A G E N D A

600 NORTHEAST GRAND AVENUE | PORTLAND, OREGON 97232 2736
TEL 503 797 1542 | FAX 503 797 1793

METRO

Agenda

MEETING:	METRO COUNCIL WORK SESSION MEETING
DATE:	May 3, 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, MAY 5, 2005/ ADMINISTRATIVE/CHIEF OPERATING OFFICER AND CITIZEN COMMUNICATIONS**	
2:15 PM	**2.**	**UPDATE ON THE FAMILY FARM AND CONDOR PROJECTS**	Vecchio
3:15 PM	**3.**	**BREAK**	
3:20 PM	**4.**	**NATURE IN THE NEIGHBORHOODS LEGISLATION**	Deffebach
4:20 PM	**5.**	**COUNCIL BRIEFINGS/COMMUNICATION**	

ADJOURN

Agenda Item Number 2.0

UPDATE ON THE FAMILY FARM AND CONDOR PROJECTS

Metro Council Work Session
Tuesday, May 3, 2005
Metro Council Chamber

METRO COUNCIL

Work Session Worksheet

Presentation Date: May 3, 2005 Time: 2:15 Length: 60 minutes

Presentation Title: Update on the Family Farm and Condor Project

Department: Oregon Zoo

Presenters: Tony Vecchio, Mia Reager, Charis Henri, Ben White - Student at De La Salle North Catholic High School, Joe Burnett

ISSUE & BACKGROUND

Family Farm Update -
Trillium Creek Family Farmed opened in July of 2004. From its inception, the farm has been a place where people and animals meet. For many years, education reforms in Oregon, have called for students getting "real world" work experience. This coupled with the fact the Zoo has been a magnet for students interested in animals and the environment, has allowed us to create a new program building on our already successful youth volunteer program. In the 9 months since the exhibit opened, teens have become the animal care takers and are beginning to develop skill that will allow them to become effective educators at the farm.

Condor Project Update –
Oregon Zoo's first California condor emerged from its shell last spring, it was the first condor hatched in Oregon in a century. The second California condor chick has now hatched in Oregon emerging from its shell at the zoo's Jonsson Center for Wildlife Conservation in mid-April. With this hatching, there are now 245 California condors in the world. The zoo is still incubating two additional eggs.

The zoo is in the process of bidding out the construction of the second phase of the condor breeding facility to be constructed over the summer of 2005. The addition of the second phase buildings will allow the zoo to double the number of birds in the breeding program and create a pre-flight aviary where juvenile condors will learn how to survive in the wild.

OPTIONS AVAILABLE

N/A

IMPLICATIONS AND SUGGESTIONS

N/A

QUESTION(S) PRESENTED FOR CONSIDERATION

N/A

LEGISLATION WOULD BE REQUIRED FOR COUNCIL ACTION __Yes _X_No
DRAFT IS ATTACHED ___Yes _X_No

SCHEDULE FOR WORK SESSION

Department Director/Head Approval _____
Chief Operating Officer Approval _____

Agenda Item Number 4.0

NATURE IN NEIGHBORHOODS LEGISLATION

Metro Council Work Session
Tuesday, May 3, 2005
Metro Council Chamber

METRO COUNCIL

Work Session Worksheet

Presentation Date: 5/2/05 Time: Length: 60 min

Presentation Title: Nature in the Neighborhoods Legislation

Department: Planning

Presenters: Deffebach, Cotugno, Curtis

ISSUE & BACKGROUND

The Council Is currently reviewing three different pieces of legislation relating to the Nature In Neighborhoods Initiative:

- Resolution 05-3574 Establishing a regional habitat protection, restoration and greenspaces Initiative called Nature In Neighborhoods
- Resolution 05-3577 Approving the Tualatin Basin Natural Resources Coordinating Committee's Fish and Wildlife Habitat Protection Program
- Ordinance 05-1077 Amending the Regional Framework Plan and the Urban Growth Management Functional Plan relating to Nature In Neighborhoods

As part of the public and committee review of the legislation, staff and the Councilors have begun to hear a variety of comments and concerns. MTAC reviewed the recommendations on April 20 and will take final action on May 4. MPAC begins their review of the recommendations on April 27 and is scheduled to complete their considerations on May 11. The Goal 5TAC/WRPAC met on April 19 and 26 to develop their comments. The first public hearing is scheduled for April 28. Staff and councilors have made additional presentations to a variety of audiences on the proposals. Staff will submit written summaries of the major issues that have developed to date.

The purpose of the work session is to discuss the issues that have been raised and give councilors the opportunity to begin to those for consideration as possible amendments to the proposed legislation. The goal is to have written drafts of possible amendments ready for discussion at the May 10 work session, prior to consideration at the May 12 Council meeting.

OPTIONS AVAILABLE

Councilors can raise additional issues for staff clarification, as needed.

IMPLICATIONS AND SUGGESTIONS

Some indication of the issues that councilors would like to develop into amendments for consideration, either at the work session, or following the work session, will be helpful to facilitate a thorough discussion and preparation for upcoming meetings.

QUESTION(S) PRESENTED FOR CONSIDERATION

Which of the choices do you support, which do you need more information about and what alternatives do you have in mind.

LEGISLATION WOULD BE REQUIRED FOR COUNCIL ACTION __Yes _x_No
DRAFT IS ATTACHED ___Yes x___No

SCHEDULE FOR WORK SESSION

Department Director/Head Approval _____
Chief Operating Officer Approval _____

050505c-01

A G E N D A

600 NORTHEAST GRAND AVENUE | PORTLAND, OREGON 97232 2736
TEL 503 797 1542 | FAX 503 797 1793

METRO

Agenda

MEETING:	METRO COUNCIL REGULAR MEETING
DATE:	May 5, 2005
DAY:	Thursday
TIME:	2:00 PM
PLACE:	Metro Council Chamber

CALL TO ORDER AND ROLL CALL

1. INTRODUCTIONS

2. CITIZEN COMMUNICATIONS

3. TWELVE AXIOMS FOR URBAN DEVELOPMENT Russell/Baldwin

4. CONSENT AGENDA

4.1 Consideration of Minutes for the April 28, 2005 Metro Council Regular Meeting.

5. ORDINANCES - SECOND READING

5.1 **Ordinance No. 05-1078,** For the Purpose of Amending the FY 2004-05 Budget and Appropriations Schedule Transferring $1,466,000 from the Solid Waste and Recycling Operating Fund Contingency, Increasing Operating Expenditures in the Solid Waste and Recycling Operating Fund by $1,466,000 in Expenses related to Increased tonnage and Declaring an Emergency. Park

5.2 **Ordinance No. 05-1074A,** For the Purpose of Adopting the Annual Budget For Fiscal Year 2005-06, Making Appropriations, and Levying Ad Valorem Taxes, and Declaring an Emergency. Burkholder

6. RESOLUTIONS

6.1 **Resolution No. 05-3579**, For the Purpose of Approving the FY 2005-06 Budget and Transmitting the Approved Budget to the Tax Supervising And Conservation Commission. Burkholder

6.2 **Resolution No. 05-3549**, For the Purpose of Granting an Easement to Pacificorp for Non-Park Use over the OMSI-Springwater Trail Corridor. Liberty

6.3 **Resolution No. 05-3571**, For the Purpose of Authorizing the Chief Operating Officer to Contribute towards the Purchase of the Dernbach Property on Mt. Williams and Enter into an Intergovernmental Agreement and Declaring The Sauvie Island to Beaverton/Hillsboro Trail Project Infeasible; and Adopting the Beaverton Powerline Trail as a Replacement Trail Project. — Hosticka

6.4 **Resolution No. 05-3581**, For the Purpose of Council Adoption of Greenspaces Policy Advisory Committee Vision Statement. — McLain

7. CONTRACT REVIEW BOARD

7.1 **Resolution No. 05-3572**, For the Purpose of Authorizing the Chief Operating Officer to Execute Amendment 1 to the Contract No. 922793 With Reischman Concerts LLC for Provisions of Concerts at the Oregon Zoo. — Newman

8. OREGON LEGISLATIVE UPDATE

9. CHIEF OPERATING OFFICER COMMUNICATION

10. COUNCILOR COMMUNICATION

ADJOURN

Television schedule for May 5, 2005 Metro Council meeting

Clackamas, Multnomah and Washington counties, and Vancouver, Wash. Channel 11 -- Community Access Network www.yourtvtv.org -- (503) 629-8534 2 p.m. Thursday, May 5 (live)	**Washington County** Channel 30 -- TVTV www.yourtvtv.org -- (503) 629-8534 11 p.m. Saturday, May 7 11 p.m. Sunday, May 8 6 a.m. Tuesday, May 10 4 p.m. Wednesday, May 11
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.
Portland Channel 30 (CityNet 30) -- Portland Community Media www.pcatv.org -- (503) 288-1515 8:30 p.m. Sunday, May 8 2 p.m. Monday, May 9	

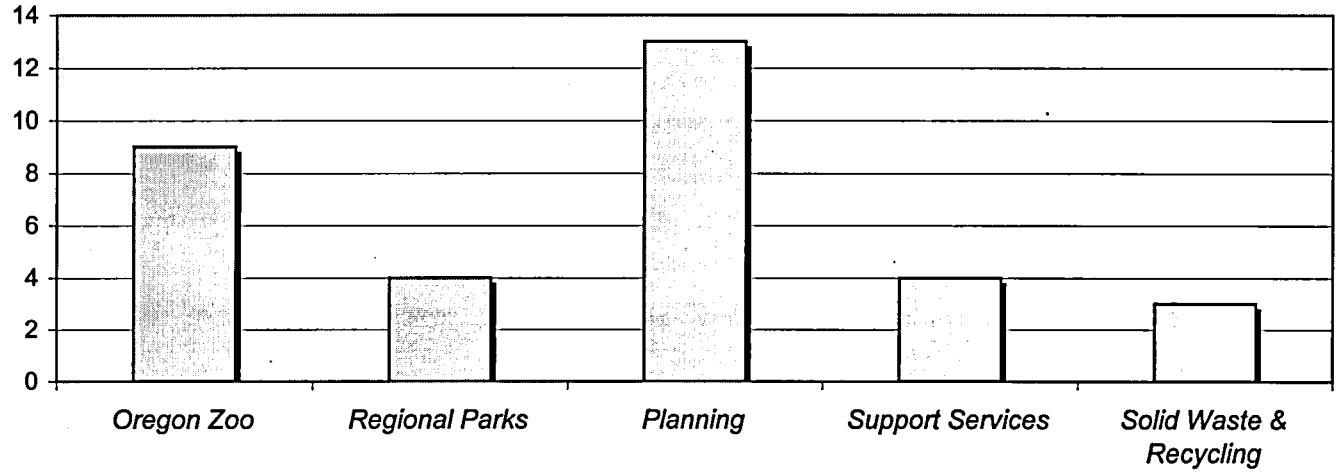
PLEASE NOTE: Show times are tentative and in some cases the entire meeting may not be shown due to length. Call or check your community access station web site to confirm program times.

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).

050305c-02

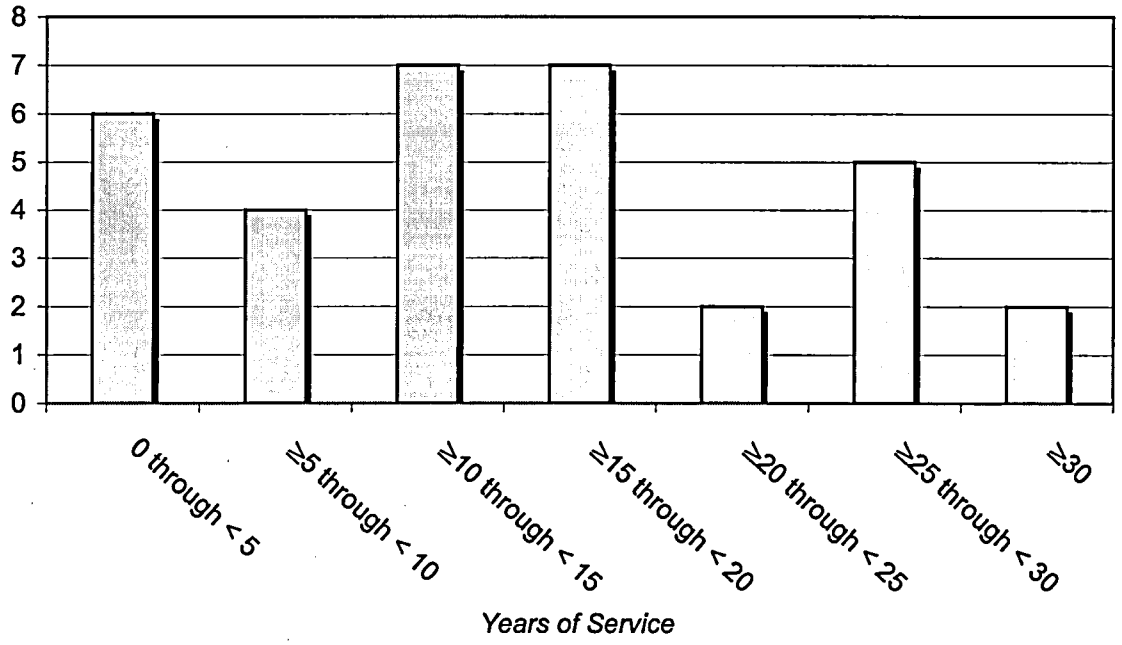
Voluntary Separation Program

Final Participation and Cost by Department/Fund through May 2, 2005



	Participants	Incentive Cost	Vacation Cost	Total Cost With Fringe	Projected FY 04-05 Salary Savings	Incentive Costs Recovered Beyond FY 04-05
Oregon Zoo	9	$176,860	$28,732	$264,802	$73,346	$191,456
Regional Parks	4	84,360	25,005	140,862	18,470	122,392
Planning	13	199,590	57,274	330,841	29,092	301,749
Support Services	4	42,640	18,426	78,653	27,730	50,923
Solid Waste & Recycling	3	28,080	5,074	42,702	6,793	35,909
Total	**33**	**$531,530**	**$134,511**	**$857,861**	**$155,431**	**$702,429**

Voluntary Separation Program
through May 2, 2005
Distribution by Years of Service



	Signed	*Metro Population*
Average Years of Service	15.3	10.3
Average Annual Salary	$53,038	$52,152

Voluntary Separation Program - Signed Paperwork

Through May 2, 2005

Total Annual Salary with Fringe by Division and Category

Department Name	*Central Services (Hard Freeze)*	*Central Services in Operating Dept (Hard Freeze)*	*Essential*	*Program*	*Grand Total*
Accounting Services Division	68,500				68,500
Animal Management Division			128,905		128,905
Creative Services	89,237				89,237
Design Services Division		34,319			34,319
Education Division				102,377	102,377
Human Resources				53,203	53,203
Marketing Division				42,443	42,443
Metro South Station			52,964		52,964
Parks Planning and Education				138,380	138,380
Planning Administration		226,295		113,317	339,612
Regional Planning				305,749	305,749
Tech Services -Travel Forecast				78,241	78,241
Waste Reduction & Outreach				145,668	145,668
Zoo Administration		94,880			94,880
Zoo Construction			112,064		112,064
Zoo Visitor Services		32,516		71,718	104,235
Open Spaces Acquisition				110,492	110,492
Corridor Planning				311,573	311,573
Cemeteries			62,554		62,554
Office of Citizen Involvement	89,237				89,237
Office of Metro Attorney				32,991	32,991
Grand Total	**$ 246,975**	**$ 388,011**	**$ 356,487**	**$ 1,506,151**	**$ 2,497,625**

Voluntary Separation Program - Signed Paperwork

Through May 2, 2005

Total FTE
by Division and Category

Department Name	*Central Services (Hard Freeze)*	*Central Services in Operating Dept (Hard Freeze)*	*Essential*	*Program*	*Grand Total*
Accounting Services Division	1.00				1.00
Animal Management Division			2.00		2.00
Creative Services	1.00				1.00
Design Services Division		0.50			0.50
Education Division				1.00	1.00
Human Resources				1.00	1.00
Marketing Division				0.80	0.80
Metro South Station			1.00		1.00
Parks Planning and Education				1.50	1.50
Planning Administration		2.75		2.00	4.75
Regional Planning				3.00	3.00
Tech Services -Travel Forecast				1.00	1.00
Waste Reduction & Outreach				2.00	2.00
Zoo Administration		1.00			1.00
Zoo Construction			1.00		1.00
Zoo Visitor Services		0.75		1.00	1.75
Open Spaces Acquisition				1.00	1.00
Corridor Planning				3.00	3.00
Cemeteries			1.00		1.00
Office of Citizen Involvement	1.00				1.00
Office of Metro Attorney				0.50	0.50
Grand Total	**3.00**	**5.00**	**5.00**	**17.80**	**30.80**

Voluntary Separation Program - Signed Paperwork

Through May 2, 2005

Total Incentive Cost with Vacation and Fringe by Division and Category

Department Name	*Central Services (Hard Freeze)*	*Central Services in Operating Dept (Hard Freeze)*	*Essential*	*Program*	*Grand Total*
Accounting Services Division	30,132				30,132
Animal Management Division			119,065		119,065
Creative Services	35,480				35,480
Design Services Division		1,925			1,925
Education Division				59,493	59,493
Human Resources				734	734
Marketing Division				1,030	1,030
Metro South Station			14,405		14,405
Parks Planning and Education				23,319	23,319
Planning Administration		122,265		16,376	138,641
Regional Planning				51,550	51,550
Tech Services -Travel Forecast				2,275	2,275
Waste Reduction & Outreach				28,297	28,297
Zoo Administration		3,910			3,910
Zoo Construction			14,535		14,535
Zoo Visitor Services		41,247		23,597	64,844
Open Spaces Acquisition				59,275	59,275
Corridor Planning				96,324	96,324
Cemeteries			58,268		58,268
Office of Citizen Involvement	42,050				42,050
Office of Metro Attorney				12,307	12,307
Grand Total	**$ 107,662**	**$ 169,348**	**$ 206,273**	**$ 374,578**	**$ 857,861**

2005 Voluntary Separation Program
Employee Tracking

	Department	Name	Extension	Last Day
1	Planning	Renee Castilla	No	2/25/2005
2	Planning	Mary Weber	No	4/30/2005
3	Planning	Carol Krigger	No	4/30/2005
4	Planning	Heather Fujioka	No	4/8/2005
5	Planning	William Barber	Yes	10/31/2005
6	Planning	Vicki Brown	No	4/30/2005
7	Planning	Karen Thackston	No	4/30/2005
8	Planning	John Cullerton	No	4/30/2005
9	Planning	Jan Faraca	No	4/30/2005
10	Planning	Carol Parno	Yes	10/31/2005
11	Planning	Sharon Kelly	No	4/30/2005
12	Planning	Dave Unsworth	Yes	5/25/2005
13	Zoo	Tim Dreis	No	3/15/2005
14	Zoo	Stanley Held	No	4/4/2005
15	Zoo	Sarah Chisholm	No	3/25/2005
16	Zoo	Anissa Morello	No	3/31/2005
17	Zoo	Roger Yerke	No	4/30/2005
18	Zoo	Stewart Sonderman	No	4/7/2005
19	Zoo	Carol Krager	Yes	6/18/2005
20	Zoo	Craig Lewis	No	4/30/2005
21	Zoo	Terry Joeckel	No	4/19/2005
22	Parks/Greenspaces	Ron Klein	No	4/15/2005
23	Parks/Greenspaces	Lupine Hudson	No	4/30/2005
24	Parks/Greenspaces	William Glenn	Yes	10/15/2005
25	Parks/Greenspaces	Nancy Chase	Yes	6/30/2005
26	SWR	Genya Arnold	Yes	6/30/2005
27	SWR	Janice Strand	No	4/23/2005
28	SWR	Joli Pfaller	No	4/11/2005
29	PAGR	Cathy Thomas	No	4/30/2005
30	PAGR	Marilyn Matteson	Yes	6/30/2005
31	Human Resources	Nicole Schneider	No	4/8/2005
32	FAS	Lee Bene'	Yes	5/26/2005
33	OMA	Kathleen Juergens	No	4/30/2005

Revised 4/25/2005

5/3/05

Ordinance No. 05-1077 and TB Resolution: Issues and potential amendments from MPAC and Goal 5/WRPAC (including submissions to those committees) up to 4/28.

Category	Potential amendment	Source
M37	Remove language from definition of "practicable"	G5/WRPAC, MPAC, Portland, Wilsonville
	Include "whereas" that strongly emphasizes connection to CWA and ESA	MPAC, Wilsonville, Audubon
Similarly situated sites	No allow decision for IT site and Port Terminals 4,5, 6	G5/WRPAC
	No allow decision for Port Terminals 4, 5, 6	Portland
Title 3 Exemptions	Carry forward exempted areas from Title 3 (includes West Hayden Island)	Port of Portland
FAA Wildlife Hazards	Require mitigation in same watershed unless not practicable	G5/WRPAC, Portland
	Apply avoid, minimize standards to these areas	G5/WRPAC, Portland
Regionally Significant Ed/Med	Identify as important but do not lower expectation for habitat protection	G5/WRPAC
	Don't adjust urban development value	Portland
Industrial Land	Designate all industrial land as "high urban development value"	Port of Portland
Habitat-friendly development practices	Require some practices, require consideration of other practices (affects Title 13 and Model Ordinance)	Staff based on comments
	Require if practicable (not technically feasible)	G5/WRPAC, Portland
	Develop scope of work for technical assistance & Metro's role in CWA	G5/WRPAC
Definition of development	Remove requirement to track vegetation removal over a 5-year period	G5/WRPAC
	Define vegetation removal as development and include exceptions	G5/WRPAC
New Urban Areas	Policies should be more directive	G5/WRPAC
Recognize local programs	No rollback of existing local Goal 5 programs	Portland, Wilsonville
Compliance	Support 2-yr timeline for local compliance as in Functional Plan	MPAC
Model Ordinance Issues	Add maximum disturbance area for Low HCA in clear and objective approach	G5/WRPAC
	Increase vegetation planting requirements for mitigation in clear and objective approach	Audubon
	Clarify language related to water utilities	G5/WRPAC, MTAC
	Clarify relationship between this ordinance and federal/state wetland mitigation requirements	Port of Portland
TB Plan	Add condition requiring avoid, minimize, mitigate in all Class I and II habitat	G5/WRPAC
	Remove condition to require habitat-friendly development	TBNRCC

I:\gm\long_range_planning\projects\Goal 5\Council Ord. 05-1077\Issues and amendments 5.03.05.doc

From Chris Deffebach

050305c-03

050305c-04

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: April 27, 2005

To: Metro Council

From: Chris Deffebach

Subject: Goal 5 TAC/WRPAC comments on Ordinance No. 05-1077

At their April 19th and 26th meetings, the combined Technical Advisory Committee for the Fish and Wildlife Habitat Program (Goal 5 TAC) and the Water Resources Policy Advisory Committee (WRPAC) reviewed Ordinance No. 05-1077 (including the Chief Operating Officer's recommendation on the proposed new title of the Urban Growth Management Functional Plan Title 13: Nature in Neighborhoods and associated amendments to the Regional Framework Plan, other Functional Plan titles, and a Model Ordinance) and Resolution No. 05-3577 which would approve the Tualatin Basin's fish and wildlife habitat protection program. This memo summarizes the Goal 5/WRPAC comments and advice to the Metro Council. All comments were made as one body, not two.

Measure 37

The Committee discussed the COO recommendation that would change the definition of "practicable" to include a reduction of fair market value. Substantial concern over implementing such a requirement was expressed. A majority of the Committee recommended that the Council make the following changes:

a. Remove the Measure 37 language from the definition of "practicable"
b. Add the word "environment" to the definition of practicable to be more consistent with federal definitions of practicable in the Clean Water Act

Tualatin Basin

The Committee considered the conditions of approval included in the COO recommendation on Resolution No. 05-3577 approving the Tualatin Basin's fish and wildlife habitat protection program, recommendations include:

a. A majority of the Committee recommended accepting the Tualatin Basin program with the addition of the conditions proposed in the COO recommendation.

b. About half of the Committee abstained from voting, but those that did vote recommended adding a condition that would require the Tualatin Basin to extend the avoid-minimize-mitigate standard to all Class I and II habitat, consistent with the regional approach.
c. Several members expressed support for including a condition that explicitly required there be no rollback of existing Goal 5 programs (no vote was taken).

New Urban Areas

The Committee agreed, without formally voting, that the policies related to planning for new urban development around habitat in new urban areas should be more directive than enabling to ensure that these habitat areas are protected.

Similarly Situated Sites

The Committee discussed the "allow" decision for international marine terminals. The COO recommendation identifies four sites by name and includes criteria for identifying sites in the future. A majority of the Committee recommended that the Metro Council not make an allow decision for these sites.

FAA Wildlife Hazard Management Areas

The Committee discussed the language in the proposed Title 13 and the Model Ordinance that exempts the Port of Portland from the avoid and minimize standards for activities on Port-owned property required to implement the Wildlife Hazard Management Plan (which applies within 10,000 feet of Portland International Airport and may apply to Hillsboro and Troutdale airports in the future) and allows mitigation for habitat impacts anywhere in the region. A majority of the Committee recommended the following changes:

a. Require that mitigation occur within the same watershed, unless proven infeasible or not practical.
b. Apply the avoid and minimize standards to these activities on Port-owned property.

Water Utilities

The Committee did not object to the language provided by the Regional Water Providers Consortium clarifying how water utilities should be treated in the Model Ordinance.

Habitat-Friendly Development Practices

The Committee discussed several issues related to habitat-friendly development practices, including:

- The practices should be required if practicable without the addition of "if technically feasible and appropriate" since jurisdictions already implement "if practicable."
- The practices should be required in the discretionary review process.
- Some members supported and some opposed a set number of practices that must be used.
- The list of practices should be illustrative and not definitive.

The Committee generally supported a recommendation that the Metro Council develop a formal scope of work that would define technical assistance to cities and counties to aid in the implementation of habitat-friendly development practices and Metro's role in addressing the Clean Water Act.

Redevelopment

The Committee discussed the requirement for mitigation when a zoning change is requested for redevelopment and strongly supported the language in the COO recommendation.

Definition of Development

The Committee discussed the change in the definition of development in the COO recommendation that would include tree or vegetation removal of over 10% of the Habitat Conservation Area over a five-year time period. Committee members expressed the following concerns about the requirement to monitor vegetation removal:

- This requirement would be difficult to track over time; and
- It is unclear whether the 10% would be ground cover or a percentage of tree canopy.

There was a recommendation to define vegetation removal as development and identify a list of exceptions (e.g., more than 10% removal of vegetation) rather than including the exception in the definition of development.

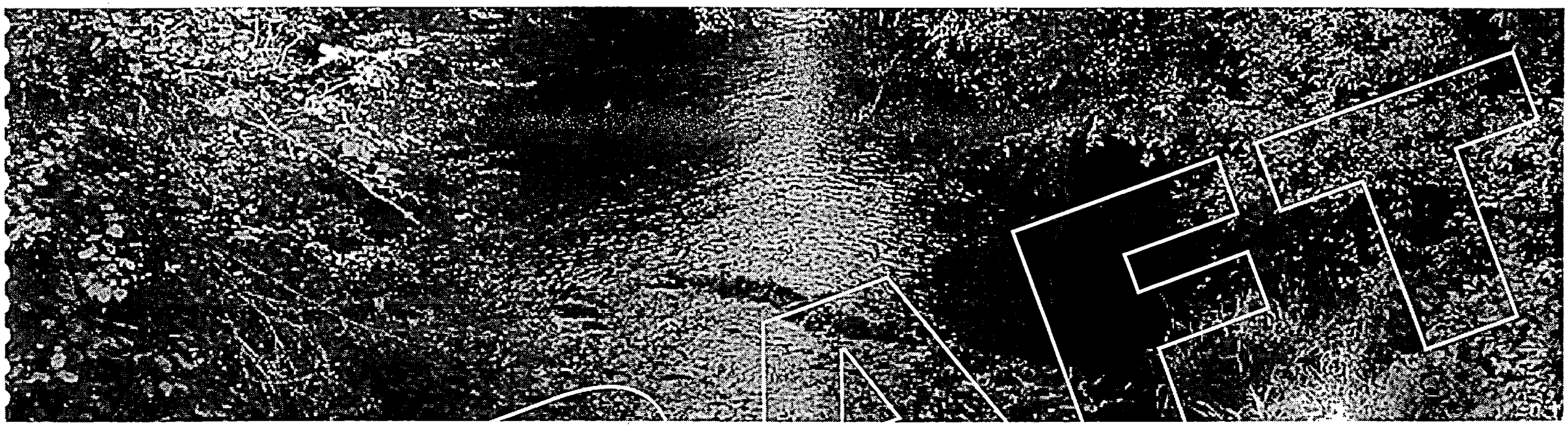
Regionally Significant Educational and Medical Facilities

The Committee discussed the increase in urban development value for regionally significant educational and medical facilities included in the COO recommendation. A majority of the Committee stated that these facilities should be recognized for their important contributions to the regional economy, but also that the campus-style development pattern allows for significant habitat protection and opportunity for education. Therefore, the Committee recommended that these institutions be recognized as high urban development value but not receive a commensurate reduction in habitat protection.

I:\gm\long_range_planning\projects\Goal 5\Council Ord. 05-1077\G5WRPAC comments 4.26.05.doc

MARCH
2005

Healthy Streams Plan



DRAFT

Clean Water Services

From Clean Water Services

05030SC-05

Table 1-7: *Overall Planning Level Costs*

Capital Projects Community	Task		Costs Per Year in 2005 Dollars 2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016-2025	Estimated Total Costs
Banks	Tree Planting	4290	$1,089	$2,177	$3,266	$4,355	$5,444	$6,532	$5,444	$4,355	$3,266	$2,177	$1,089	$4,355	$43,548
	Stormwater Outfalls	0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
	Culverts	0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Beaverton	Tree Planting	237030	$60,153	$120,306	$180,459	$240,612	$300,765	$360,918	$300,765	$240,612	$180,459	$120,306	$60,153	$240,612	$2,406,117
	Stormwater Outfalls	15	$90,000	$90,000	$90,000	$90,000	$90,000	$180,000	$180,000	$180,000	$180,000	$90,000	$90,000	$0	$1,350,000
	Culverts	47	$270,000	$270,000	$270,000	$270,000	$270,000	$270,000	$270,000	$270,000	$270,000	$270,000	$270,000	$1,260,000	$4,230,000
Cornelius	Tree Planting	30450	$7,728	$15,455	$23,183	$30,910	$38,638	$46,365	$38,638	$30,910	$23,183	$15,455	$7,728	$30,910	$309,101
	Stormwater Outfalls	1	$0	$90,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$90,000
	Culverts	0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Durham	Tree Planting	4200	$1,066	$2,132	$3,198	$4,263	$5,329	$6,395	$5,329	$4,263	$3,198	$2,132	$1,066	$4,263	$42,635
	Stormwater Outfalls	0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
	Culverts	0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Forest Grove	Tree Planting	57390	$14,564	$29,129	$43,693	$58,257	$72,822	$87,386	$72,822	$58,257	$43,693	$29,129	$14,564	$58,257	$582,572
	Stormwater Outfalls	0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
	Culverts	1	$0	$90,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$90,000
Hillsboro	Tree Planting	238020	$60,404	$120,808	$181,213	$241,617	$302,021	$362,425	$302,021	$241,617	$181,213	$120,808	$60,404	$241,617	$2,416,167
	Stormwater Outfalls	9	$90,000	$90,000	$90,000	$90,000	$90,000	$90,000	$90,000	$90,000	$90,000	$0	$0	$0	$810,000
	Culverts	33	$180,000	$180,000	$180,000	$180,000	$270,000	$270,000	$270,000	$270,000	$270,000	$270,000	$270,000	$360,000	$2,970,000
King City	Tree Planting	6300	$1,599	$3,198	$4,796	$6,395	$7,994	$9,593	$7,994	$6,395	$4,796	$3,198	$1,599	$6,395	$63,952
	Stormwater Outfalls	0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
	Culverts	0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
North Plains	Tree Planting	4920	$1,249	$2,497	$3,746	$4,994	$6,243	$7,492	$6,243	$4,994	$3,746	$2,497	$1,249	$4,994	$49,943
	Stormwater Outfalls	4	$0	$90,000	$90,000	$90,000	$90,000	$0	$0	$0	$0	$0	$0	$0	$360,000
	Culverts	0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Portland* (in Tualatin Basin)	Tree Planting	210000	$53,293	$106,587	$159,880	$213,173	$266,467	$319,760	$266,467	$213,173	$159,880	$106,587	$53,293	$213,173	$2,131,733
	Stormwater Outfalls	0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
	Culverts	39	$180,000	$180,000	$180,000	$270,000	$270,000	$270,000	$270,000	$180,000	$180,000	$180,000	$180,000	$1,170,000	$3,510,000
Sherwood	Tree Planting	42150	$10,697	$21,393	$32,090	$42,787	$53,484	$64,180	$53,484	$42,787	$32,090	$21,393	$10,697	$42,787	$427,869
	Stormwater Outfalls	1	$0	$90,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$90,000
	Culverts	4	$0	$90,000	$90,000	$90,000	$90,000	$0	$0	$0	$0	$0	$0	$0	$360,000
Tigard	Tree Planting	135390	$34,359	$68,718	$103,077	$137,436	$171,795	$206,154	$171,795	$137,436	$103,077	$68,718	$34,359	$137,436	$1,374,359
	Stormwater Outfalls	16	$90,000	$90,000	$90,000	$90,000	$180,000	$180,000	$180,000	$180,000	$180,000	$90,000	$90,000	$0	$1,440,000
	Culverts	49	$270,000	$270,000	$270,000	$270,000	$270,000	$270,000	$270,000	$270,000	$270,000	$270,000	$270,000	$1,440,000	$4,410,000
Tualatin	Tree Planting	74370	$18,873	$37,747	$56,620	$75,494	$94,367	$113,241	$94,367	$75,494	$56,620	$37,747	$18,873	$75,494	$754,938
	Stormwater Outfalls	2	$0	$90,000	$90,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$180,000
	Culverts	8	$0	$90,000	$90,000	$90,000	$90,000	$90,000	$90,000	$90,000	$90,000	$0	$0	$0	$720,000
Clean Water Services*	Tree Planting	40490	$10,275	$20,551	$30,826	$41,102	$51,377	$61,653	$51,377	$41,102	$30,826	$20,551	$10,275	$41,102	$411,018
	Stormwater Outfalls	14	$90,000	$90,000	$90,000	$90,000	$90,000	$180,000	$180,000	$180,000	$90,000	$90,000	$90,000	$0	$1,260,000
	Culverts	101	$450,000	$450,000	$450,000	$450,000	$450,000	$450,000	$450,000	$450,000	$450,000	$450,000	$450,000	$4,140,000	$9,090,000
	Stream Enhancement		$1,200,000	$1,200,000	$1,200,000	$1,200,000	$1,200,000	$1,200,000	$1,250,000	$1,250,000	$1,250,000	$1,250,000	$1,250,000	$12,500,000	$25,950,000
	Flow Restoration		$150,000	$250,000	$250,000	$250,000	$250,000	$250,000	$250,000	$250,000	$250,000	$250,000		$0	$2,400,000
ODOT	Stormwater Outfalls	6	$0	$90,000	$90,000	$90,000	$90,000	$90,000	$90,000	$0	$0	$0	$0	$0	$540,000
Washington County	Culverts	101	$450,000	$450,000	$450,000	$450,000	$450,000	$450,000	$450,000	$450,000	$450,000	$450,000	$450,000	$4,140,000	$9,090,000
Total Capital Costs Per Year			$3,785,349	$4,880,698	$4,886,047	$5,161,395	$5,616,744	$5,892,093	$5,666,744	$5,211,395	$4,846,047	$4,210,698	$3,935,349	$26,111,395	$80,203,954
Total Policy and Program Refinement Options Costs			$0	$828,000	$765,000	$715,000	$712,000	$712,000	$712,000	$712,000	$712,000	$712,000	$712,000	7,120,000	$14,412,000
Total Overall Costs/Year for 20 years (2005 Dollars)			$3,785,349	$5,708,698	$5,651,047	$5,876,395	$6,328,744	$6,604,093	$6,378,744	$5,923,395	$5,558,047	$4,922,698	$4,647,349	$33,231,395	$94,615,954

Funding Sources

SDC Eligible Projects	$9,270,000
Transportation Funded Projects	$9,630,000
SWM Fee Funded Capital	$61,053,954
SWM Fee Funded Operating	$14,612,000

Total Resources Needs

Total SWM fee funded elements	$75,665,954
Cost already funded under existing SWM program	$30,083,000
Total additional funds needed for HSP over 20 year program	$45,582,954

guarantees would be required by NOAA (National Oceanic and Atmospheric Administration) if the District and local jurisdictions decide to submit the Healthy Streams Plan as a Habitat Conservation Plan to obtain limited liability status under the Endangered Species Act.

A "SWM Team" is proposed to foster commitment to implementing the Action Plan, as well as other SWM-related activities. The team will include staff members from the local jurisdictions and the District and will meet quarterly to report on the status of their activities. Yearly SWM status reports will be distributed to all city managers, other interested staff, and stakeholders. News media will be engaged to focus attention on implementation successes. Managers will be asked to make the performance targets a priority in their work and the work of their staff. A fundamental awareness and commitment to implementing the Action Plan is needed to create the critical mass necessary to achieve the targets. Consistent and continuous action by dedicated individuals will be crucial to achieving long-term success.

Monitoring

To monitor the Action Plan's effectiveness, baseline conditions must be established. For the Healthy Streams Plan, baseline conditions for the streams' physical attributes were documented in 2000-2001 as part of the planning process. Continuous, long-term monitoring of water quality and flow, and periodic monitoring of biological communities and physical habitat conditions, are also relevant. The District already implements an extensive monitoring program in the Tualatin Basin (see Part II, Chapter 3), and is currently reviewing the program to determine if additional or different monitoring activities will advance the understanding of the system's ecology.

It is important to document changes in water quality, quantity, and habitat conditions over time, as well as to identify the likely causes, so best management practices can be adjusted. Table I-1, section 8.0, identifies monitoring physical and biological attributes of the system and lists project-specific monitoring activities. These options may become part of the comprehensive monitoring program or stand alone as independent short-term projects.

In addition to resource monitoring, action monitoring is also necessary. The District and Cities have databases and GIS systems that will be used for tracking the location, actions, and costs on various project sites. This will be particularly helpful for monitoring tree planting and enhancement actions. Creating an institutional memory regarding activities on various sites improves long term commitment to their success.

To ensure that the surface water management program continues to advance positively, the District will periodically reevaluate the policy and program refinements and capital project implementation, starting in 2010. The SWM Team will be responsible for reporting progress and recommending any adjustments.

Adaptive Management

Adaptive management is the process of planning, implementing, monitoring, and adjusting actions in an effort to meet a desired goal. The SWM Team and status reporting described above will facilitate an adaptive management strategy for the Healthy Streams Plan. Elements of the Plan will inevitably change, but the staff members who implement the Plan will be in a position to readily adapt to changing conditions. Adaptive management will allow Clean Water Services and the local jurisdictions to systematically adjust actions over time as they gain implementation experience and knowledge. This approach will help the watershed community stay on course toward improving watershed and stream health.

Implementation and Monitoring

Implementation of the Healthy Streams Action Plan requires a flexible management approach that can adapt to changes in staffing, funding, partners, policies, regulations, and watershed/stream conditions. A successful plan will consistently ensure:

- **Efficient use of surface water management funds over time**
- **Commitment of local jurisdictions and community members to meet their assigned targets**
- **Monitoring effectiveness**
- **A self-evaluating adaptive management process**

The Healthy Streams Plan is a voluntary water master plan that lists policies and programs, and suggests projects that will further improve the health of our water resources. Approval and implementation of the Plan by the District and local jurisdictions does not obligate them to implement all the actions identified, nor does it change the current funding and obligations of the existing surface water management program. For the Cities, the Plan was designed to encourage steady consistent progress towards performance targets for trees, culverts, and outfalls. Working within the context of existing program activities the Plan brings focus to certain needs, while providing the Cities with the flexibility to determine the timing and scope of projects so that they fit within their existing programs. For the District, projects and programs proposed will also be tracked to show steady progress. Due to various implementation circumstances, project listed may change and policies and programs further refined to meet the overall intent of improving stream health. As projects are scoped, more detailed timelines, cost estimates, and funding will be developed.

Funding

Managing surface and stormwater can be a complex and expensive public program if managers attempt to address all problems, everywhere. The Healthy Streams Plan process was designed to identify and focus on the actions that offer increasing environmental value for the dollar spent. The Action Plan meets federal Clean Water Act and Endangered Species Act goals and supports complementary environmental/land use goals (such as Statewide Planning Goals 5, 6, and 7) by allocating funds to projects and programs that will improve natural resource conditions over time. The Action Plan avoids high-cost, low-benefit projects and applies a graduated scale of expected resource improvements, based on existing watershed conditions.

The estimated overall cost to implement all aspects of the Healthy Streams Action Plan is $95 million over 20 years. Table I-7 shows the planning level costs in 2005 dollars of each major Action Plan element, by jurisdiction. The cost table is based on average conditions for all actions, policies, and programs in 2005; most projects will be more or less expensive depending on site conditions and final project scope. Implementation of the Action Plan is focused on completing over half of the priorities by 2010. Greater effort in the first quarter of the Action Plan timeframe will generate compounding benefits over the remaining 15 years. Activity will gradually level off or even decline as the surface water system is improved and becomes more self-sustaining.

The Action Plan will be funded predominantly by surface water management fees. Some culvert repairs will also eligible to use system development charges and transportation funds. The District and local jurisdictions have approximately $12 million in surface water management fee balances and contingency and $16 million in system development charges as of June 2004. These funds can be used to start the implementation, but a future surface water management fee increase will be necessary to support the Action Plan.

The District and local jurisdictions have spent their funds judiciously and have anticipated that Action Plan implementation will draw upon the reserve funds. As presented in Table II-7, the surface water management program is funded at a modest level relative to similar jurisdictions in the state. The public values survey found over 90 percent of the respondents consistently willing to support a fee increase of $1 to $2 per month. With rising operating costs, yearly inflation, increasingly strict regulatory mandates, and the depletion of reserves to aggressively implement the Action Plan, the buying power of the surface water management fees is declining. A modest rate increase that will hedge against inflationary pressures over time and provide adequate funding to implement the Action Plan is recommended.

Commitment to act

Commitment to implementing the Action Plan is needed at all levels - from mayors and managers to maintenance staff. While Board adoption provides important formal recognition of the Action Plan, staff commitment will determine the Action Plan's long-term success.

Assurances to implement the Action Plan involve commitments by Clean Water Services and the local jurisdictions to provide necessary services and funding. Most of the activities can be implemented without IGA's. Project specific IGA's that involve cost share or other agreements can be developed at the time of implementation. The District is willing to provide training on project implementation as requested by the Cities. Funding and service

From: Brent Curtis

050305c-06

Goal 5 Regulatory Parameters for Tualatin Basin Approach: Application of Vegetated Corridors for Typical Scenarios vs. Mapped Proxy

Conclusion

A very conservative methodology was utilized to delineate a proxy for stream areas regulated by Vegetated Corridor standards on the Tualatin Basin ALP map. This analysis shows that regulated stream buffer area are likely to be underestimated for the vast majority of mapped streams.

Explanation

This series of cross-section diagrams represents a variety of typical stream corridor situations in the urban Tualatin River basin where Vegetated Corridor standards are applicable. Criteria for identifying Water Quality Sensitive Areas (WQSAs) and their adjacent Vegetated Corridors are described in Clean Water Services' Design & Construction Standards. The application of these standards is unique to each site, and based upon variables such as stream type, gradient, adjacent slope, and presence of wetlands. Both the presence of WQSAs and the limits of Vegetated Corridor areas, therefore, are determined on a case-by-case basis, triggered by nearby development. For this reason the mapping of Vegetated Corridors presents a formidable and complicated task, made further impractical because of the evolving nature of stream resource areas.

For ALP purposes, and to provide a comparative analysis of the recommended basin program with Metro's proposed area of regulation (Class I and II inventoried riparian areas), a mapped proxy for Vegetated Corridors was developed. Some of the acreage comparisons resulting from this analysis suggest a difference of approximately 2800 acres where Vegetated Corridor (VC) areas do not cover Class I/II resource areas. It is important to bear in mind that the methodology for delineating the mapped proxy is very conservative, and therefore can produce a misleading analysis. For instance, with stream location information limited to centerline data, the mapped proxy measures most vegetated corridor buffers as 50 feet from the stream's centerline. As accurately applied, however, the vegetated corridor buffer is actually measured from the edge of the WQSA (i.e., top of bank).

The purpose of this exercise is to provide a comparison that illustrates the limitations of the ALP mapping exercise. Mapped proxy measurements are represented on the left sides of the diagrams (in blue) and typical Vegetated Corridor measurements are represented on the right sides (in red). A narrative is provided to explain each scenario type. For the majority of cases, the Vegetated Corridor area will exceed the mapped proxy. The numbers for each narrative description corresponds with the numbered images attached.

Note that in addition to the additional extent of area typically covered, Vegetated Corridor standards require restoration of existing vegetation to "good" condition within the first 50 feet from edge of sensitive area for all sites.

Cross-Section Diagrams

1. Low-gradient headwater areas – intermittent streams: This scenario represents a low-gradient, intermittent stream. If the stream drains a small area (1.0 to <50 acres), the VC buffer is measures as 15 feet from the edge of the sensitive area, (or top of bank). For an intermittent stream that drains a large area (≥50 to ≤100 acres), or for a small (<0.5 acre) wetland, the VC buffer is measured as 25 feet from the edge of the sensitive area. For comparison, the mapped proxy measures 50 feet from the centerline of all known intermittent streams. While the mapped proxy for these situations typically may be broader than the actual area on site (depending on the width of the stream), not all intermittent streams are mapped and others may be identified in response to development review site analysis.

   Frequency of occurrence: There is approximately **one mile** of low-gradient, intermittent headwater streams represented by the mapped proxy.

2. Low- to mid-gradient areas – perennial streams (with adjacent wetlands): The second cross-section depicts a low-gradient stream with adjacent wetlands. For these scenarios, the VC consists of a 50-foot buffer measured from the outer edge of the wetland. For known wetlands, the mapped proxy is generally accurate, however site evaluations may reveal the presence of additional wetlands.

3. Low- to mid-gradient areas – perennial streams (without adjacent wetlands): For larger isolated wetlands (≥0.5 acre), perennial streams, intermittent streams that drain relatively large areas (>100 acres), and bodies of water such as lakes, ponds and in-stream impoundments – all in low-gradient areas – the VC buffer is measured as 50 feet from the defined edge of the sensitive area. By comparison, the mapped proxy measures from the resource centerline for streams. For these scenarios, the mapped proxy is generally conservative.

   Frequency of occurrence (for diagram nos. 2 and 3): The mapped proxy represents approximately:
   - **30 miles** of low-gradient, perennial streams that occur in headwater areas (diagram. 3);
   - **108 miles** of low-gradient, perennial streams, with or without adjacent wetlands (diagram 2 or 3); and
   - **121 miles** of mid-gradient, perennial streams, with or without adjacent wetlands (diagram 2 or 3).

4. Main stem – Tualatin River: This scenario is typical of lowland areas adjacent to the Tualatin River, where VC standards require a 125-feet buffer, measured from the edge of the 2-year surface elevation of the river. Adjacent wetlands that extend beyond 75 feet from the 2-year elevation would extend the width of the buffer accordingly. For the Tualatin River, the mapped proxy is generally accurate.

5. High-gradient headwater areas – perennial streams: This scenario represents stream types with the greatest margin of error for the mapped proxy. In high-gradient areas, the VC buffer width varies considerably for wetlands, perennial streams, intermittent streams draining large areas (>100 acres) and water bodies (lakes, ponds, in-stream impoundments), depending on

6. the character of the adjacent topography. At minimum, the buffer will measure 50 feet from the edge of the sensitive area, but will continue beyond the break in slope to broaden the buffer with by an additional 15 or 35 feet (depending on whether or not the information is based on site-engineered data). In no case is the buffer width greater than 200feet.

   Lacking adequate slope data, the mapped proxy measures only 50 feet from centerline for resources in steeply sloped areas.

   Frequency of occurrence: There are approximately **38 miles** of high-gradient, perennial headwater streams represented by the mapped proxy.

7. High-gradient headwater areas – intermittent streams: This cross-section diagram depicts a similar methodology for scenarios where intermittent streams drain 10 acres or more. In these cases, the first 50 feet of buffer area is required to be in a distinct tract, and any remaining buffer area must have an easement to allow access for corridor management purposes.

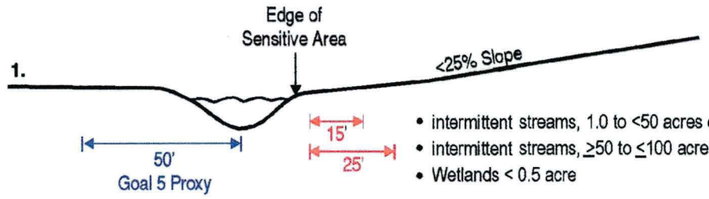
   Frequency of occurrence: There are approximately **0.5 miles** of high-gradient, intermittent headwater streams represented by the mapped proxy.

8. Redevelopment sites: This diagram represents a generic redevelopment site in non-steeply sloped area. For most scenarios, redevelopment activities in the basin are required to preserve a 25-foot VC buffer width of 25 feet, as measured from the edge of the sensitive area. Adjacent to the Tualatin River, the minimum width is 50 feet. As mentioned above, the mapped proxy depicts a VC buffer width of 50 feet, measured from the stream centerline, for most resources. The minimum buffer area acquired through redevelopment projects represents additional future restoration potential.

Application of Vegetated Corridors vs. Goal 5 Mapping Proxy

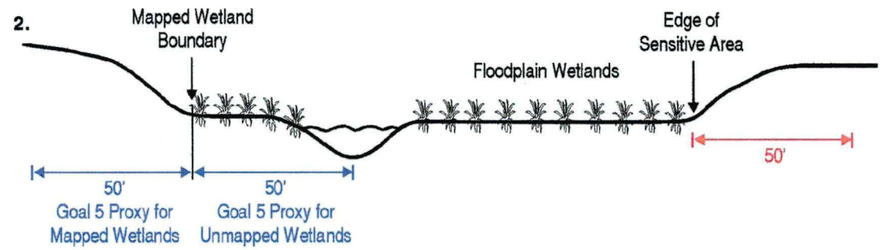
Revegetation to good condition required in first 50' on all sites

1.

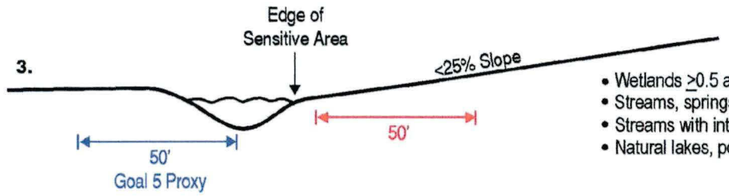


- intermittent streams, 1.0 to <50 acres drainage
- intermittent streams, ≥50 to ≤100 acres drainage
- Wetlands < 0.5 acre

2.

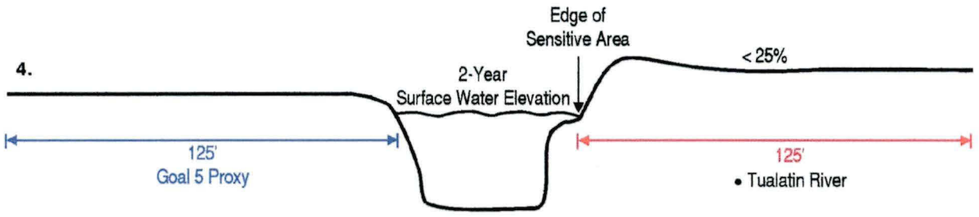


3.

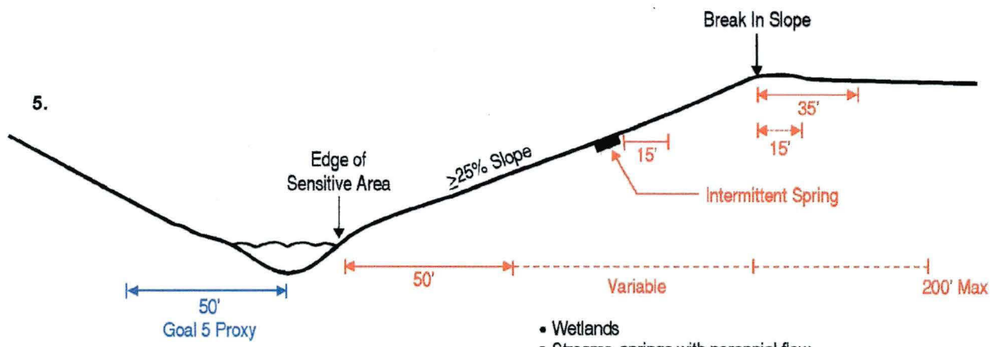


- Wetlands ≥0.5 acres
- Streams, springs with perennial flow
- Streams with intermittent flow draining >100 acres
- Natural lakes, ponds and instream impoundments

4.

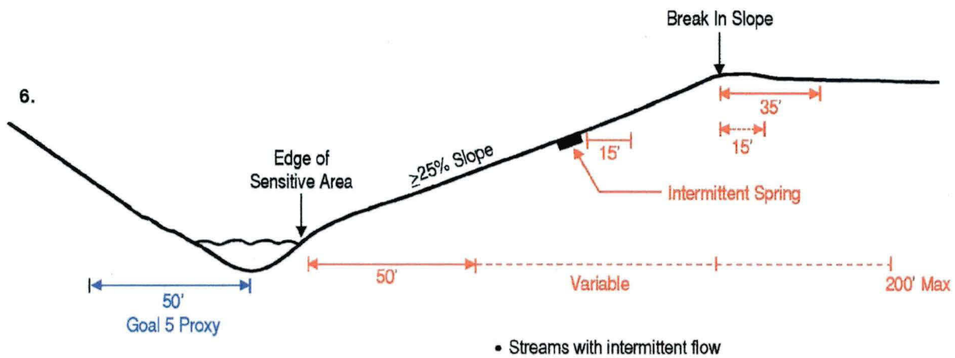


5.



- Wetlands
- Streams, springs with perennial flow
- Streams with intermittent flow draining > 100 acres
- Natural lakes, ponds and instream impoundments

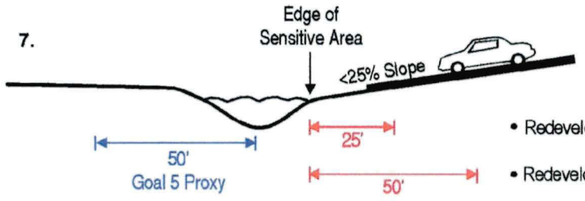
6.



- Streams with intermittent flow draining 10 to 100 acres.

  First 50' in tract and remaining area in easement (easement limits tree/vegetation removal, no staging, grading, stockpiling)

7.



- Redevelopment sites on streams, springs, wetlands, lakes, ponds
- Redevelopment sites on Tualatin River

From Brent Curtis

050305c-07

Comparison of Clean Water Services Vegetated Corridors Proxy and Metro Habitat Conservation Areas within the Tualatin Basin IGA

3-May-05

Acres of Habitat Conservation Area By Resource Class, Habitat Emphasis, and Vegetated Corridor Proxy Status

Class & Emphasis	In Vegetated Corridors*	Not In Vegetated Corridors*	Grand Total
Class I & II - High	4924	2099	7023
Class I & II - Moderate	1092	1435	2526
Class I & II - Low	287	282	570
Grand Total	6303	3816	10119

% of Total Habitat Conservation Area in Tualatin Basin By Resource Class, Habitat Emphasis, and Vegetated Corridor Proxy Status

Class & Emphasis	In Vegetated Corridors*	Not In Vegetated Corridors*	Grand Total
Class I & II - High	48.7%	20.7%	69.4%
Class I & II - Moderate	10.8%	14.2%	25.0%
Class I & II - Low	2.8%	2.8%	5.6%
Grand Total	62.3%	37.7%	100.0%

% of Total Resource Class and Habitat Emphasis by Vegetated Corridor Proxy Status

Class & Emphasis	In Vegetated Corridors*	Not In Vegetated Corridors*	Grand Total
Class I & II - High	70.1%	29.9%	100.0%
Class I & II - Moderate	43.2%	56.8%	100.0%
Class I & II - Low	50.4%	49.6%	100.0%
Grand Total	62.3%	37.7%	100.0%

% of Vegetated Corridor Proxy Status by Resource Class and Habitat Emphasis

Class & Emphasis	In Vegetated Corridors*	Not In Vegetated Corridors*	Grand Total
Class I & II - High	78.1%	55.0%	69.4%
Class I & II - Moderate	17.3%	37.6%	25.0%
Class I & II - Low	4.6%	7.4%	5.6%
Grand Total	100.0%	100.0%	100.0%

*The vegetated corridor proxy is a simplified version of the standards Completed by the Washington County Planning Department in April 2005:

1) 50' buffer of Streams
2) 125' buffer of the Tuatatin River
3) 50' buffer of any resource identified as "wetland" in Metro's inventory
4) Floodplain, other than that covered 1,2,3, or 4 above was not included

Total Acres of Regulated Metro Habitat Conservation Areas Outside of Vegetated Corridors Proxy* by Habitat Emphasis & Category

EMPHASIS	In Flood Plains	>25% Slopes	Other Gap	Grand Total
HIGH	1006	294	1353	2653
MODERATE	491	204	828	1523
LOW	67	18	263	348
Grand Total	1564	516	2445	4525

% of Total Regulated Metro Habitat Conservation Areas Outside of Vegetated Corridors Proxy* by Habitat Emphasis & Category

EMPHASIS	In Flood Plains	>25% Slopes	Other Gap	Grand Total
HIGH	22%	7%	30%	59%
MODERATE	11%	5%	18%	34%
LOW	1%	0%	6%	8%
Grand Total	35%	11%	54%	100%

% of Each Habitat Emphasis Area Outside the Vegetated Corridor Proxy* by Category

EMPHASIS	In Flood Plains	>25% Slopes	Other Gap	Grand Total
HIGH	38%	11%	51%	100%
MODERATE	32%	13%	54%	100%
LOW	19%	5%	76%	100%
Grand Total	35%	11%	54%	100%

% of Each Category Outside Vegetated Corridor Proxy* by Habitat Emphasis Area

EMPHASIS	In Flood Plains	>25% Slopes	Other Gap	Grand Total
HIGH	64%	57%	55%	59%
MODERATE	31%	39%	34%	34%
LOW	4%	3%	11%	8%
Grand Total	100%	100%	100%	100%

*The vegetated corridor proxy is a simplified version of the standards:

1) 50' buffer of Streams
2) 125' buffer of the Tuatatin River
3) 50' buffer of any resource identified as "wetland" in Metro's inventory
4) Floodplain, other than that covered 1,2,3, or 4 above was not included

From: Brent Curtis

050305c-08

Recommended amendments to proposed Metro Council Resolution No. 05-3577, Approving the Tualatin Basin Natural Resources Coordinating Committee's Fish and Wildlife Habitat Protection Program

The following changes are recommended for Resolve No. 2.d., found on Page 3 of 4:

> Provisions are adopted that ~~require~~ facilitate the use of habitat-friendly development practices, where technically feasible and appropriate, in all areas identified as Class I and II riparian habitat areas on the Metro Regionally Significant Fish and Wildlife Habitat Inventory Map. Table 3.07-13a in Exhibit C to Ordinance No. 05-1077 provides examples of the types of habitat-friendly development practices that shall be ~~required~~considered;

With these changes, the Council would adopt the Tualatin Basin program as recommended by the Tualatin Basin Natural Resources Coordinating Committee (TBNRCC). All other conditions proposed by Resolution No. 05-3577 are consistent with the Basin program as recommended by the TBNRCC.

As recommended, the Basin program is consistent with Metro Resolution No. 04-3506A, adopted in December 2004, which provides direction for a non-regulatory program, emphasizes voluntary and incentive-based approaches, proposes consistency with Ballot Measure 37, and states an intention to pursue a greenspaces bond measure for the acquisition of resource land..

The recommended Basin Approach depends upon an investment strategy to improve resource quality in regulated areas, and existing working relationships with the public and the development community to promote and facilitate the use of habitat-friendly development techniques in all developable resource areas throughout the basin.

At their meeting on April 4, 2005, the TBNRCC specifically considered the option to require the use of low-impact development techniques in Class I and II areas and explicitly rejected this approach, which would require local adoption of new land use regulations.

From Robert Curtis

050305c-09

Key Features of the Tualatin Basin Goal 5 Program

- USES EXISTING ACKNOWLEDGED LAND USE RESTRICTIONS CONSISTENTLY APPLIED THROUGHOUT CLEAN WATER SERVICES' JURISDICTION, RESULTING IN:
  - ✓ *Reduced exposure to Measure 37 claims,*
  - ✓ *Reduced need for discretionary development review procedures, and*
  - ✓ *Reduced potential for inconsistent interpretation of regulations adopted independently by cities and counties.*

- WITHIN ONE YEAR OF METRO COUNCIL ADOPTION OF THE TUALATIN BASIN PROGRAM BASIN CITIES AND THE COUNTY WOULD ADOPT NEW REGULATIONS TO:
  - ✓ *Further define location-appropriate habitat friendly development practices,*
  - ✓ *Eliminate barriers to using such practices, and*
  - ✓ *Provide incentives to encourage use of such practices.*

- GUIDED BY THE CLEAN WATER SERVICES' HEALTHY STREAMS PLAN WHICH:
  - ✓ *Calls for $95 Million of specific capital improvement projects over 20 years to improve watershed and stream health, including:*
    - o Riparian enhancement projects
    - o Tree planting in riparian areas
    - o Stream flow restoration projects
    - o Stormwater outfall retrofits
    - o Culvert improvements
  - ✓ *Includes program and policy direction relating to:*
    - o Stormwater regulation
    - o Local land use and building codes
    - o Vegetated Corridor regulations
    - o Operation and maintenance of storm system
    - o Inspection and code enforcement
    - o Incentives
    - o Public education and awareness
    - o Monitoring implementation and effectiveness
    - o Funding
    - o Capital projects implementation

- RELIES ON A STABLE SOURCE OF FUNDING, SURFACE WATER MANAGEMENT FEES THAT MAY BE INCREASED AS NECESSARY TO COVER PLAN IMPLEMENTATION COSTS

- ONGOING OVERSIGHT BY THE TUALATIN BASIN NATURAL RESOURCES COORDINATING COMMITTEE REGARDING:
  - ✓ *Implementation*
  - ✓ *Habitat friendly development guidelines*
  - ✓ *Project priorities*
  - ✓ *SWM fee adjustment recommendations*
  - ✓ *Consistency throughout basin*

050305c-10

From Brent Curtis

Comparison of Regulated Resource Areas[1]: Tualatin Basin Program[2] vs. Proposed Metro Regional Program

Resource Category	Total Acres	Inside Vegetated Corridor Proxy	Total Increment	Increment: Publically or Commonly Owned* Increment	Increment – Privately Owned Increment: Inside Existing ROW	Increment – Privately Owned Increment: Developed[3] Increment	Increment – Privately Owned Increment: Vacant[3] Increment
Class I	6,812	5,195	1,617	449	39	377	752
Class II	2,418	1,179	1,239	295	39	289	616
Metro Regulated Resource	**9,230**	**6,375**	**2,856**	**745**	**78**	**665**	**1,368**

Percentages							
Class I	100%	76%	24%	7%	1%	6%	11%
Class II	100%	49%	51%	12%	2%	12%	25%
Total	**100%**	**69%**	**31%**	**8%**	**1%**	**7%**	**15%**

Conclusions:
1. A more in-depth analysis suggests that only 15% of the Class I/II areas would be subject to potential development.
2. Only 16% of the floodplain area that is included as Class I/II resource falls outside of Vegetated Corridor boundaries and is under private overship (and therefore subject to potential devleopment). The majority of this is values as Class II.

In addition:
1. The Vegetated Corridor proxy also protects nearly 700 acres of Metro regionally significant resource area outside of Class I/II riparian areas.
2. The Tualatin Basin also features considerable protected resource area outside the UGB, including a federal wildlife sanctuary and locally & regionally owned parks.

Resource Category	Total Floodplain Area	Vegetated Corridor Proxy Area within Floodplain	Increment within Floodplain	Publically or Commonly Owned Increment Floodplain	Privately Owned portion of Increment within Floodplain
Class I	3,772	3,105	667	461	461
Class II	397	117	279	189	189
Metro Regulated Resource	**4,169**	**3,223**	**947**	**650**	**650**

Percentages					
Class I	55%	82%	18%	6%	12%
Class II	16%	30%	70%	22%	48%
Total	**45%**	**77%**	**23%**	**7%**	**16%**

* Publically or Commonly Owned includes:

Federal	THPRD
State	Tri-Met
County	Water districts
City	Common Tracts
Metro	Wetlands Conservancy
Clean Water Services	

Footnotes
1: Study area for this analysis consists of urban area [including 2004 UGB additions] for Tualatin Basin partner jurisdictions
2: Based on ALP Mapped Proxy for Vegetated Corridors - a very conservative depiction
3: Developed / Vacant status based on 2003 Metro vacant land inventory

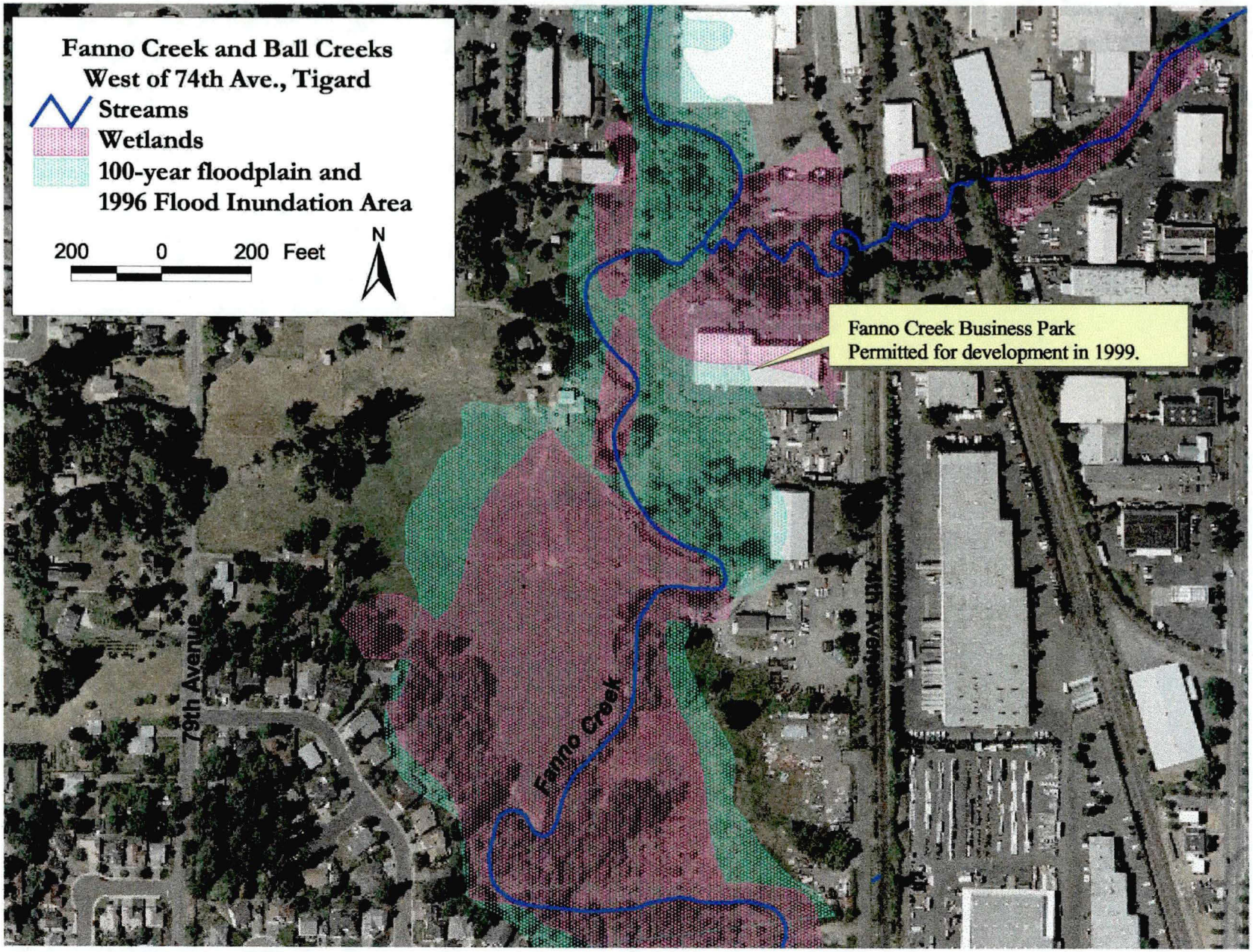
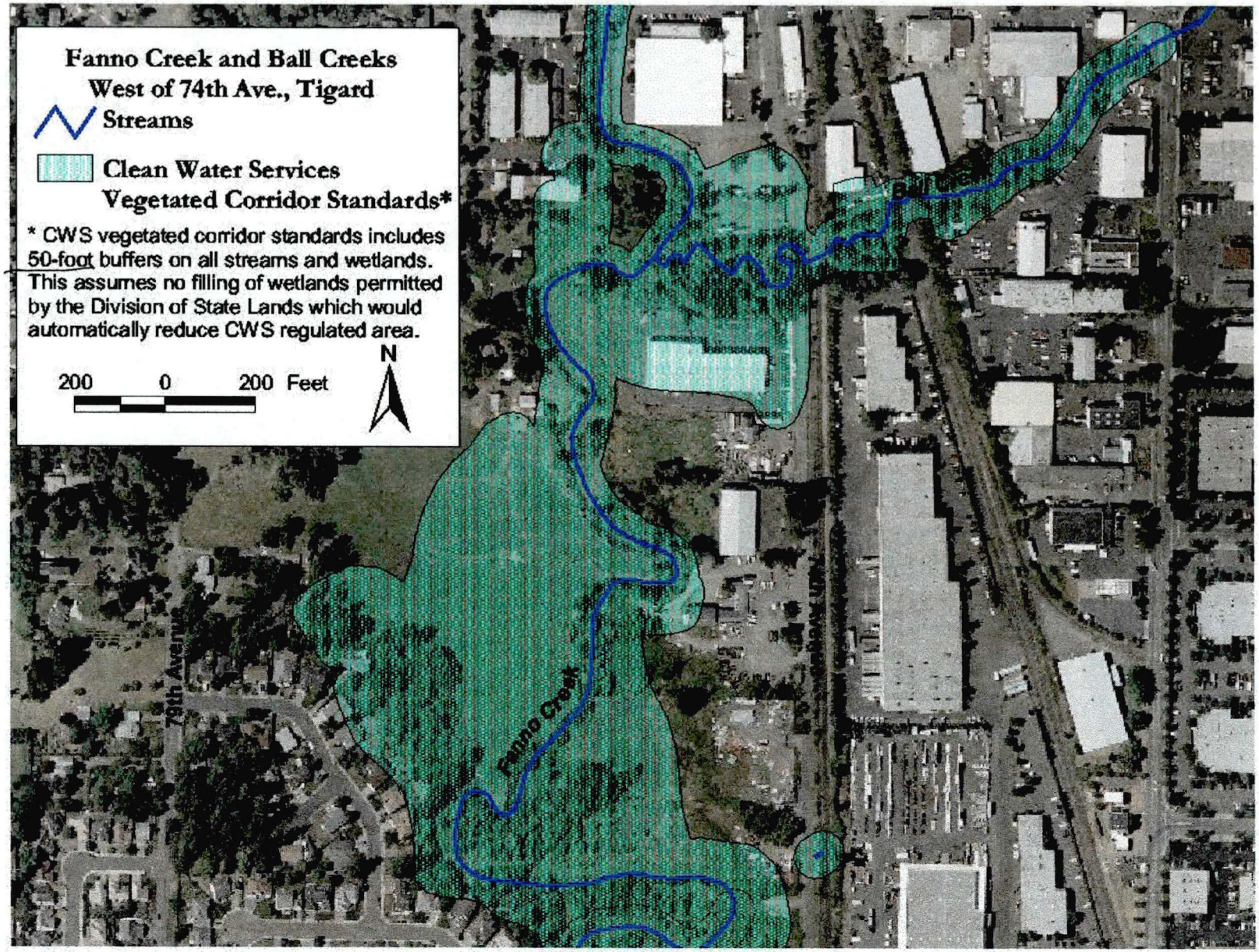


Figure 1: 100-year floodplain, 1996 flood inundation area, and wetlands at Fanno and Ball Creeks confluence in Tigard. Aerial photography from 2001.



No slope >25%.

Figure 2: Fanno and Ball Creeks confluence in Tigard showing areas regulated by Clean Waters Services vegetated corridor standards. Note: Aerial photography 2001.

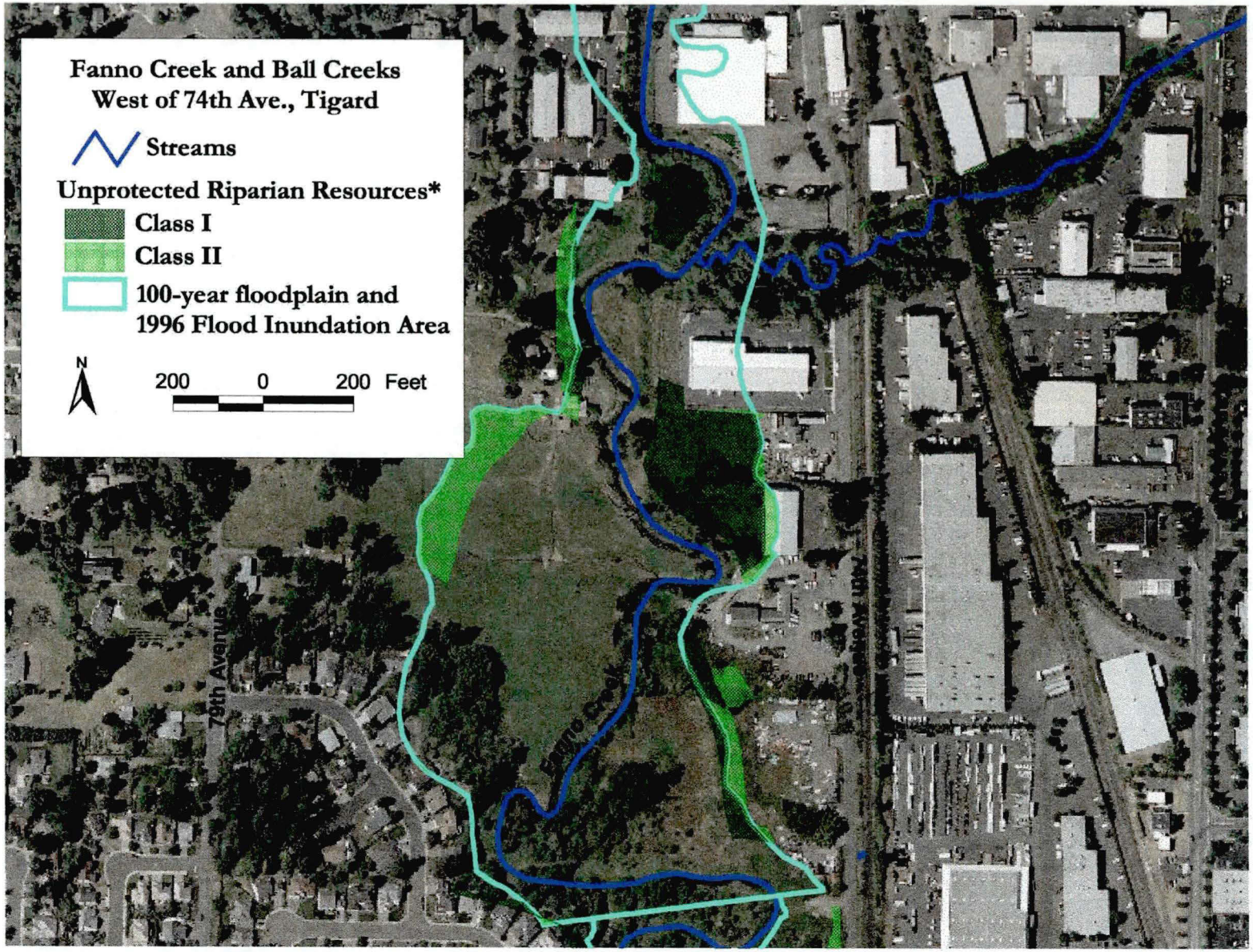


Figure 3: Fanno and Ball Creeks confluence in Tigard showing unprotected class I and II riparian resources and 100-year floodplain and 1996 flood inundation area. *Most class I riparian resources above are also designated "Habitats of Concern" in Metro's inventory of regionally significant fish and wildlife habitat. Aerial photography from 2001.

* Unprotected by TB Goal 5 program

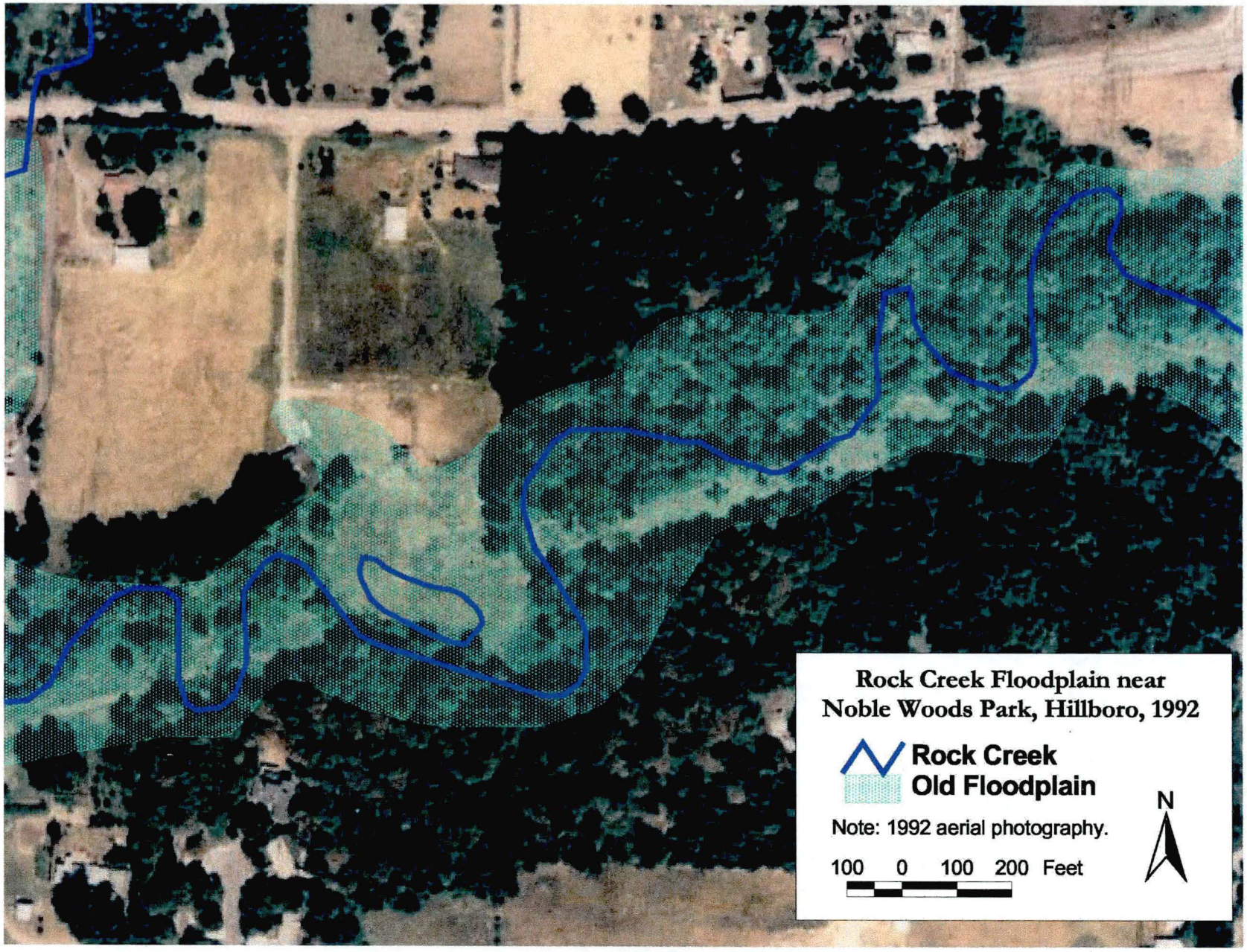


Figure 4: Rock Creek at Noble Woods showing old 100-year floodplain. Aerial photography from 1992.

Figure 5: Rock Creek at Noble Woods showing new 100-year floodplain. Aerial photography from 2001.

Figure 5: The photograph above was taken from the photo point identified from **figure 4** looking west. It shows bank erosion from downstream channel migration along Rock Creek in Hillsboro. The channel eroded the existing riparian buffer and is currently undermining a home built in the 100-year floodplain in 1996. The home is part of the Preston Meadows subdivision permitted in 1995. Current balance cut-and-fill regulations required by Metro would make it much more difficult to construct this home today. However current rules do allow parking lots and active recreation facilities in the floodplain and in the path of migrating channels.