

BEFORE THE METRO COUNCIL

FOR THE PURPOSE OF ADOPTING A DRAFT MAP OF REGIONALLY SIGNIFICANT FISH HABITAT PURSUANT TO RESOLUTION NO. 01-3141C ) RESOLUTION NO. 02-3176 )  
) Introduced by Metro Council Natural Resources Committee

WHEREAS, the Regional Framework Plan and Urban Growth Management Functional Plan state that Metro will undertake a program for protection of fish and wildlife habitat; and

WHEREAS, on July 17, 2001, in Resolution No. 01-3087A, Metro Council approved a draft matrix of ecological functional criteria to be used to map potential riparian corridor resources in the Metro region; and

WHEREAS, on December 13, 2001, in Resolution No. 01-3141C, Metro Council identified criteria that define regionally significant riparian corridors and applied those criteria to adequate information Metro gathered on the location, quantity and quality of riparian corridors in the Metro region; and

WHEREAS, as part of that resolution, Metro Council amended the matrix of ecological functional mapping criteria as follows:

- For microclimate and shade the secondary functional value is retained to include all forest or woody vegetation that is beyond 100 feet but within 780 feet;
- For stream flow moderation and water storage, developed floodplains should not be included as a primary function, rather, they should be included as a secondary function;
- For large wood and channel dynamics the secondary functional value should be revised to read "Forest within 150 to 262 feet of a stream;
- For the organic materials functional, the primary function be revised to read "Forest or woody vegetation within 100 feet of a stream or wetland; or within a flood area, or vegetation or undisturbed soils within 50 feet of a stream or wetland;" and

WHEREAS, in connection with Resolution No. 01-3141C Metro Council directed staff to provide data and analysis on:

- The location of developed floodplains.
- How the stream network mapping might be extended to capture all "waters of the state" as defined by ORS 196.800(14).
- Ecological functional criteria necessary to map wildlife habitat in the Metro region; and

WHEREAS, Metro Council directed staff to produce a map reflecting Metro Council's regionally significant riparian corridor decision for Metro Council review prior to identifying conflicting uses in the ESEE analysis; and

WHEREAS, Metro Council will consider the criteria and mapping of regionally significant wildlife habitat in a separate resolution; and

WHEREAS, at Metro Council Natural Resource Committee's February 27, 2002 meeting, staff presented a map of known streams entitled "Metro Stream Network Comparison" that might qualify as "waters of the state" and that are not currently part of the stream network to which Metro has applied the ecological functional mapping criteria for riparian corridors; and

WHEREAS, Metro Council Natural Resource Committee found that information on such streams is not consistent throughout the region, and that Metro Council had not considered riparian corridors along streams draining less than 50 acres to generally to be regionally significant. However, Metro Council Natural Resources Committee recommended that these streams be considered by local governments in their local Goal 5 processes; and

WHEREAS, at the March 6, 2002, Metro Council Natural Resources Committee meeting, staff presented data and analysis in a memo dated February 7, 2002, to identify the location of development within floodplains; and

WHEREAS, several options were identified for locating lands in developed floodplains and staff presented four options for locating these lands. Metro Council Natural Resources Committee recommended Option 3 which integrates existing Metro databases for floodplains, undeveloped lands, developed lands, forest canopy and grassland land cover types, open water, wetlands, and parks and open space to identify the locations of development within floodplains; and

WHEREAS, a draft inventory map of regionally significant riparian corridors that reflect Metro Council's decision in Resolution No. 01-3141C and the Metro Council Natural Resources Committee's direction on the mapping of development within floodplains is attached as Exhibit A; now, therefore

BE IT RESOLVED:

1. That the data contained within the Metro databases, and the integration of those databases as described in the February 7, 2002 memo from Justin Houk and Lynnea Sutton to Andy Cotugno provide adequate information to refine the location, quality and quantity of regionally significant riparian corridors as identified by the Metro Council in Resolution No. 01-3141C.
2. The Metro Council adopts the draft map in Exhibit A as the inventory of regionally significant riparian corridors. The draft map shall be the basis for conducting the economic, social, environmental and energy consequences analysis required by the Goal 5 administrative rule.
3. The Metro Council reserves the opportunity to minimally or substantially alter the draft map prior to adoption of a final map of regionally significant fish and wildlife habitat areas and Program to Achieve Goal 5, after public comment and review.

4. The Metro Council's actions in this resolution are not final actions designating regionally significant fish and wildlife habitat areas or a final action to protect those areas through a Program to Achieve Goal 5.

ADOPTED by the Metro Council this 8<sup>th</sup> day of August 2002.

Susan McLain Dep.  
Carl Hosticka, Presiding Officer

Presiding  
Officer

Approved as to Form:

Daniel B. Cooper  
Daniel B. Cooper, General Counsel

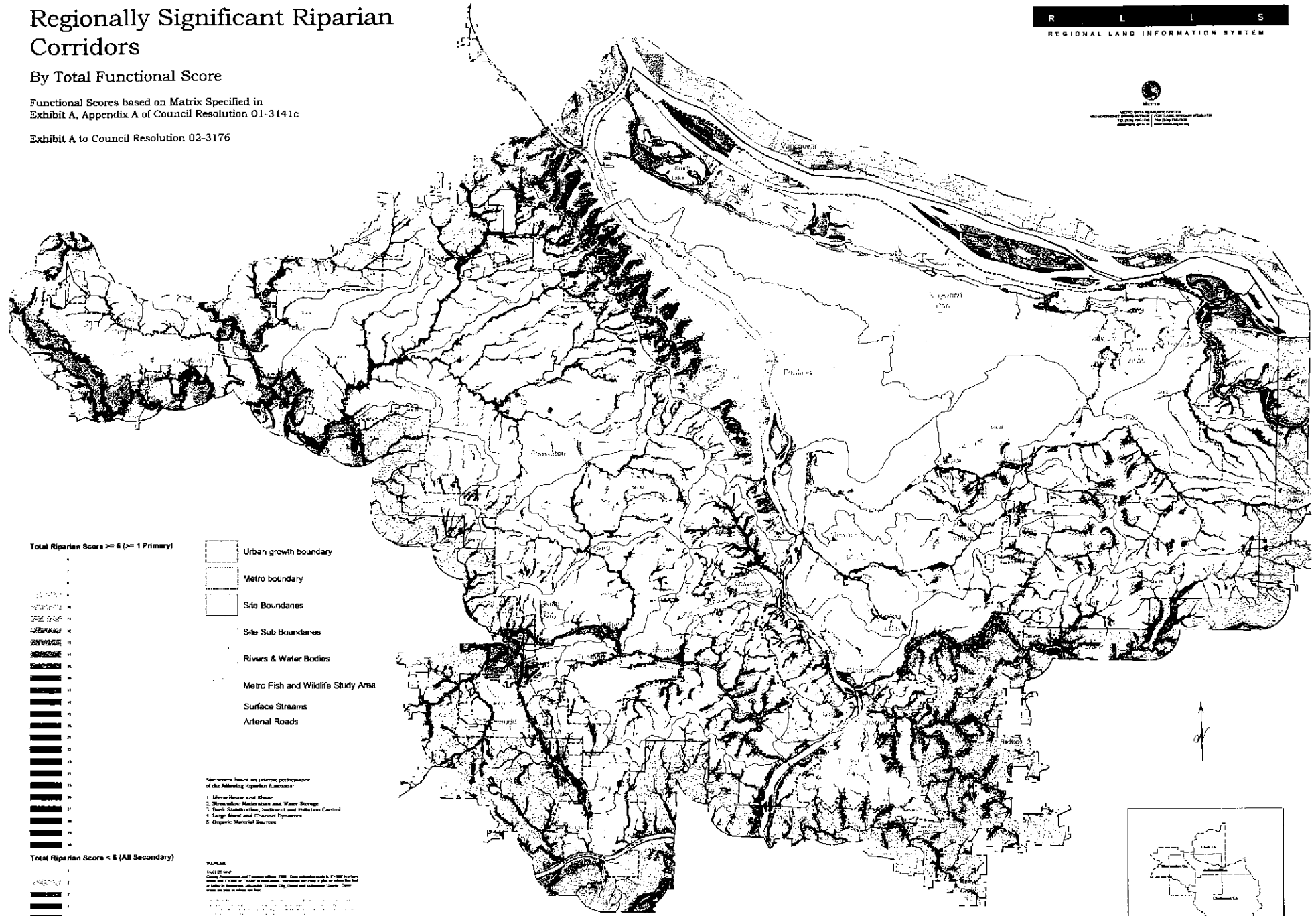
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# Regionally Significant Riparian Corridors

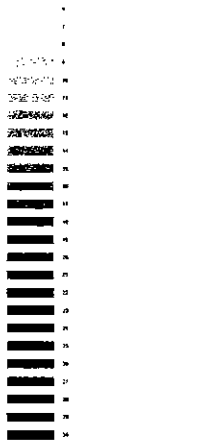
By Total Functional Score

Functional Scores based on Matrix Specified in Exhibit A, Appendix A of Council Resolution 01-3141c

Exhibit A to Council Resolution 02-3176



Total Riparian Score >= 6 (>= 1 Primary)



Total Riparian Score < 6 (All Secondary)

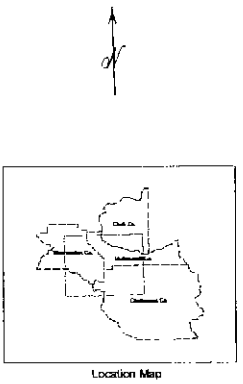
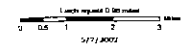


- Urban growth boundary
- Metro boundary
- Site Boundaries
- Site Sub Boundaries
- Rivers & Water Bodies
- Metro Fish and Wildlife Study Area
- Surface Streams
- Arterial Roads

Site scores based on a matrix (specification) of the following riparian functions:

1. Microclimate and Shade
2. Shaded Moisture and Water Storage
3. Bank Stability, Sediment and Pollution Control
4. Large Wood and Channel Dynamics
5. Organic Material Sources

SOURCE:  
GULLER MAP  
GULLER MAP of Greater Chicago, 1988. The information is for the year 1988 and is not intended to be used for any other purpose. The information is for the year 1988 and is not intended to be used for any other purpose. The information is for the year 1988 and is not intended to be used for any other purpose.



## **METRO NATURAL RESOURCES COMMITTEE REPORT**

CONSIDERATION OF RESOLUTION NO. 02-3176, FOR THE PURPOSE OF  
ADOPTING A DRAFT MAP OF REGIONALLY SIGNIFICANT FISH HABITAT  
PURSUANT TO RESOLUTION #01-3141C

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Date: June 7, 2002

Presented by: Councilor McLain

**Committee Action:** At its June 5, 2002 meeting, the Metro Natural Resources Committee voted 4-0 to recommend Council adoption of Resolution 02-3176. Voting in favor: Councilors Atherton, Hosticka, Park and McLain

**Background:** Resolution 02-3176 represents a step towards completion of Metro's Fish and Wildlife Habitat Protection Plan, which itself completes Title 3 of Metro's Urban Growth Management Functional Plan. This step concludes draft mapping of the riparian/fish portion of the plan, following-up on council approval of criteria for the mapping in the fall of 2001. The follow-up included finalizing issues concerning developed floodplains, waters of the state, mapping related to organic materials and map corrections. When companion legislation concerning mapping wildlife habitat is concluded, the activities related to the next step in the plan, ESEE analysis can begin in earnest.

- Existing Law: State Planning Goal 5, and OAR chapter 660; Metro Framework Plan and Urban Growth Management Functional Plan; Resolution 01-3141C, establishing criteria to define regionally significant fish habitat.
- Budget Impact: There is no budget impact related to adoption of this resolution.

**Committee Issues/Discussion:** Mark Turpel made the staff presentation and reminded the committee of prior actions and testimony. Chair McLain affirmed that the committee is very up to speed with the history of this resolution, and is ready to move on. The committee requested some additional information tabulating acres covered in the inventory by title 3 status, acres in public or private ownership, etc.

The Audubon Society praised the staff work reflected in this resolution and urged adoption.

There was no adverse testimony or committee discussion.

## STAFF REPORT

IN CONSIDERATION OF RESOLUTION NO. 02-3176, FOR THE PURPOSE OF ADOPTING A DRAFT MAP OF REGIONALLY SIGNIFICANT FISH HABITAT PURSUANT TO RESOLUTION NO. 01-3141C

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Date: March 13, 2002

Prepared by: Andy Cotugno

### BACKGROUND

In 1996, Metro Council adopted Ordinance 96-647C for the purpose of establishing the Urban Growth Management Functional Plan (UGMFP) and recommendations and requirements for implementing the 2040 Growth Concept. In 1996 completion of Title 3 of the UGMFP was postponed in order to gather more information. In June of 1998, sections of Title 3 were completed to address water quality and flood management and section 5 of Title 3 directed

*“Within eighteen (18) months from the effective date of this functional plan, Metro shall complete the following regional coordination program by adoption of functional plan provisions.”*

- 1. Metro shall establish criteria to define and identify regionally significant fish and wildlife habitat areas.*
- 2. Metro shall adopt a map of regionally significant fish and wildlife areas after examining existing Goal 5 data, reports and regulations from cities, counties, and holding public hearings.”*

With the adoption of Resolution 01-3141C, For the Purpose of Establishing Criteria to Define and Identify Regionally Significant Fish Habitat and Approving Creation of a Draft Map of Regionally Significant Fish Habitat Areas, the Metro Council established criteria for defining and identifying riparian corridors, one section of applicable State regulations. The Council, through this resolution, directed staff to revise the maps to account for developed floodplains, how organic materials were mapped, and to address map corrections. Attachment A provides a detailed description of the method to address and revise the maps where developed floodplains exist.

With the adoption of this resolution, these policy changes and related map revisions would be addressed. In addition, the analysis of the inventoried regionally significant riparian corridors could be initiated to assess the economic, social, environmental, and energy consequences of allowing, limiting or prohibiting conflicting uses (the ESEE analysis). (A separate resolution, 02-3177, addresses wildlife habitat inventory and if both resolutions are adopted, the ESEE analysis could consider both resources - riparian corridors and wildlife habitat).

### ANALYSIS/INFORMATION

#### 1. Known Opposition

Opposition includes some landowners who may be concerned about the impact of this work on the value and use of their land. Until Metro completes the second step (which includes consideration of the economic, social, environmental, and energy consequences of allowing, limiting or prohibiting conflicting

uses) and creates the program step (which could include acquisition, education, incentives and regulations), it is not possible to determine what change, if any, the final Metro decision may have on an area or site. If regulations alone are the only approach, then it is likely that some property owners will oppose the final program decision. If acquisition, incentive, a or education approaches are used, it is likely that very little, if any, opposition will be heard from property owners, but those most concerned with protecting these resources may oppose a voluntary only approach. What combination of these approaches, regulatory and voluntary, would be optimal, would be best considered after the ESEE analysis and after program options are designed.

## **2. Legal Antecedents**

There is a myriad of legislation that relates to this resolution. It includes Federal, State, regional and local laws. At the Federal level there is the Clean Water Act and the Endangered Species Act. At the State level there are State planning laws, goals and administrative rules (especially OAR chapter 660 and sections 660-023-090 and 660-023-110). At the regional level there is the Regional Framework Plan, the Urban Growth Management Functional Plan and Resolution 01-3141C. Local governments within the region have also enacted a range of local policies and regulations and these are documented in the draft Local Plan Analysis, Metro, 2002.

## **3. Anticipated Effects**

The anticipated effect of the adoption of this ordinance is to begin the analysis of the economic, social, environmental and energy consequences of allowing, limiting or prohibiting uses that conflict with the protection of those areas determined to be regionally significant wildlife habitat.

## **4. Budget Impacts**

As noted above, the approach that the Metro Council may direct, can be considered after the Council considers the economic, social, environmental and energy consequences and after program alternatives are created. The cost to implement this legislation is not be possible to estimate until these steps have been taken.

## **RECOMMENDED ACTION**

The recommendation is to adopt resolution 02-3176.



**METRO**

Attachment A to staff report for Resolution 02-3176

**TO:** Andy Cotugno  
**FROM:** Justin Houk and Lynnae Sutton  
**DATE:** 02/07/2002  
**SUBJECT:** Modeling Developed Floodplain

**MODELING DEVELOPED FLOODPLAIN**

Council Resolution 3141C (Regionally Significant Fish Habitat) directs staff to produce a GIS dataset to identify developed areas within floodplains. To determine if Metro's existing data could be used to model this dataset, a "Developed Floodplains" coverage was created and evaluated using the following methodology and data.

**DATA USED IN DEVELOPED FLOODPLAIN MODEL**

Table 1 lists the data used in creating the "Developed Floodplains" layer. It is important to note the minimum mapping units, assumptions and rules by which each dataset was developed, since these items are incorporated into the "Developed Floodplains" layer. For instance, a taxlot is either developed, partially developed or undeveloped. Developed lots must have improvements and specific land uses. For example, a paved parking lot is developed but an unpaved lot where trucks are parked is vacant. If a developed tax lot has a 1/2 acre (20,000-sq. ft.) or greater portion that is vacant, the lot is considered to be partially vacant and partially developed. The vacant portion is added to the vacant or undeveloped land database. These are some of the rules used in the production of vacant lands each year. Developed lands then are the "reverse" of the undeveloped lands layer. In other words, any land (or water) which is not undeveloped is shown on the developed layer.

**Table 1 – Data used in "Developed Floodplains Model"**

DATASET	DESCRIPTION
Floodplains	Flood of 1996 and 100 Year Flood Plain as delineated by the Federal Emergency Management Association (FEMA). Digitized by the Portland Office of the Army Corps of Engineers. Updated with local input.
Undeveloped lands	<p>The undeveloped land layer represents lands appearing unimproved on aerial photography, without regard to developability and accessibility. <i>On partially developed parcels, only undeveloped areas 1/2 acre or larger are included.</i> The layer is digitized on an annual basis.</p> <p>Metro's vacant land definitions: Every tax lot is determined to be vacant, partially vacant, or developed.</p> <ul style="list-style-type: none"> <li>• Vacant tax lots are those that have no building, improvements or identifiable land use.</li> <li>• Developed lots must have improvements and specific land uses. For example, a paved parking lot is developed but an</li> </ul>



	<p>unpaved lot where trucks are parked is vacant.</p> <ul style="list-style-type: none"> <li>• Lots under site development show building activity, but development is incomplete and they are considered vacant.</li> <li>• If a developed tax lot has 1/2 acre (20,000-sq. ft.) or greater portion that is vacant, the lot is considered to be partially vacant and partially developed. The vacant portion is added to the vacant land database.</li> <li>• Parks and open spaces are treated as developed.</li> </ul> <p>During the assessment of each tax lot, no consideration is given to constrained land, suitability for building, or to redevelopment potential.</p>
Developed lands	This layer is the "reverse" of the undeveloped lands layer. In other words, any land (or water) which is not undeveloped is show on the developed layer.
Land cover including: Forest canopy throughout metropolitan region, grassland and shrub/scrub land within 300 feet of a stream.	Forest canopy was digitized from the 2000 aerial photographs. <i>The tree stands were only digitized if they were at least two acres in size. Gaps between forest stands were only digitized if they were at least 1 acre in size.</i> Grassland and shrub/scrub land were digitized within 300 feet of a stream.
Open water	River and other water body outlines.
Wetlands	<p>This layer is the National Wetland Inventory (NWI) with revisions made by local governments in the tri-county region. These revisions were coordinated by Metro's Growth Management department.</p> <p>NWI digital data files are records of wetlands location and classification as defined by the U.S. Fish &amp; Wildlife Service. This dataset contains ground planimetric coordinates of wetlands, line, and area features and wetlands attributes.</p>
Parks and open space	Public and private parks and open space. (updated quarterly)

## DEVELOPED FLOODPLAIN MODEL METHODOLOGY

The following steps were used in creating the “Developed Floodplains” coverage:

- Floodplains and developed lands were intersected, extracting developed land polygons which fell within the floodplains, creating a preliminary developed floodplains layer.
- Parks and openspaces were considered undeveloped for this model. Those within the floodplain were intersected with the developed floodplains layer. Then developed floodplains that were also designated as a park or openspace were removed from the layer.
- Forest canopy and shrub/scrub/grassland (within 300 feet of a stream) polygons within the floodplain were intersected with the developed floodplains layer. Then, developed floodplains that were also designated as these vegetation land cover types were removed from the layer.
- Wetland polygons within the floodplain were intersected with the developed floodplains layer. Then, developed floodplains that were also designated as a wetland were removed from the layer.
- Open water polygons within the floodplain were intersected with the developed floodplains layer. Then, developed floodplains that were also designated as open water were removed from the layer.

*Hence, “Developed Floodplains” are developed lands polygons within the floodplain where no digitized forest canopy, wetlands, open water or parks and open spaces polygons occur.*

## METHODS OF EVALUATING MODEL

In order to evaluate the model, developed floodplain polygons<sup>1</sup> were chosen at random from throughout the metropolitan region. They were visually evaluated for quality by overlaying them onto the 2000 aerial photographs. Each polygon was qualitatively rated as Very Good (4), Good (3) – containing some minor problems, Fair (2) – containing more problems, and Poor (1) – not delineated correctly. There were a total of 51 sample polygons evaluated. In addition, comments on the problems within the dataset were recorded along with the qualitative rating. Appendix A – contains the results from this analysis.

## DISCUSSION OF RESULTS

Of the 51 sampled polygons, 20 were rated as poor (1) or fair (2) (i.e., problems with correct delineation of developed floodplains). This represents about 39% of the sample. Hence, 61% of the sample are rated as very good (3) or good (4). All of the polygons that were rated as poor were along open water and actually contained open water, beach, vegetation or sand bars, areas that should not be considered developed. This poor rating is most likely due to the fact that taxlots are digitized to the “low water” mark. These represented about 16% of the sample. To potentially fix a large portion of this problem, major river bank map corrections could be completed so that the river banks did not coincide with the low water mark or taxlot boundary.

Polygons rated as very good were found in developed areas within the floodplain. These represented about 47% of the sample. Developed floodplain polygons rated as good constituted about 16% of the sample. Most of these polygons contained some undeveloped acreage, generally less than an acre in size, or were in close proximity to an undeveloped floodplain polygon containing some developed acreage.

The largest problems were in the polygons rated as fair. These constituted about 21% of the sample and contained similar problems as the “good” polygons. However, the area that was incorrectly identified as

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<sup>1</sup> A polygon is a two-dimensional feature representing an area such as a state or county.

either developed or undeveloped was generally large compared to the areas within the “good” category. For instance, a large developed floodplain polygon contained a 2 acre grassland.

There were three polygons which represented some unique problems within the datasets. In one example, about 60% of a golf course lawn was categorized as developed due to improvements, while 40% of it was categorized as undeveloped. To alleviate this problem, delineated golf courses could be designated as undeveloped. In another example, when wetland polygons were removed from the developed floodplains, an incorrect wetland delineation caused a building and road patch to be identified as undeveloped. Map corrections, such as including local wetland inventories, may alleviate some of these problems. And finally, when the parks were removed from the developed floodplain, parking lots were then designated as part of the undeveloped floodplain because they were within a park boundary. Parks are hard to categorize because they may contain large undeveloped or developed areas, depending on the type of park. These three examples represent less than one percent of the total sample.

It is important to remember that these categories were subjective. Hence, someone else could have looked at the same sample polygons and placed some of those designated as poor in the fair category and visa versa.

Assuming that most of the polygons were designated correctly and finding a way to filter out those rated as poor, 79% of the sample could be considered acceptable, leaving 21% considered questionable. If one assumes at least a 5% error level in the categorization of the polygons, 74% to 84% of the polygons could be considered acceptable, leaving 16% to 26% considered questionable. If the polygons designated as poor were left in the sample, only 63% could be considered acceptable with 37% categorized as unacceptable.

**CONCLUSIONS AND OPTIONS**

There are several options available in the production of a GIS dataset identifying developed areas within floodplains. Table 2 lists several options and potential pros and cons associated with each of these decisions.

**Table 2 – Developed Floodplain Options**

DEVELOPED FLOODPLAIN OPTION	PROS	CONS
Option 1 - Digitize all impervious areas within the floodplain, based on specific rules.	<ul style="list-style-type: none"> <li>• A rule-base could be developed to establish known reasons why specific polygons are designated as impervious (developed) within the floodplain and why others are not, resulting in less gray area within the polygon designations.</li> <li>• A more precise coverage of “Developed Floodplains” would be available with this option.</li> </ul>	<ul style="list-style-type: none"> <li>• Impervious polygons within the floodplains would have to be digitized each year, as the undeveloped polygons are digitized each year.</li> <li>• A large portion of staff time and resources would have to be committed to this project... about 400-500 hours annually.</li> </ul>
Option 2 – Use the modeled “Developed Floodplains” and evaluate each polygon for correctness, re-digitizing those with common problems (including all of a road instead of just a portion of it).	<ul style="list-style-type: none"> <li>• A more precise coverage of “Developed Floodplains” would be available with this option.</li> </ul>	<ul style="list-style-type: none"> <li>• A large portion of staff time and resources would have to be committed to this project... about 300-400 hours annually.</li> </ul>

Option 3 -- Use the modeled "Developed Floodplains".	<ul style="list-style-type: none"> <li>Developed floodplains are already identified with this option. No additional staff time required in the production of a "Developed Floodplain" GIS data coverage.</li> </ul>	<ul style="list-style-type: none"> <li>There may be more map corrections with this option than with the first two options.</li> </ul>
Option 4 -- Create a more conservative version of modeled developed floodplains by overlaying the developed areas and floodplains.	<ul style="list-style-type: none"> <li>There would be less gray area in terms of the definition of modeled developed floodplains.</li> </ul>	<ul style="list-style-type: none"> <li>A large portion of undeveloped areas would be considered developed.</li> </ul>

Option 3 is considered the recommended option in the production of a "Developed Floodplains" GIS dataset. An additional model standard could be considered to mark golf courses as undeveloped. In addition, if the former mentioned river bank and local wetland inventory map corrections were completed, it may increase the "correctness" of the modeled developed floodplains to approximately 80%. Option 4 would create a more conservative version of modeled developed floodplains. However, large portions of undeveloped areas may be considered as developed.

## APPENDIX A - "Developed Floodplain" Model Analysis Results

SECTION	FINAL-ID	AGRES	VALUE	MAPISSUE	NOTES
	3723	0.340	1	River bank correction	Polygon includes edge of river, sand bar, vegetation.
1n2w24	3907	0.460	1	River bank correction	DF polygon only includes part of golf course... the rest of it still is in floodplain.
2n1e30,2n1e19,2n1w24	146	0.473	1	River bank correction	DF polygon along river, includes beach, sand bar.
2n1w24	43	1.366	1	River bank correction	DF polygon along river, includes beach, sand bar.
2n1w24	43	1.367	1	River bank correction	Polygon is adjacent to open water and includes beach, open water, sand bar and forest edge.
	9523	2.182	1	River bank correction	Sand bar
	51	3.457	1	River bank correction	Sand bar
	12307	4.799	1	River bank correction	Sand bar
1n2w24	3979	0.710	2		DF polygon misses about 1/4 of road length
1s1w34	9419	1.140	2		Clips out about 85% of houses at edge of wetland as developed, leaves 15% as marked incorrectly as undeveloped.
2n1w24		2.171	2		Includes correctly parking lot and road, however it missed portion of road that goes out to large dock -- still maked as undeveloped.
1n1w02	979	2.578	2		Includes portion of river bank with dock, building and open water...hence portion with bank and open water should not be included as developed.
1s4w01	4972	3.277	2		DF polygon is a road, however it leaves about 1/4 of it still in floodplain as undeveloped.
1s3w08	5484	5.079	2		This polygon follows a road; it leaves the edges of the road and small portions of the ends as undeveloped

	6135	13.448	2		DF polygon includes large portion of undeveloped area; polygon is mostly undeveloped
1n3w36	4626	16.115	2	Golf course (model standard)	DF polygon consists of golf course lawn. However, some of golf course lawn is also designated as undeveloped (60% developed and 40% undeveloped)
	6253	17.157	2		The portion marked as developed is good. However, adjacent to it is a large storage area with a lot of containers? Should this be marked as developed?
2s2e29,2s2e30		152.181	2	Parks (model standard)	DF polygon includes 2 acre grass area near parking lot, undeveloped areas include a park that is developed with parking lot etc..., undeveloped area includes a large storage area? Or gravel area with containers and some cars.
1s2e14	943	423.067	2		The undeveloped area near polygon includes small houses and portions of roads...the undeveloped areas could be extended to include larger portions of area that is marked as developed.
3s1w23	13651	1.066	3		Clips out developed area (houses), leaves undeveloped area (backyard and trees) marked correctly, however leaves house as undeveloped downstream.
3S1W14	13443	2.307	3		West edge of DF polygon includes some low structure vegetation (0.115 acres)
1s1w23	8126	3.804	3		In undeveloped portion of the floodplain, there is a small parking lot (0.227 acres)
	11738	5.108	3		Small house left in undeveloped FP near DF polygon.
	71	5.212	3		DF polygon near river includes sand bar that has a boat landing.
2s2e31	12983	15.069	3		Includes 0.12 acres of undeveloped land along river

1n2e07, 1n2e18	2294	21.116	3		Undeveloped area includes 0.53959 acres of developed area
Lower Tualatin Subbasin	7929	47.905	3	Local Wetland Correction	DF polygon includes road, building and vegetation zones between highway. When the wetland was added as areas of undeveloped floodplain, the building and road patch was included in the undeveloped floodplain.
	12339	0.309	4		
2s2e06	9898	0.382	4		
1s1w33	9417	0.407	4		Includes road and houses as developed floodplain.
1n2w24	3918	0.457	4		
3s1w23	13661	0.500	4		
3s1w14	13465	0.532	4		
1s1w33	918	0.545	4		Completely marks road as developed floodplain.
1n2w24	3827	0.657	4		
3s1w23	13662	1.153	4		
2s2e06	9896	1.418	4		
2s2e06	10071	1.797	4		
2n1w24	53	2.171	4		
1n1e34	4893	2.317	4		
	9481	2.811	4		Developed area near river that it marked correctly
2s2e06	10111	2.921	4		
1s3w08	6089	3.149	4		
	4088	3.812	4		
3s1w14	13452	9.131	4		
1n3w36	4785	10.851	4		
2s2e06	9838	18.065	4		
1n1e34	4539	19.892	4		
	3729	26.109	4		
1n1e34	5024	29.738	4		
2n1e30,2n1e19,2n1w24	73	31.513	4		
(1) Poor, (2) Fair, (3) Good, (4) Very Good					

# Proposed Resource Site & Riparian Function Mapping

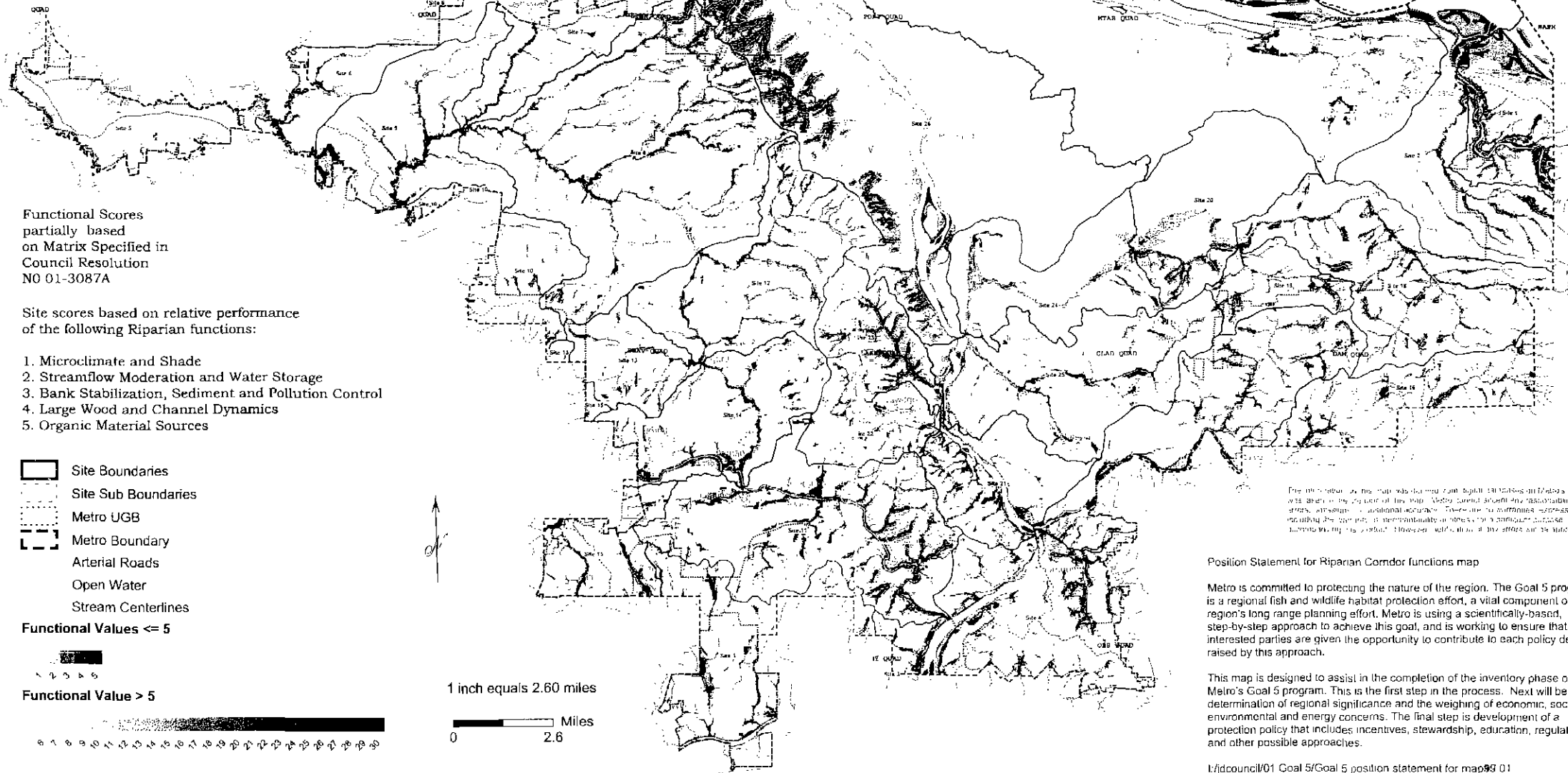
Decision Draft  
11/21/2001

Resolution No. 02-3176  
Exhibit A  
Changes Pending



METRO DATA RESOURCE CENTER  
600 NORTH EAST GRAND AVENUE  
TEL (503) 797-1742  
frc@metro.dst.or.us

PORTLAND, OREGON 97232-2736  
FAX (503) 797-1909  
www.metro-region.org



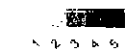
Functional Scores partially based on Matrix Specified in Council Resolution NO 01-3087A

Site scores based on relative performance of the following Riparian functions:

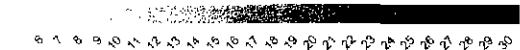
1. Microclimate and Shade
2. Streamflow Moderation and Water Storage
3. Bank Stabilization, Sediment and Pollution Control
4. Large Wood and Channel Dynamics
5. Organic Material Sources

- Site Boundaries
- Site Sub Boundaries
- Metro UGB
- Metro Boundary
- Arterial Roads
- Open Water
- Stream Centerlines

Functional Values <= 5



Functional Value > 5



1 inch equals 2.60 miles



The information on this map was obtained from digital data files on Metro's GIS. Care was taken in the design of this map. Metro cannot accept any responsibility for errors, omissions, or additional inaccuracies. There are no warranties, expressed or implied, including the accuracy, completeness, or suitability for a particular purpose. Information on this website is provided "as is" and its effect can be substantial.

### Position Statement for Riparian Corridor functions map

Metro is committed to protecting the nature of the region. The Goal 5 program is a regional fish and wildlife habitat protection effort, a vital component of the region's long range planning effort. Metro is using a scientifically-based, step-by-step approach to achieve this goal, and is working to ensure that all interested parties are given the opportunity to contribute to each policy decision raised by this approach.

This map is designed to assist in the completion of the inventory phase of the Metro's Goal 5 program. This is the first step in the process. Next will be the determination of regional significance and the weighing of economic, social, environmental and energy concerns. The final step is development of a protection policy that includes incentives, stewardship, education, regulation and other possible approaches.