Payments to the owners of Program Obligations.

“Program Trustee” means Wells Fargo Bank, National Association, as trustee under the Program Trust Agreement, or its successors.

“Resolution” means this Resolution, including any amendments made in accordance with Section 7 of this Resolution.

“Security Payments” means the payments Metro is required to make on the 15th day of the month which precedes each Payment Date. The Security Payments are equal to the amount required to be paid on that Payment Date.

Section 2. Bond Authorized.

- (1) Metro hereby authorizes the issuance, sale and delivery of its Limited Tax Pension Bond, Series 2005, in accordance with this Resolution and in an amount which is sufficient to produce net proceeds which do not exceed the most recent estimate of Metro’s unfunded pension liability to OPERS which Metro receives from OPERS prior to selling the Bond, plus the costs of issuing and selling the Bond, obtaining credit enhancement, paying Metro’s share of any costs of the

Program Trustee and any other costs of participating in the Program, and paying any interest on the Bond subject to Section 2(3) herein.

- (2) The issuance of the Bond and the participation in the Program shall not obligate Metro to pay any portion of another government's pension bonds or liabilities to OPERS.
- (3) Bond proceeds shall be used to pay Metro's unfunded pension liability to OPERS, to pay interest on the Bond for a period not to exceed three years and to pay costs of issuing and selling the Bond, including any costs of the Program Trustee and credit enhancement.
- (4) The Bond shall be a "federally taxable bond" which bears interest that is not excludable from gross income under Section 103(a) of the Internal Revenue Code of 1986, as amended. Interest shall, however, be exempt from Oregon personal income taxation.
- (5) OPERS currently requires Metro to pay this unfunded liability over a period of years. OPERS charges Metro eight percent per annum because OPERS expects, over the long term, to earn eight percent on its investments. Refinancing that liability at a lower rate of interest should, therefore, reduce costs for Metro. To ensure that the rate of interest on the Bond will be less than the rate of interest which OPERS expects to earn, the Bond shall not be sold at a true interest cost of more than 6.50% per annum.

Section 3. Delegation.

If the Metro Official determines that Metro shall issue the Bond, the Metro Official is hereby directed, on behalf of Metro and without further action by the Metro Council, to:

- (1) Participate in the preparation of, authorize the distribution of, and deem final any official statement or other disclosure documents relating to the Bond or the Program Obligations.
- (2) Establish the final principal amounts, maturity schedules, interest rates, sale prices and discount, redemption terms, payment terms and dates, Security Payment terms, and other terms of the Bond.
- (3) Negotiate the terms of, and enter into a bond purchase agreement, which provides for the acquisition of the Bond by the Program Trustee.
- (4) Approve and execute and deliver an intergovernmental agreement and the Program Trust Agreement, or an intergovernmental agreement which is combined with the Program Trust Agreement, which directs the Program Trustee to issue the Program Obligations and provides for the administration of funds held by the Program Trustee, and any other agreements or documents which may be required for participation in the Program. However, delivery of the Bond to the Program Trustee shall constitute execution of the Program Trust Agreement by Metro, and Metro shall be bound by the Program Trust Agreement upon delivery of the Bond to the Program Trustee.
- (5) Undertake to provide continuing disclosure for the Bond in accordance with Rule 15c2-12 of the United States Securities and Exchange Commission.
- (6) Apply for ratings on the Bond or the Program Obligations and purchase municipal bond insurance or obtain other forms of credit enhancements for the Bond or the Program Obligations,

enter into agreements with the providers of credit enhancement, and execute and deliver related documents.

- (7) Execute and deliver the Bond to the Program Trustee.
- (8) Negotiate the terms of, and enter into guaranteed investment contracts or other agreements for the investment of capitalized interest, if any.
- (9) Execute and deliver any agreements or certificates and take any other action in connection with the Bond which the Metro Official finds is desirable to permit the sale and issuance of the Bond in accordance with this Resolution.

Section 4. Security for Bond.

- (1) Metro hereby pledges its full faith and credit and taxing power within the limitations of Sections 11 and 11b of Article XI of the Oregon Constitution to pay the Bond. The Bond shall be a limited tax bond of Metro as defined in ORS 288.150, and Metro shall pay the Bond from its Available General Funds. Metro is not authorized to levy additional taxes to pay the Bond.
- (2) To secure the payment of the Bond, Metro shall make the Security Payments as provided in the Bond. The Security Payments shall be applied to make Bond Payments.
- (3) This Resolution shall constitute a contract with the Trustee, and the owners of the Program Obligations shall be third-party beneficiaries of this contract.

Section 5. Redemption.

The principal component of Bond Payments shall be subject to redemption on the dates and at the prices established by the Metro Official pursuant to Section 3(2) and in accordance with the Program Trust Agreement.

Section 6. Covenants.

Metro hereby covenants and agrees with the owner of the Bond as follows:

- (1) Metro shall promptly cause Security Payments and the principal, premium, if any, and interest on the Bond to be paid as they become due in accordance with the provisions of this Resolution and the Bond.
- (2) Metro covenants for the benefit of the Program Trustee to pay the Additional Charges reasonably allocated to it by the Program Trustee, in accordance with the invoices for such Additional Charges which are provided by the Program Trustee pursuant to the Program Trust Agreement.
- (3) To the extent permitted by law, Metro covenants and agrees to indemnify and save the Program Trustee harmless against any loss, expense or liability which is reasonably allocable to Metro and which the Program Trustee may incur arising out of or in the exercise or performance of its duties and powers under the Program Trust Agreement relating to the Bond, including the costs and expenses of defending against any claim or liability, or enforcing any of the rights or remedies granted to it under the terms of the Program Trust Agreement in connection with the Bond, excluding any losses or expenses which are due to the Trustee's breach of fiduciary duties, negligence or willful misconduct. The obligations of Metro under this Section 6(3) shall survive

the resignation or removal of the Program Trustee under the Program Trust Agreement and the payment of the Program Obligations and discharge under the Program Trust Agreement. The damages claimed against Metro shall not exceed the damages which may be allowed under the Oregon Tort Claims Act, Oregon Revised Statutes Section 30.260, et seq., unless the provisions and limitations of such act are preempted by federal law, including, but not limited to the federal securities laws.

Section 7. Amendment of Resolution.

Metro may amend this Resolution only in accordance with the Program Trust Agreement.

Section 8. Default and Remedies.

- (1) The occurrence of one or more of the following shall constitute an Event of Default under this Resolution:
 - (A) Failure by Metro to pay Bond principal, interest or premium when due (whether at maturity, or upon redemption after principal components of Bond Payments have been properly called for redemption);
 - (B) Failure by Metro to make any Security Payment within five Business Days after it is due;
 - (C) Failure by Metro to observe and perform any covenant, condition or agreement which this Resolution requires Metro to observe or perform for the benefit of the Program Trustee, other than as set forth in Section 8(1)(A) or 8(1)(B), which failure continues for a period of 60 days after written notice to Metro by the Program Trustee specifying such failure and requesting that it be remedied; provided however, that if the failure stated in the notice cannot be corrected within such 60 day period, it shall not constitute an Event of Default so long as corrective action is instituted by Metro within the 60 day period and diligently pursued, and the default is corrected as promptly as practicable after the written notice referred to in this Section 8(1)(C); or,
 - (D) Metro is adjudged insolvent by a court of competent jurisdiction, admits in writing its inability to pay its debts generally as they become due, files a petition in bankruptcy, or consents to the appointment of a receiver for the installment payments.
- (2) The Program Trustee may waive any Event of Default and its consequences, except an Event of Default described in Section 8(1)(A).
- (3) If an Event of Default occurs and is continuing the Program Trustee may exercise any remedy available at law or in equity; however, the Bond Payments shall not be subject to acceleration.
- (4) No remedy in this Resolution conferred upon or reserved to the Program Trustee is intended to be exclusive and every such remedy shall be cumulative and shall be in addition to every other remedy given under this Resolution or now or hereafter existing at law or in equity. No delay or omission to exercise any right or power accruing upon any default shall be construed to be a waiver thereof, but any such right and power may be exercised from time to time and as often as may be deemed expedient. To entitle the Program Trustee to exercise any remedy reserved to it, it shall not be necessary to give any notice other than such notice as may be required by this Resolution or by law.

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Section 9. Defeasance.

Metro may defease all or any portion of the Bond Payments in accordance with the Program Trust Agreement.

Section 10. Form.

The Bond shall be issued as a single installment bond in substantially the form attached hereto as Exhibit A, with such changes as may be approved by the Metro Official. The Bond shall be executed on behalf of Metro with the manual signature of the Metro Official.

Section 11. Rules of Construction.

In determining the meaning of provisions of this Resolution, the following rules shall apply unless the context clearly requires application of a different meaning:

- (1) References to section numbers shall be construed as references to sections of this Resolution.
- (2) References to one gender shall include all genders.
- (3) References to the singular shall include the plural, and references to the plural shall include the singular.

Section 12. Effective Date.

This resolution shall take effect on the date of its adoption by the Metro Council.

ADOPTED by the Metro Council this 21st day of July, 2005.

David Bragdon, Council President

APPROVED AS TO FORM:

Daniel B. Cooper, Metro Attorney

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Exhibit A

Form of Bond

No. R-«BondNumber»

\$«PrincipalAmtNumber»

United States of America
State of Oregon
Counties of Multnomah, Washington, and Clackamas
Metro
Limited Tax Pension Bond
Series 2005

Dated Date: _____

Registered Owner: ---WELLS FARGO BANK, NATIONAL ASSOCIATION, as Trustee---

Principal Amount: ---\$«PrincipalAmtSpelled» Dollars---

Metro, Oregon (the "Metro"), for value received, acknowledges itself indebted and hereby promises to pay to the registered owner, which is WELLS FARGO BANK, NATIONAL ASSOCIATION, as Trustee (the "Program Trustee") under the Trust Agreement among the Program Trustee and the issuers of pension bonds which is dated as of ___, 2005 (the "Program Trust Agreement"), the Principal Amount indicated above, in installments as provided in Exhibits A and B attached hereto, together with interest thereon as provided below, computed on the basis of a 360-day year of twelve 30-day months.

To provide additional security, Metro covenants to make payments (the "Security Payments") to the Program Trustee on the dates and in the amounts shown in Exhibit C attached hereto.

Each Security Payment shall be credited against the Bond principal and interest payment which is due on the first day following that Security Payment.

This Bond is Metro's Limited Tax Pension Bond, Series 2005 (the "Bond"). This Bond is issued for the purpose of financing Metro's pension liability to the Oregon Public Employees Retirement System. This Bond is authorized and issued under Metro Resolution No. __ (the "Resolution") and ORS 238.692 to 238.698 and ORS 288.150, in full and strict accordance and compliance with all of the provisions of the Constitution and Statutes of the State of Oregon and the Metro Charter. Capitalized terms used in this Bond have the meanings defined for such terms in the Resolution.

This Bond is issued in conjunction with and subject to the terms and conditions of the Program Trust Agreement. Metro's obligations under this Bond, the Program Trust Agreement and the Program are limited to paying the principal, interest and any premium on this Bond by making the Security Payments, and to paying the Additional Charges. The issuance of this Bond and the participation by Metro in the Program shall not obligate Metro to pay any portion of another government's pension bonds or liabilities to OPERS.

This Bond is a legal, valid and binding limited tax bond of Metro which is enforceable against Metro in accordance with its terms. Metro's full faith and credit and taxing power within the limitations of Sections 11 and 11b of Article XI of the Oregon Constitution are pledged for the punctual

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payment of the principal of and interest on this Bond. Metro has covenanted to pay this Bond from its "Available General Funds" as defined in the Resolution. Metro is not authorized to levy any additional taxes to pay this Bond. This Bond does not constitute a debt or indebtedness of Multnomah, Washington, or Clackamas Counties, the State of Oregon, or any political subdivision thereof other than Metro.

The principal components of the Bond Payments are subject to redemption [insert redemption provisions].

[insert redemption procedure]

The Bond may not be transferred to any person other than a successor Program Trustee.

IT IS HEREBY CERTIFIED, RECITED, AND DECLARED that all conditions, acts, and things required to exist, to happen, and to be performed precedent to and in the issuance of this Bond have existed, have happened, and have been performed in due time, form, and manner as required by the Constitution and Statutes of the State of Oregon and the Metro Charter, and that the issue of which this Bond is a part, and all other obligations of Metro, are within every debt limitation and other limit prescribed by such Constitution and Statutes and Metro Charter.

IN WITNESS WHEREOF, the Metro Council, by Resolution duly passed, has caused this Bond to be signed by the manual signature of its Metro Official, all as of the date first above written.

Metro, Oregon

Metro Official