



Oregon

Theodore R. Kulongoski, Governor

Department of Land Conservation and Development

635 Capitol Street, Suite 150

Salem, OR 97301-2540

(503) 373-0050

Fax (503) 378-5518

www.lcd.state.or.us



NOTICE OF ADOPTED AMENDMENT

06/20/2011

TO: Subscribers to Notice of Adopted Plan
or Land Use Regulation Amendments

FROM: Plan Amendment Program Specialist

SUBJECT: City of Rivergrove Plan Amendment
DLCD File Number 001-10

The Department of Land Conservation and Development (DLCD) received the attached notice of adoption. Due to the size of amended material submitted, a complete copy has not been attached. A Copy of the adopted plan amendment is available for review at the DLCD office in Salem and the local government office.

Appeal Procedures*

DLCD ACKNOWLEDGMENT or DEADLINE TO APPEAL: Tuesday, July 05, 2011

This amendment was submitted to DLCD for review prior to adoption pursuant to ORS 197.830(2)(b) only persons who participated in the local government proceedings leading to adoption of the amendment are eligible to appeal this decision to the Land Use Board of Appeals (LUBA).

If you wish to appeal, you must file a notice of intent to appeal with the Land Use Board of Appeals (LUBA) no later than 21 days from the date the decision was mailed to you by the local government. If you have questions, check with the local government to determine the appeal deadline. Copies of the notice of intent to appeal must be served upon the local government and others who received written notice of the final decision from the local government. The notice of intent to appeal must be served and filed in the form and manner prescribed by LUBA, (OAR Chapter 661, Division 10). Please call LUBA at 503-373-1265, if you have questions about appeal procedures.

***NOTE:** The Acknowledgment or Appeal Deadline is based upon the date the decision was mailed by local government. A decision may have been mailed to you on a different date than it was mailed to DLCD. As a result, your appeal deadline may be earlier than the above date specified. NO LUBA Notification to the jurisdiction of an appeal by the deadline, this Plan Amendment is acknowledged.

Cc: Brian Gerritz, City of Rivergrove
Gloria Gardiner, DLCD Urban Planning Specialist
Jennifer Donnelly, DLCD Regional Representative
Amanda Punton, DLCD Regional Representative
Thomas Hogue, DLCD Regional Representative
Gloria Gardiner, DLCD Urban Planning Specialist
Bill Holmstrom, DLCD Regional Representative

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FORM 2

DLCD

Notice of Adoption

This Form 2 must be mailed to DLCD within **5-Working Days after the Final Ordinance is signed** by the public Official Designated by the jurisdiction and all other requirements of ORS 197.615 and OAR 660-018-000

In person electronic mailed

DATE STAMP

DEPT OF

JUN 15 2011

LAND CONSERVATION AND DEVELOPMENT

For Office Use Only

Jurisdiction: **City of Rivergrove**

Local file number: ~~DA 2008-2~~ Ord. 79-2011

Date of Adoption: **6/13/2011**

Date Mailed: **6/14/2011**

Was a Notice of Proposed Amendment (Form 1) mailed to DLCD? Yes No Date: Feb 2010

Comprehensive Plan Text Amendment

Comprehensive Plan Map Amendment

Land Use Regulation Amendment

Zoning Map Amendment

New Land Use Regulation

Other:

Summarize the adopted amendment. Do not use technical terms. Do not write "See Attached".

The City of Rivergrove's Comprehensive Plan had been amended most recently in 1993. This new amendment updates statistical information and land use policy to reflect the City's growth in an urban Oregon setting. Two new goals (#2 and #14) were added. All maps were correspondingly updated.

Does the Adoption differ from proposal? Please select one
Minor changes only in text and maps.

Plan Map Changed from:

to:

Zone Map Changed from:

to:

Location:

Acres Involved:

Specify Density: Previous:

New:

Applicable statewide planning goals:

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Was an Exception Adopted? YES NO

Did DLCD receive a Notice of Proposed Amendment...

45-days prior to first evidentiary hearing?

Yes No

If no, do the statewide planning goals apply?

Yes No

If no, did Emergency Circumstances require immediate adoption?

Yes No

DLCD file No. PAPA-001-10

Please list all affected State or Federal Agencies, Local Governments or Special Districts:

Metro, Rivergrove Water District, Clackamas County, WES, Lake Oswego, ODOT

Local Contact: **Sheri Richards**

Phone: (503) 970-5858 Extension:

Address: **PO Box 1104**

Fax Number: **503-624-8498**

City: **Lake Oswego**

Zip: **97035-**

E-mail Address: **CityofRivergrove@yahoo.com**

ADOPTION SUBMITTAL REQUIREMENTS

This Form 2 must be received by DLCD no later than 5 working days after the ordinance has been signed by the public official designated by the jurisdiction to sign the approved ordinance(s) per ORS 197.615 and OAR Chapter 660, Division 18

1. This Form 2 must be submitted by local jurisdictions only (not by applicant).
2. When submitting the adopted amendment, please print a completed copy of Form 2 on light green paper if available.
3. Send this Form 2 and one complete paper copy (documents and maps) of the adopted amendment to the address below.
4. Submittal of this Notice of Adoption must include the final signed ordinance(s), all supporting finding(s), exhibit(s) and any other supplementary information (ORS 197.615).
5. Deadline to appeals to LUBA is calculated **twenty-one (21) days** from the receipt (postmark date) by DLCD of the adoption (ORS 197.830 to 197.845).
6. In addition to sending the Form 2 - Notice of Adoption to DLCD, please also remember to notify persons who participated in the local hearing and requested notice of the final decision. (ORS 197.615).
7. Submit **one complete paper copy** via United States Postal Service, Common Carrier or Hand Carried to the DLCD Salem Office and stamped with the incoming date stamp.
8. Please mail the adopted amendment packet to:

**ATTENTION: PLAN AMENDMENT SPECIALIST
DEPARTMENT OF LAND CONSERVATION AND DEVELOPMENT
635 CAPITOL STREET NE, SUITE 150
SALEM, OREGON 97301-2540**

9. **Need More Copies?** Please print forms on 8½ -1/2x11 green paper only if available. If you have any questions or would like assistance, please contact your DLCD regional representative or contact the DLCD Salem Office at (503) 373-0050 x238 or e-mail plan.amendments@state.or.us.

<http://www.oregon.gov/LCD/forms.shtml>

Updated April 22, 2011

ORDINANCE NO. 79-2011

AN ORDINANCE REPEALING THE RIVERGROVE COMPREHENSIVE PLAN (Attachment B to Ordinance 54-89) AND ADOPTING A NEW RIVERGROVE COMPREHENSIVE PLAN

WHEREAS, a City-wide survey coupled with a series of public meetings provided the overall vision, policies and goals for the future growth and development within the City; and

WHEREAS, The Rivergrove Comprehensive Plan is intended to guide the growth and management of the City, to support natural, recreational, and economic benefits for the community, and to provide a framework for implementation of identified goals and policies; and

WHEREAS, the Rivergrove Comprehensive Plan complies and is consistent with Statewide Planning Goals and other applicable law; and

WHEREAS, notice was mailed to all City property owners in conformance with Measure 56 requirements and notice was published in the local newspaper. Public meetings and workshops were held where the objectives and concepts of the Comprehensive Plan were presented and discussed; and

WHEREAS, the Planning Commission and the City Council both held publicly noticed meetings on the proposed amendments; and

WHEREAS, further amendments to the Rivergrove land use regulations will be necessary in order to implement the Rivergrove Comprehensive Plan, and these amendments will be considered and reviewed in duly noticed public hearings before the Planning Commission and City Commission; and

WHEREAS, adopting the Rivergrove Comprehensive Plan, based on the findings, attached to the Comprehensive Plan as Exhibit 1, is in the best interest of Rivergrove to ensure that the goals and policies of the City can be realized;

NOW THEREFORE, THE CITY OF RIVERGROVE ORDAINS AS FOLLOWS:

Section 1. The Rivergrove Comprehensive Plan, Attachment B to Ordinance No. 54-89, is hereby repealed.

Section 2. A new Rivergrove Comprehensive Plan, located as Attachment A to this Ordinance No. 79-2011, is hereby adopted and shall serve as the Comprehensive Plan for the City of Rivergrove based on the findings contained in Attachment B to this Ordinance No. 79-2011.

Submitted to the Rivergrove City Council on June 13, 2011

Adopted by the Rivergrove City Council on June 13, 2011


Heather Kibbey, Mayor

June 13, 2011
Date


Sheri Richards, City Recorder

June 13, 2011
Date



CITY OF RIVERGROVE
PO Box 1104 - Lake Oswego, Oregon 97035
503.639.6919 – Fax 503.624.8498

Heather Kibbey, Mayor
Brian Gerritz, Planning Commission Chair
Sheri Richards, City Manager/Recorder

DEPT OF

JUN 15 2011

**LAND CONSERVATION
AND DEVELOPMENT**

June 14, 2011

Department of Land Conservation and Development
Attn: Plan Amendment Specialist
635 Capitol Street NE, Suite 150
Salem, OR 97301-2540

Dear Sir/Madam:

Enclosed is are the comprehensive plan updates, findings, ordinance 79-2011 and form 2 Notice of Adoption from the City of Rivergrove.

Thank you for your assistance.

Sheri Richards
City Manager/Recorder



**CITY OF RIVERGROVE
COMPREHENSIVE PLAN**

(Attachment A to Ordinance No. 79-2011)

Adopted June 13, 2011

City of Rivergrove
P.O. Box 1104
Lake Oswego, OR 97035
(503) 639-6919

**RIVERGROVE COMPREHENSIVE PLAN
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INTRODUCTION

Rivergrove is located in the lower Tualatin Valley in northwestern Oregon. It is bordered on the south by the Tualatin River, on the west by Interstate 5, on the east by the Oswego Canal, and for the most part by Childs Road to the north.

Rivergrove is flat in topography and is dominated by the Tualatin River which gives the City a rural and scenic character. It is a linear city about two miles in length with an average width of about .04 of a mile. Portland, which lies to the north, has a very strong influence over the lives of the residents of Rivergrove supplying them with jobs and a wide variety of services and consumer goods. Lake Oswego, Tualatin, Lake Grove, Tigard and Beaverton are also important employment and commercial centers servicing Rivergrove residents.

Rivergrove lies within the Metropolitan Service District (Metro) and Metro serves as the primary coordinator of land use plans in the region. Rivergrove is also situated in both Washington County and in Clackamas County. The City was incorporated in 1971 with a population of 319 residents. Preservation of the City's residential character was and continues to be one of the primary desires of the City and its residents.

The Comprehensive Plan of Rivergrove describes the intentions of the City to shape its future development. The plan expresses the desired patterns of land use and sets out provisions for supplying the support services necessary for future urban development. This plan should be considered by the citizens, developers and affected governments and agencies as the intent of public officials for the development of Rivergrove. It should guide officials in their administration of all applicable ordinances.

The plan is divided into a series of elements, each addressing one of the Statewide Goals. Within each element there is a discussion of the particular issues of concern and the relevant factual information. These discussions offer a summary of the background information which led to the formation of policies. The policies, which appear at the end of each element, are the City's attempt to achieve the Statewide Goals while meeting the special needs and expectations of the residents of Rivergrove.

The Rivergrove Comprehensive Plan is a city limits plan, meaning that the Urban Planning Area is contiguous with the present city limits of Rivergrove. Rivergrove's comprehensive plan does not cover any land outside City limits, because Rivergrove does not have its own Urban Growth Boundary (UGB). Rivergrove, 23 other cities, and three counties are within the Metropolitan Service District (Metro) UGB.

All land within Rivergrove is urban. Unincorporated land lies to the north of Rivergrove, while the City's east and west limits are contiguous with those of the Cities of Lake Oswego and Tualatin respectively. Rivergrove has entered into an Urban Planning Area Agreement with Clackamas County.

This plan, each of its elements, and the zoning ordinance shall be opened for amendments that consider compliance with the Goals and Objectives and Plans

of Metro or its successor, on an annual basis and may be so amended or revised more often than annually if deemed necessary by the City Council. Annual amendment and revision for compliance with the above regional goals, objectives and plans shall be consistent with any schedule for re-opening of local plans approved by the Department of Land Conservation and Development (DLCD).

This provision is not to be construed as waiving any legal rights which the City may have to challenge the legality of a regional goal, objective or plan provision.

AMENDMENT PROCESS – 2008-2010

The City of Rivergrove evaluated the need for an amendment to its Comprehensive Plan and began the process of citizen involvement in 2008. With planning assistance, a Community Survey was conducted in June 2008, followed by a series of public meetings that addressed different statewide goals and elicited comments from residents.

In 2009, a Citizen's Action Group was formed to process community input. The Group submitted a draft amendment proposal to the Planning Commission in February 2010.

After DLCD reviewers comments were added, the amendment was made available to the public in July 2010, and the first public hearing was scheduled for the August meeting of the Planning Commission.

CITIZEN INVOLVEMENT

The Survey results and entire body of comments may be found in Appendix B-1 and B-2 respectively. Here is a sample:

On natural resources:

“The trees in Rivergrove are central to the feel and character of the community. As we develop the land and cut the trees, we are in danger of becoming just like the other developments in the area.”

“If we say we love trees—that trees are our greatest natural resource, then why aren't we better guardians?? We need stronger tree ordinances and a way to enforce them.”

“Trees are a necessity of life, but if you chop down only a few, then you risk other trees falling during a windstorm. I would like to see more trees though.”

On air, water & land resources quality:

“Too many trees have been removed already! The river's edge especially needs protection & trees should not be cut down. More trees... better for the water quality.”

Things that are best about the quality of life in Rivergrove? “Trees, biking, quietness”; “natural beauty, river access”; “environmental influences”; “quiet streets.”

66.2% of survey respondents strongly disagreed with the statement that “the environmental quality of the Tualatin River water quality is acceptable,” an indication of awareness of the problems.

92.5% of those responding to the Survey rated the livability of Rivergrove as “Very Good” or “Good.”

93.5% indicated that their primary mode of transportation was the auto, with only 3.2% listing bus as the primary mode.

In the 2008 Rivergrove City Survey, respondents were asked if they agreed with the following statement: “The environmental quality of the Tualatin River is acceptable.” Only 4.4% strongly agreed and 23.5% agreed, while 39.7% disagreed and 26.5% strongly disagreed. (5.8% didn’t know.)

On open spaces and recreation:

“If you are going to keep the park, make it more user friendly and esthetically pleasing. The space is nice and it would be a great place for kids and families if there were more things to do there.”

“Minor Park: add picnic tables, plant some shade trees.”

“Landscaping on Stark’s Boat Ramp needs to be maintained. There should be a no-parking designation directly across the street...as it is very difficult to maneuver a boat/trailer down the ramp when cars are parked on the street.”

On housing & land use:

In answering the survey, citizens indicated (questions 052 through 054) that they preferred the current variety of lot sizes, and did not feel that lot sizes were too large. However, they did not support a suggestion that lot sizes be *more* varied.

By strong majorities (questions 057 and 058), they felt that new homes were being built with yards that were too small, and they wanted to see a maximum footprint size for new construction.

Respondents indicated (questions 044 through 047) that townhouses and multi-family developments were not acceptable within the city limits, but they were not opposed to living near them (as some citizens do currently).

While a majority believe that the new houses and subdivisions are attractive, views were mixed as to whether there was good integration of home styles and neighborhood design (questions 36 through 43).

Overall, a large majority (92.5%) of respondents rated the City’s livability as

Good or Very Good and their comments showed an appreciation for the Rivergrove lifestyle and an eagerness for maintaining it.

On transportation:

“Speed limit is okay but people don’t obey it. Somewhat feel safe on pedpath, but it’s too close to the street.”

“We need ‘bumps’ down the edge of the pedway to make it safe.”

“Hold developers accountable in repairing roads they tear up, back to original condition.”

“We live on Childs Rd. in the school zone. Kids cross the crosswalk to go to school and I rarely see cars stop for them. Many kids are not with parents and it is an extremely dangerous area.”

“TriMet services are inconsistent or rather limited to only main roads and poor after 6 o’clock.”

“Bike paths are woefully inadequate. I am strongly in favor of the Tualatin River footbridge and would love to see it built....The condition of Childs Rd. west of 65th is terrible and needs repaving.”

POLICIES:

1. The City of Rivergrove will maintain an intergovernmental agreement with Clackamas County because the development of lands adjoining the City will affect lands within the City. This agreement is intended to provide the City with notice of development within certain specified areas as outlined in the agreement. The purpose of this agreement is to ensure that City concerns about adjoining development are available to the County.
2. The City of Rivergrove shall adopt a city Comprehensive Plan designation for any land which is annexed to the City at the time of the annexation. The City shall choose a designation that is (1) the closest to the Clackamas County plan designation for the parcel or parcels prior to annexation, and (2) consistent with the housing needs analysis in the City’s Comprehensive Plan.
3. The City of Rivergrove will maintain urban service agreements pursuant to ORS 195.085 with the cities of Lake Oswego and Tualatin for the purpose of providing sanitary sewer service to Rivergrove.

GOAL # 1: CITIZEN INVOLVEMENT

GOAL: To develop and implement a citizen involvement program that ensures the opportunity for citizens to be involved in all phases of the planning process.

CONTEXT:

In preparing its comprehensive plan Rivergrove has adopted a Citizen Involvement Program which was subsequently approved by Oregon Department of Land Conservation and Development (DLCD). It makes provisions for citizen involvement, communication with officials, access to technical information, influence in the planning process, and mechanisms for obtaining feedback from officials. The plan and all relevant documents will be on file with the City Recorder.

The Rivergrove Planning Commission has been designated by the City as the Committee for Citizen Involvement.

POLICIES:

1. The City shall implement its Citizens' Involvement Program.
2. The City shall involve other governmental agencies and districts in the local planning process, and shall give them the opportunity to propose plan changes or review and comment on any proposed plan changes
3. The citizens of Rivergrove shall be given the opportunity to propose plan changes or review and comment on any proposed plan changes.
4. The Planning Commission shall consider reviewing and updating the Comprehensive Plan every ten years, coincident with the US Census, and shall involve citizens in this regular process..

GOAL #2: LAND USE PLANNING

GOAL #2: To establish a land use planning process and policy framework as a basis for all decision and actions related to use of land and to assure an adequate factual base for such decisions and actions.

- Specifically, to identify land use activities and their effect on the public health, safety and welfare of Rivergrove citizens.
- To ensure orderly and efficient development.
- To establish a planning process, policies and factual basis for all decisions and actions related to the use of the land.

CONTEXT:

The City of Rivergrove is comprised of single-family homes on lots that are generally 10,000 square feet or greater, with residential zoning. Larger lots have been partitioned or subdivided as sewers were constructed, although this has been a very gradual process.

The City has no urban growth boundary (UGB), because it is within the UGB of the Metropolitan Service District (Metro). Within Rivergrove's city limits, there are two very small landlocked properties that have not been annexed to the City: one is an access drive, and the other is a developed single family lot.

Rivergrove's Land Use decisions have been based upon the Rivergrove Land Development Ordinance (RLDO), adopted in March 1989 and amended as needed. In conjunction with the amendment of the City's Comprehensive Plan, the City of Rivergrove has begun a reformatting and revision of its RLDO.

CITIZEN RECOMMENDATIONS – GOAL # 2:

Based upon citizen comments at a series of community meetings during 2008 to discuss the amendment of the City's Comprehensive Plan, comments submitted in the June 2008 City Survey, (see Appendix B), and through the work of the Citizens' Advisory Group, the following actions were also recommended:

1. Encourage and support other agencies to help implement the City's Comprehensive Plan.
2. Encourage and facilitate the exchange of information, data and assistance with neighboring and affected governmental units.
3. Create a vehicle for providing a coordinated approach to problems facing Rivergrove and its neighbors.

POLICIES:

1. The Comprehensive Plan for the City of Rivergrove will be filed in the office of the City Recorder, and in the County Clerk's office in both Clackamas and Washington Counties.
2. The City of Rivergrove shall maintain an ongoing planning process that will facilitate federal agency, state agency, and county plans which are to be consistent with this comprehensive plan.
3. The Planning Commission shall review the entire Comprehensive Plan and implementing ordinances at least upon notice from DLCD, pursuant to OAR 660-19, Periodic Review. Decennial reviews shall occur as designated in Goal #1 of this Comprehensive Plan.
4. Comprehensive Plan map and text amendments may be initiated by the Planning Commission, City Council, a property owner, his or her authorized representative, or a resident of the City.
5. The City shall encourage communication with all local, state and federal agencies, to assure coordinated comprehensive planning and to exchange maps, data, and other pertinent information.
6. During all Comprehensive Plan Revisions, the City shall encourage the participation of affected persons and governmental entities, including property owners and citizens, as well as local, state and federal government units. All will be given an opportunity to review and comment prior to any changes in the Plan and implementation ordinances, with at least 30 days' notice of the public hearing on the proposed change.

EXEMPTED GOALS # 3 AND 4

The City of Rivergrove has adopted exemptions to the following Statewide Planning Goals for the reasons indicated:

GOAL # 3: AGRICULTURAL LANDS

The preservation of agricultural land is not at issue in this plan since the entire planning area is within established city limits.

GOAL # 4: FOREST LANDS

Since Rivergrove is entirely within the adopted regional Urban Growth Boundary (UGB), preservation of commercial forest lands is not at issue.

GOAL #5: NATURAL RESOURCES, SCENIC & HISTORIC AREAS, OPEN SPACES

GOAL: To protect natural resources and conserve scenic and historic areas and open spaces.

CONTEXT:

If you ask Rivergrove residents to name the City's most precious natural resources—as was done in the *2008 Rivergrove City Survey*¹ and in the Citizen Involvement meetings held during summer and fall 2008¹, the answer most often given cites the Tualatin River that forms the city's southern boundary, and the groves of Douglas fir and other species of large trees (predominantly evergreen) that still stand throughout the City.

The increase in development during the years 2000 through 2009—which saw the final plat approval of 4 subdivisions, preliminary approval for 2 other subdivisions plus additional partitions, and the construction of 30 new homes²—brought challenges to the City in its efforts to conserve and protect both trees and water quality.

During this decade, no new open spaces (such as parks, nature preserves and other public areas) were created. Density increased, with the advent of additional sewers through parts of the City, allowing the partitioning of larger tracts and creation of new subdivisions.

The question remains, however, can Rivergrove's Land Use Ordinance (RLDO) effectively encourage the conservation of open spaces as natural areas or for public use, and protect the City's remaining trees?

NATURAL RESOURCES:

Fish and wildlife form an integral part of Rivergrove's desirable environment. Maintenance of the wide variety of fish and wildlife found in the City requires maintenance of the habitats on which they depend. Development pressures will be in direct conflict with the preservation of these habitats. However, judicious planning can assure that the anticipated growth of the City will have only minimal impacts on fish and wildlife.

The City is underlain by a formation of Columbia River Basalt which provides an excellent, high quality groundwater source. The Oswego Canal to the east and the Tualatin River to the south constitute the major surface water features in the planning area. The Tualatin River and the Oswego Canal drains the entire City.

There is a seasonal wetland in the eastern section of the City, as noted above. It is caused by a winter high water table. This area provides valuable nesting sites for ducks, and habitat area for other animals.

The most significant wildlife habitat in Rivergrove is the riparian area. It is

important in this area that natural conditions (especially the native vegetation) be maintained. The Tualatin River is an important fish habitat; however, the poor water quality of the river threatens the survival of some of the species. The Corps of Engineers has also identified wetlands centered on Sycamore between Childs and Dogwood.³ These wetlands extend east of Sycamore into territory within the city limits of Lake Oswego. The wetlands border the Lake Oswego Bryant Woods Nature Park. Plan policies are intended to preserve these habitat areas.

The City addressed this issue in the year 2001, with the adoption of an ordinance establishing Water Quality Resource Areas (WQRAs)⁴, to protect environmentally sensitive lands from development.

There are no rare or endangered species of fish or wildlife known to exist in Rivergrove. A list of species of fish, amphibians, reptiles, birds and mammals known or suspected to reside in Rivergrove may be found in Appendix D.

Many of the trees in Rivergrove are second-growth Douglas fir, cedars, oaks and spruces estimated to be approximately 100 years old. These are predominantly Douglas fir, but other species are well represented. The City's tree-cutting ordinance has not prevented significant loss of these large trees, and, unfortunately, many fell victim to root rot, as a result of flooding in the late 1990s. Since the loss of edge trees will leave the grove weakened, the City's tree-cutting policy needs to focus on the needs of groves, as well as individual trees.

The central portion of the City was the site of the old Pilkington Nursery, and evidence of this can be seen in the varied species of trees and their placement in rows.

Rivergrove has no Historic Trees registry, and the creation of such could be of benefit to the preservation of significant specimens.

The WQRA ordinance adopted in 2001⁴, requires planting in sensitive riparian areas to consist solely of native plants. A list of plants native to the area can be found in Appendix D.

There are no significant mineral and aggregate resources⁵ or significant fossil fuel resources known to exist in Rivergrove.

SCENIC & HISTORIC AREAS:

Scenic views of the Tualatin River are limited, since the only public access to the river is from the City Boat Ramp on Dogwood Drive, and development has obscured the visibility.

There are no places in the City which are listed in the State Register of Historic Sites. However, an historic trail once ran just south of where Childs Road is currently located. A ferry crossing of the Tualatin was once just east of the present County boundaries.

According to tax records, two houses in the City, on Childs Road, were built in the year 1900, and a third in 1910. These are the oldest structures in Rivergrove.. There are no significant cultural areas in the City.

OPEN SPACES:

Public open space within the City is limited to a City-owned park on Dogwood Drive between Marlin and Tualamere Avenues. The park includes a boat ramp and totals 1.11 acres. That parcel is the only point in the City with public access to the Tualatin River.

Within its city limits, Rivergrove presently contains privately owned open space (undeveloped land). The current density of development is approximately 1.46 dwelling units per acre. At this level of development, the City has a semi-rural quality characterized by as yet undeveloped land, although it should be noted that much of this land is in the riparian corridor/WQRA. This level of development would still allow for considerable open space in the community.

There are no wilderness areas or significant natural areas⁶ designated within the City. The public open space and the riparian section constitute the major areas in the City which have open space or resource value. These areas have been protected from development pressures by the policies below.

POLICIES:

1. Future acquisition of public lands shall be based on the needs of the residents and the physical capacity of the City to provide them. Land currently designated as public open space shall be preserved as such.
2. Wildlife and plant habitat considerations shall be integrated into the land use decision-making process.
3. Compliance with Metro's Title 13 for protection riparian areas and wildlife habitat; compliance with Title 13 meets Goal 5 requirements for these resources.
4. In order to preserve the riparian habitat, strict enforcement of the City's WQRA ordinance is vital. This ordinance meets METRO goals for environmentally sensitive areas.
5. Development adjacent to the Tualatin River and wetlands will be governed by Metro Guidelines as most recently specified in Rivergrove's WQRA Ordinance.
6. Make a commitment to complete a local wetland inventory to better inform future planning and development, and improve compliance with existing state and federal wetland regulations.
7. Identify the link between tree groves and wildlife habitat, and their link to water

and air quality. Understanding and documenting the habitat functions of groves will strengthen the City's ability to use Goal 5 to achieve protection of this resource.

8. Recognize the link between floodplain management and both riparian and habitat protection.
9. The maintenance of vegetative cover with native plant species is encouraged.
10. The public shall be encouraged to provide for wildlife on their home properties.
11. Rivergrove shall encourage open space designation for land within the Tualatin River greenway, and other areas of the City.
12. City shall revise its tree cutting ordinance to include stronger language to preserve Rivergrove's native trees.
13. The City shall identify historic trees and make efforts to preserve them.
14. The City shall make an effort to improve public access to the Tualatin River.
15. Encourage privately owned open spaces with public access in new subdivisions.
16. Rivergrove shall encourage the discovery and recording of its history, through interviews with long-time residents, and written documentation, in an attempt to identify historic areas.

ENDNOTES – GOAL # 5:

¹ 2008 Rivergrove City Survey Results and Citizen Involvement Meetings, see Appendix B

² Housing and land use statistics, see Appendix E.

³ See map, Appendix D.

⁴ Rivergrove Land Development Ordinance #73-2003

⁵ Oregon Dept. of Geology & Mineral Industries and Columbia Region Association of Governments

⁶ As determined by the Nature Conservancy's *Natural Heritage Program Inventory*.

GOAL # 6: AIR, WATER AND LAND RESOURCES QUALITY

GOAL: To maintain and improve the quality of air, water and land resources.

CONTEXT:

In the Rivergrove City Survey¹, conducted in the spring of 2008, citizens and residents were asked to list three of the best things about life in Rivergrove. Time after time, the answers were trees, the river, or quiet surroundings. Those are the things most appreciated in this City, and it should be our goal to maintain these resources to the best of our ability.

We are fortunate that our City is situated in a state that values clean air and water, and freedom from pollution.

AIR:

Rivergrove lies within the Portland/Vancouver Interstate Air Quality Maintenance Area (AQMA). In its *2008 Air Quality Conformity Determination*², Metro prepared an air quality conformity determination for the federal component of the *2035 RTP* and *2008-11 Metropolitan Transportation Improvement Program (MTIP)*, a requirement of state and federal law. The document shows that the metro area, including the 25 cities and the urban portions of three counties of the greater metropolitan region, will continue to meet federal and state air-quality standards to the year 2035.

The major source of air pollution in Rivergrove is motor vehicle exhaust. A large portion of an individual's carbon footprint comes from vehicle miles traveled (VMT). In addition to increased public transit use, promoting carpools and telecommuting are important strategies for reducing VMT.

Trees and tree groves sequester carbon dioxide. Identifying the link between trees and the preservation of air quality can inform policies for protecting trees and encouraging the planting of new trees.

WATER:

Once considered Oregon's most polluted river³, the Tualatin, which flows along Rivergrove's southern boundary, has been the subject of considerable cleanup efforts. Stronger environmental enforcement, stringent WQRA ordinances, improved waste treatment upstream, the construction of water storage facilities to augment the meager summer flows, and an effort to educate citizens have all contributed to measurable improvement. However water quality is still far from acceptable.

According to the Department of Environmental Quality's *Willamette Basin Rivers & Streams Assessment, 2008-9*⁴:

The Tualatin subbasin had the greatest extent of stream length with poor to very poor OWQI [Oregon Water Quality Index] scores, indicating overall impaired water quality condition.... Of the 12 subbasins, the Tualatin had the highest proportion of stream length impaired by low dissolved oxygen in the basin (41%) and the second highest extent of impairment for high levels of total solids (46% and nutrient enrichment. (>35%)

Rivergrove contributes minimally to the pollution of the Tualatin River, but two factors increase the city's contribution. First, older, failing septic tanks leach coli form bacteria into the surrounding soil. And second, the application of lawn and garden chemicals increases phosphates and other river pollution through surface water runoff.

The first factor can be mitigated by linking all homes in the City to a properly functioning sewerage facility. As for the second factor, surface water detention ponds for new subdivisions and improved storm water sewers (although there are relatively few in the City) have helped control runoff. Through public education of the dangers of over-fertilizing lawns and overuse of garden chemicals, citizen awareness can help improve water quality.

The Tualatin River's OWQI score⁵ (at Boones Ferry Road in Tualatin, 2008-9, the closest monitoring site) was 54, a ranking of "Very Poor" and a trend considered "Declining." While Rivergrove inherits most of its river pollution from upstream, there are still greater efforts that can and should be made.

For more complete information on the water quality of the Tualatin River refer to Appendix E.

Trees and tree groves retain storm water. Identifying the link between trees and the preservation of water quality can inform policies for protecting trees and encouraging the planting of new trees.

LAND:

All solid waste produced in Rivergrove is residential waste. Hopefully, the historical trend of increasing per capita waste generation will be offset through source-separation, recycling and waste reduction. If so, increases in waste generation by Rivergrove will be no more than the proportional increases in population.

There are currently no significant threats to the quality of land in the City.

NOISE:

The City of Rivergrove enjoys a quiet, peaceful environment. Preservation of this quietude is essential to the preservation of the character of the community.

Noise pollution in Rivergrove is minimal, but has increased over the years with a rise in traffic on Interstates 5 and 205, as well as traffic along Childs Road. These constitute the major sources of noise in the city.

Further development in and around Rivergrove can be expected to increase traffic levels and thus increase noise levels. It is expected, however, that these levels will remain within acceptable standards, especially if the speed limit of 25 miles per hour is maintained and enforced on Childs Road. A 25 mph speed limit on the section of Pilkington Road within the City limits—from Dawn Street to Childs Road—would be desirable to increase safety and decrease noise, as vehicular traffic increases and a pedway is considered.

As residential growth continues in areas surrounding the City, construction noise has been and will likely continue to be a problem. Rivergrove will work to minimize construction noise, to the degree practical, within its own boundaries. In addition, Rivergrove should work with neighboring jurisdictions of Tualatin and Lake Oswego to minimize construction noise through the area.

POLICIES:

1. Evaluate trips within the City for the purpose of identifying ways to reduce VMT.
2. Until such time as control strategies are realized, Rivergrove shall use measures described in the DEQ handbook "Environmental Quality Elements of Oregon Local Comprehensive Plans" when planning any development activities having the potential to directly or indirectly affect air quality.
3. Rivergrove shall work with Tri-Met to increase mass transit ridership and reduce air pollution.
4. Should noise from automobiles reach unacceptable levels, Rivergrove shall work with the appropriate agencies to reduce the noise level.
5. Identify link between trees and the preservation of air and water quality.
6. Rivergrove shall cooperate with all affected agencies to extend sanitary and storm sewers throughout the City.
7. Rivergrove shall, through its newsletter, encourage solid waste recycling efforts in the City.
8. Rivergrove shall encourage a reduction in the use of fertilizers and other garden chemicals.
9. Rivergrove supports the clean-up of the Tualatin River.

10. The City will comply with all applicable state and federal air, water, solid waste, hazardous waste and noise regulations.
11. Final water detention facility design and use of materials shall be approved by the Planning Commission after approval by Water Environment Services (WES) and before construction.
12. Encourage reduction and control of light pollution that affects residents and wildlife.

ENDNOTES – GOAL #6

¹ Comments, *Rivergrove City Survey*, June 2008

² METRO, *2008 Air Quality Conformity Determination*

³ *The Student Watershed Project*, Portland State University, 2003

⁴ *Willamette Basin Rivers & Streams Assessment 2008-9*, Department of Environmental Quality

⁵ *Tualatin Riverkeepers Newsletter*, Summer 2009

GOAL # 7: NATURAL DISASTERS AND HAZARDS

GOAL: To protect life and property from natural disasters and hazards.

CONTEXT:

Situated as it is—a skinny little city, built on the lowlands along the Tualatin River—Rivergrove is bound to have water problems! And indeed it does. Two significant floods, in 1996 and 1997, caused considerable damage, distress, and loss of property. Floodwaters in the area rose above FEMA's existing 100-year flood level in some locations, and the agency has since then has issued new designated flood levels.

Long after the Tualatin had receded to its normal level, many of Rivergrove's stalwart old Douglas Firs died from root rot disease that thrived in the wet soil. Enormous dead and dying trees posed a hazard in themselves, especially in windstorms.

Water has always been a challenge to Rivergrove, whether in the form of flooding or surface water, and would easily top the list of natural hazards.

FLOODING & SURFACE WATER ISSUES:

Areas subject to flooding are identified in the Flood Insurance Studies prepared by the Federal Emergency Management Agency (FEMA) and are indicated on a flood plain map. The most current FEMA 100-year flood levels, which were adopted by the Rivergrove City Council in June 2008, can be seen on the Rivergrove Floodplain Map in Appendix D.

Many dwellings in the City are located in this floodplain. Consequently, the City participates in the flood insurance program developed by FEMA, which makes flood insurance available to homeowners. The purchase of flood insurance generally requires compliance with the Department of Housing and Urban Development (HUD) Flood Insurance Program Regulations. These regulations specify building criteria for structures built within the 100-year floodplain.

The year 2009 was the first time most Rivergrove residents realized that surface water issues are serious matters. That was the year the first noticeable detention pond was constructed along Childs Road. Its black chain link fence and concrete walls brought immediate comments. Others will follow as acreage is developed.

Yet some homeowners have been battling surface water runoff for years, as development has occurred, in Rivergrove or nearby. Non-pervious paving and structures have sent excess surface water running down through the City, toward the Tualatin River, flooding driveways and backing up roadside drainage ditches.

Careful management of surface water, through stringent land use ordinances and strict enforcement is needed to prevent this.

GROUNDWATER CONTAMINATION:

Groundwater contamination is possible if areas where ponding occurs are polluted. For this reason, septic tank development should not be allowed in areas with high water tables. Although there is a certain amount of development in such areas in Rivergrove, no problems of groundwater contamination have been noted.

Areas of Potential Groundwater Contamination can be noted on the map in Appendix D.

SOILS HAZARDS:

The following table summarizes the hazards of soils found in Rivergrove. Additional details of soils may be found in Appendix D-5, with a soil map in Appendix D-6.

Characteristics & Constraints of Soils in Rivergrove^{1,2}

Number	Soil	Slope	Characteristics			Constraints	
			Shrink/ Swell	Drainage*	Erosion*	Dev.* Const.	SDS* Const.
<i>Clackamas County</i>							
56	McBee Silty Clay Loam	0-3%	Mod.	M	SL	SV	SV
84	Wapato Silty Clay Loam	0-3%	Mod.	P	SL	SL	SL
91A	Woodburn Silt Loam	0-7%	Mod.	MW	SL	M	SV
91B	Woodburn Silt Loam	3-8%	Mod.	M	SL	SV	SV
76B	Salem Silt Loam	0-7%	Low	W	SL	SL	SL
16	Chehalis Silt Loam	0-3%	Mod.	W	SL	SV	SV
<i>Washington County</i>							
9	Chehalis Silty Clay Loam	0-3%	Mod.	W	SL	SV	SV
21C	Hillsboro Loam	7-12%	Low	W	SL	SL	SL

Abbreviations: P=Poor, M=Moderate, MW=Moderately Well, W=Well, SV-Severe, SL=Slight

The most notable soil hazards are severe constraints to development and subsurface disposal systems (SDS). Severe constraints to development soils generally require major reclamations, design modifications, or special maintenance. The soils with a severe constraint to SDS have poor permeability and a high seasonal water table. Development on these soils should be at lower densities than on the moderate and slightly constrained soils. For more detailed information of the soils in the City and a soil map, refer to Appendix D.

OTHER HAZARDS:

Slopes in the City are mild; therefore, landslide hazards are minimal.

There are no earthquake faults running under the city of Rivergrove, although the entire Pacific Northwest is subject to seismic activity.

Deposition in the Tualatin River appears to be balanced with channel scouring during high water flows and is thus not a problem. However, an additional problem in the City is erosion of the banks of the Tualatin River. The City will work with the State Marine Board and other responsible agencies, including the neighboring jurisdictions of Tualatin, Tigard, and Lake Oswego, to minimize bank erosion possibly by establishing limitations on speed or size of motor boat traffic on the Tualatin River.

POLICIES:

1. Development in area of special flood hazard (Flood Management Area) shall be in accordance with the National Flood Insurance Program Regulations. The preferred use within the area of special flood hazard is open space.
2. Land use decisions shall consider their potential effect on flooding, drainage and soil erosion.
3. Development on soils with severe constraints to development or SDS shall be allowed only after appropriate safeguards have been taken.
4. Rivergrove shall encourage the preservation of natural drainage ways.
5. Encourage the use of individual pumping stations where needed for sewer connections.
6. Limited new single family residential development may be allowed within lands designated as Floodway Fringe areas on Federal Emergency Management Agency maps subject to the new structures meeting the standards specified in the Flood Damage Prevention Ordinance (Rivergrove Ordinance #52). All such structures shall be flood resistant.
7. If sanitary sewer is available, the maximum density allowed in the 100-year flood boundary should be one (1) house per 10,000 square feet.
8. Development in the floodway itself, as designated on Federal Emergency Management Agency Maps, should be aimed at enhancing the recreational use of this space, while mitigating environmental damage concerns.

ENDNOTES -- GOAL #7

¹ USDA , Natural Resources Conservation Service, *Rivergrove Soils Report*, July 2010

² Oregon Department of Environmental Quality (DEQ)

GOAL # 8: RECREATIONAL NEEDS

GOAL: To satisfy the recreational needs of the citizens of the Rivergrove area and visitors.

CONTEXT:

A variety of recreational opportunities are easily accessible to Rivergrove residents. Within the city limits, there is a 1.11 acre city park—Lloyd Minor Park— located on Dogwood Drive between Marlin and Tualamere Avenues.

Across from the park, on the river side of Dogwood Drive, a city-owned boat ramp provides public access to the Tualatin River. The river contains a variety of game fish and provides angling opportunities for Rivergrove residents.

There are no public camping, picnicking, and recreational lodging facilities in Rivergrove. No travel-ways, trails, or archeological sites are located within Rivergrove. No cultural events, winter sports events, or active and passive games and activities take place in Rivergrove. No hunting is allowed in the City.

Nearby, in Lake Oswego, other recreational sites are available for use by Rivergrove residents.

LLOYD MINOR PARK:

Rivergrove residents love their park: 82.5% of respondents to the 2008 *Rivergrove City Survey* said that the park is a “great asset to Rivergrove.”¹ Yet only 27.4% felt that the park “has all the facilities needed to serve its users.”

In 2006, the City received a 60%/40% matching funds grant from the Oregon Lottery—the State’s share amounted to \$38,000—and the funds were used to construct a safe, fun and colorful playground structure. However, limited financial resources have delayed the further landscaping and development of the park.

STARK BOAT RAMP:

The Leonard & Edith Stark boat ramp allows public access to the Tualatin River. 66.2% of respondents to the 2008 *Rivergrove City Survey*¹ said that the boat ramp “is a great asset to Rivergrove,” and 52.3% said that they “regularly access the river.”

A Citizens’ Advisory Committee was formed in 2009, to address not only the concerns of neighbors about noise and traffic issues relating to the boat ramp, but also future landscaping and development possibilities for the park as a whole.

NEARBY RECREATIONAL ACTIVITIES:

Other recreational opportunities are in close proximity to Rivergrove. Three Lake Oswego city parks are located at or near Rivergrove's eastern border with Lake Oswego.

Sharing a contiguous border with Rivergrove, and just north of the City's easternmost area is Canal Acres, a 31-acre natural open space.

Bryant Woods Nature Park, a 17-acre nature conservancy, is located on the north side of Childs Road west of (and adjacent to) the Oswego Canal.

River Run Park, a 7-acre passive park site, is located to the east of Rivergrove across the Lake Oswego Canal.

North of central Rivergrove, Pilkington Park and Soccer Field, adjacent to River Grove Elementary School, offer additional recreational opportunities.

Citizens of Rivergrove are granted access to Oswego Lake for swimming and picnicking via the Lake Grove Swim Park.

FUTURE PARKS IN RIVERGROVE:

Outdoor recreation facility standards for urban areas recommended by the State Parks and Recreation Department² and acreage requirements for Rivergrove are shown in the table below.

Acreage Requirements for Rivergrove Parks

Type of Park	Acreage per 1000 Pop.	Pop.= 350	Pop.= 450
Neighborhood Park	2.5 acres/1000 persons	.9 acres	1.2 acres
Community Park	2.5 acres/1000 persons	.9 acres	1.2 acres
Regional Park	10.5 acres/1000 persons	3.7 acres	4.7 acres

From these figures it would seem that the City has provided marginally sufficient neighborhood park space for its citizens at current population levels. However, as our population grows in coming years, when subdivisions now in the approved or in planning stages are developed, the need for additional parks will grow. There are limited site opportunities for neighborhood and citywide park and recreation facility development because few vacant sites are of adequate size and have aesthetic value and a good location.

To accomplish this, the City of Rivergrove must first be certain to have a land use Code that allows for the dedication of open space.

There are limited site opportunities for neighborhood and citywide park and recreation facility development because few vacant sites are of adequate size and have aesthetic value and a good location. Moreover, local means to acquire and develop park sites are extremely limited.

The City has recently given preliminary approval for an application for density transfer in a large subdivision. By increasing the density of housing in the portion of the land outside the floodplain, the developer proposed the creation of an open space in the floodplain.

POLICIES

1. Explore the potential for joint park development with Clackamas County.
2. Acceptance by Rivergrove of any land dedicated for park purposes shall be based upon its usefulness and adaptability to the City's park and open space system.
3. Cooperate with Lake Oswego and other jurisdictions in the development and maintenance of parks which are easily accessible to Rivergrove residents.
4. Work with affected agencies to improve the Tualatin River and allow access to its recreational opportunities.

ENDNOTES - GOAL # 8:

¹City of Rivergrove, 2008 Rivergrove City Survey.

¹State Highway Division, Parks and Recreation Department, Oregon Outdoor Recreation, 1971.

GOAL # 9: ECONOMIC DEVELOPMENT

GOAL: To provide adequate opportunities throughout the City for a variety of economic activities for the health, welfare and prosperity of Rivergrove and its citizens.

CONTEXT:

Rivergrove is a residential community, and its citizens want to maintain the residential character of the area. There is no industrial development or commercial development. During the last decade, one commercial facility, a fitness gym/with swimming pool, was annexed to Rivergrove under the City's new conditional use ordinance. However that land use has now become residential.

Currently, most residents of Rivergrove find their employment in the Portland metropolitan area. Prospects to provide a commercial or industrial base in Rivergrove are not favorable due to the limited supply of buildable land, the lack of large parcels of buildable land, the existing residential development, and the lack of sewers accessible by many homes in the Clackamas County portion of Rivergrove.

Although the feasibility of providing sewers to this part of Rivergrove remains under study, there is very little Rivergrove can do to remove the other constraints to industrial and commercial development which exist in Rivergrove. The nearby cities of Tigard, Tualatin and Lake Oswego have more suitable and available land, and have included commercial and industrial development in their long-range planning.

Because Rivergrove is unsuited for commercial and industrial development and does not plan to provide for such development in the future, Rivergrove residents will continue to be dependent for their employment on the Portland metropolitan area.

POLICIES:

1. Allow home businesses as specified in the Land Development Ordinance.
2. Encourage the interim use of vacant land for urban agriculture.
3. Rivergrove could explore the possibility of zoning a very small commercial "node," so that residents can buy some basic goods and services without having to drive to another city.

GOAL # 10: HOUSING

GOAL: To provide for the housing needs of citizens of the City of Rivergrove; to encourage the availability of adequate numbers of needed housing units at price ranges and rent levels which are commensurate with the financial capabilities of Rivergrove households and allow for flexibility of housing location, type and density; and to ensure the efficient use of residential land within the Metro urban growth boundary consistent with Statewide Planning Goal 14 Urbanization; in a way that is consistent with the Metro Urban Growth Management Functional Plan, while at the same time, maintaining the characteristics that make Rivergrove unique and desirable to current and future residents.

CONTEXT:

In the past 20 years, Rivergrove has seen many changes to its new housing stock as well as the value of land. This is due to many factors that include growth in the Portland Metropolitan Area, economic growth in the region, and an improvement in the water quality of the Tualatin River. Rivergrove has also benefited from its close proximity to major freeways, central location to jobs, and a scenic beauty that attracts residents.

While all of these amenities have made Rivergrove a desirable place to live, the city also lacks much of the infrastructure that would make it a candidate for denser development. That includes availability and frequency of mass transit, and commercial development within walking distance.

The sensitive ecological system that exists throughout much of the City's area is another deterrent. In Metro's 2040 Plan⁸, Rivergrove has been designated as a low-density residential area. This classification has also been adopted by both Clackamas and Washington Counties.

BUILDABLE LAND:

Table F-2, in appendix F, shows the City's 2009 inventory of fully developed land (including dedicated park land), re-developable and vacant land. It should be noted that acreage of protected Goal 5 resource areas such as designated wetlands and riparian corridors, and Goal 7 hazard areas such as floodways (see Floodplain & Floodway Map, appendix D-3) has not been removed from the buildable land inventory. Development in such areas is restricted in the RLDO.

All land in the City is zoned Residential, with a minimum lot size of 10,000 square feet for land outside the Flood Hazard District and 0.5 acre within the Flood Hazard District. Higher density is achieved in two ways: (1) The City allows the lot size calculation for subdivision lots on private streets to include the square footage of the street when connected to sewers; and (2) the Rivergrove Land Use Development Ordinance allows duplexes, triplexes and accessory dwelling units on lots that meet the minimum square footage.

Development in the City shall be subject to urban development standards consistent with Statewide Planning Goals 10, 11 and 14, and with the Metro Urban Growth Management Functional Plan, in order to encourage infill development and redevelopment to meet the City's current and future housing needs. These development standards will not require property owners to partition or redevelop their land; they will merely allow them to do so if they wish.

DEVELOPMENT HISTORY:

During the past decade (2000 through 2009), the City has approved 32 development applications for new houses and 19 for renovation of existing homes.

LAND USE INVENTORY AND COST:

Rivergrove's land use inventory is summarized in Appendix F, in Map F-1, and Table F-2, using statistics from the most recent census¹ and tax assessment data.² The inventory shows vacant, developed and re-developable land.

Table F-3, in Appendix F shows the distribution of Rivergrove households among ranges of monthly housing values from the most recent census¹ and tax assessment data.²

Rivergrove, as part of the Lake Oswego School District, is fortunate to have an outstanding school system. And as a result of this, citizens enjoy other benefits such as access to the Lake Grove Swim Park and participation in the City of Lake Oswego's recreation program, all factors that contribute to the value of property in the City.

All of this information is updated with the latest census data when it is available in Appendix F.

HOUSEHOLD INCOME:

Please refer to table F-4 in Appendix F for the most current income data.

HOUSING AFFORDABILITY:

The need for affordable housing in the Portland metropolitan region is well documented.

In the year 2009, a house at Rivergrove's median value of \$359,411 would have required a household income of approximately \$54,000 to \$64,000. Table F-3 in Appendix F gives the figures used to calculate this.

POPULATION PROJECTION:

Rivergrove has not grown nearly as rapidly as Metro's earlier projected figure of 450 by 2000². Since incorporation in 1971, the population has increased by only 5 persons, from 319 to 324 in 2000¹. The primary reasons for the slow growth are the lack of large parcels of buildable land free of environmental obstacles (wetlands, floodway, floodplain, surface water management) and the expense of bringing sewers to some difficult sites.

While the years 2003 through 2008 saw a rapid increase in development activity in the City³, the subsequent recession has left developed subdivision land standing vacant or only partially built.

At the time of the US Census 2000, Rivergrove had a population of 324 (297 in Clackamas County, 37 in Washington County). The median age was 34.

Metro's population growth forecast⁷ estimates a growth range for the Portland Metropolitan Area of between 1.37% and 1.70% over the period 2000 to 2030. Based on this estimate, Rivergrove's population for the year 2030 would be within the range of 444 to 550 citizens.

DEMOGRAPHIC OVERVIEW:

[Note: Census 2010 data will be substituted when it becomes available in 2011.]

The U.S. Bureau of the Census' Census 2000¹ provides the following profile of Rivergrove households:

- 69.6% of all households are comprised of married couples
- Average household size is 2.77 individuals
- 51.5% of residents are female, 48.5% male
- 88% own their homes, 12% are renters
- 75.2% of households have school-age children

For additional census figures, see Appendix F.

HOUSING DEMAND:

The 32 new homes built between the years 2000 and January 1, 2010 accommodate approximately 174 new residents, based on Metro's current household size estimate of >2.6 persons per household.

In addition, 54 lots have been approved for development. Using Metro's current household size estimate of >2.6 persons per household⁷ these lots should bring Rivergrove's population to 548, just two short of the estimated population range high, assuming single family homes are constructed on each lot. (The RLDO allows duplexes or triplexes.)

Many of these lots are in new subdivisions with private streets. Therefore, the square footage of the street has been included in each lot's total area, bringing the buildable portion of the lot to less than the minimum 10,000 square feet.

FUTURE GROWTH:

With the exception of two very small parcels of developed land, Rivergrove has now annexed all pockets of land within its city limits. Since it is bounded by the Tualatin River on the south, and the cities of Lake Oswego and Tualatin, or unincorporated land within the Metro urban growth boundary on all other sides, there is no room for future growth outside its existing city limits.

Therefore, growth in population must be accommodated through development of vacant land, infill and duplexes or triplexes as currently allowed under the Rivergrove Land Development Ordinance.

ADDRESSING HOUSING NEEDS:

DLCD's State Housing Goal discusses the need for affordable housing and the provision of diverse housing which meets the characteristics of statewide housing demand while satisfying local housing demand.

The location of new residential development in Rivergrove is severely limited due to the lack of vacant, buildable land, and the small size of the City. Thus, new residential development in Rivergrove is basically an in-fill situation and this restricts the degree to which the methods to promote lower housing costs and housing diversity can be applied.

There is little a small jurisdiction such as Rivergrove can do to affect the major determinants of housing costs: prime interest rate, labor costs and state and local regulations. However, until urban conditions develop, there are some things Rivergrove can do to reduce housing costs.

Strategies, actions and measures that Rivergrove has adopted or may consider, to encourage infill housing development that will meet the City's future housing needs analysis include:

- allowing accessory dwelling units (currently allowed by the RLDO);
- allowing duplexes and triplexes (currently allowed by the RLDO);
- allowing for smaller than 10,000 square foot lots where urban services are available (currently allowed on private streets);
- permitting outright, through a site plan review or conditional use, townhouses and cottage housing.

POLICIES:

1. Encourage a city-wide effort to bring sewers to the entire community at a reasonable cost.
2. Explore ways to increase density without sacrificing the lifestyle that is important to Rivergrove citizens, and without sacrificing environmental quality standards.
3. Encourage the "filling-in" of vacant and underdeveloped land unless precluded by environmental constraints.
4. Update Rivergrove's subdivision and development process for developers and builders in an effort to reduce application costs, legal costs, and other permit processing expenses.
5. Take into consideration how a development application affects the overall character of the neighborhood.

ENDNOTES – GOAL # 10

¹ U.S. Bureau of the Census, *Census 2000*

² Tax assessment/valuation data from Clackamas County and Washington County Assessors, 2009.

³ City of Rivergrove, *Rivergrove Housing Survey*, November, 1977.

⁴ Clackamas and Washington County, Oregon, property tax data.

⁵ City of Rivergrove archives.

⁶ City of Rivergrove Survey June 2008.

⁷ Metro Council's *20 and 50-Year Population and Employment Range Forecasts*, 2009

⁸ *Metroscape Gen 2.3 – Year 2030*, Metro regional government, Portland Oregon, 2008.

GOAL # 11: PUBLIC FACILITIES AND SERVICES

GOAL: To plan and develop a timely, orderly and efficient arrangement of public facilities and services to serve planning area development.

CONTEXT:

Rivergrove does not have a sufficient revenue source to directly provide many public facilities and services to its residents. Instead, the City has entered into Intergovernmental Agreements with other governmental units, to receive sewer and emergency services. Contractual franchise agreements with utilities, communication companies and waste collection services bring these amenities to homes in Rivergrove.

The city of Rivergrove has residents living in both Washington, and Clackamas County, Oregon. Some public facilities and services serving the residents span both counties; others depend on the geographic location within Rivergrove itself.

EDUCATION:

Children of Rivergrove residents attend schools within the Lake Oswego School District. Those children attend Rivergrove elementary School, Waluga Middle School, and Lakeridge High School.

POLICE:

In an emergency, residents should call 911 and emergency services will be dispatched accordingly.

Rivergrove is under the jurisdiction of the Clackamas County Sheriff's office. For all non-emergency questions or concerns, residents should contact the Sheriff's office directly.

FIRE PROTECTION:

In an emergency, residents should dial 911 and inform the operator of the type of emergency and location for appropriate dispatch.

The city of Rivergrove has a franchise agreement with Tualatin Valley Fire and Rescue, which offers sufficient fire and rescue services, with secondary response assistance from neighboring communities such as Lake Grove Fire and Rescue.

For answers to questions or for a summary of emergency services available, residents are advised to contact the fire districts periodically to keep abreast of the services and equipment available for emergency deployment such as cardiac-equipped rescue vehicles, emergency rescue, etc.

WATER:

Rivergrove has urban service agreements with both the Rivergrove Water District and the city of Tualatin, to provide water respectively for homes in Clackamas and Washington Counties respectively. Both supply ample amounts of high quality water for the district.

Residents should be advised the water does have mineral content at low levels and the installation and use of a water softener is recommended merely as a convenience to maintaining your home and fixtures.

SEWER:

Public Sewer is supplied through Lake Oswego Sewer district and Tualatin United Sewerage Agency.

Many Rivergrove residents still do not have access to a public sewer, but instead rely on septic systems. Many of the city's older systems are failing and the expense of bringing sewer to a single residence can be substantial.

See Appendix G-3 for a map of the areas served by the two public sewer systems to determine which agency should be contacted for questions or to address any problems.

HEALTH SERVICES:

There are many private health service providers in the area surrounding Rivergrove.

Public health services are available in both Clackamas and Washington Counties (see Appendix G-1).

For a list of available private and public health providers, residents are urged to research those required in the Yellow Pages, or through a search on the internet at home or through a public library.

ENERGY AND COMMUNICATIONS SERVICES:

Rivergrove residents are supplied electricity through Portland General Electric. Natural gas is available through Northwest Natural Gas. Communications and television services are available through the private corporations Comcast and Verizon, with whom the City has entered into a franchise agreement.

TRANSPORTATION SERVICES:

Rivergrove has access to public transportation through TRI-MET at several stops along Childs Rd. There is no city-operated public transportation system.

GOVERNMENTAL SERVICES:

Rivergrove has a volunteer Mayor, City Council and Planning Commission, and a paid City Recorder and City Manager.

The City Council is responsible for approval of issues relating to the city and the goals of the city.

The Planning Commission reviews and approves applications for development within the city limits. These applications may include requests for conformance to zoning and city design requirements for the purpose of building, remodeling, demolishing, or moving homes, installing services such as sewer, water, etc. and for the removal of trees that may be required for such building, moving, etc.

POLICIES:

1. The City shall continue to cooperate with the City of Lake Oswego in development of any future sewerage master plans. This plan shall be coordinated with all effected sewerage planning authorities with whom agreements shall be reached and maintained to continue to provide Rivergrove with sewerage services.
2. Where full public facilities and services are available, no urban-level development shall occur without the provision for public facilities and services.
3. Where sewerage service is not available, private approved individual sewage disposal systems shall be allowed at lower densities. Development on private sewage disposal systems shall not preclude urban level development when public sewerage service is available.
4. The City shall cooperate and maintain agreements with the districts and agencies which provide its residents with special services so as to continue and improve those services.

GOAL # 12: TRANSPORTATION

GOAL: To provide and encourage a safe, convenient and economical transportation system.

CONTEXT:

The principle streets in Rivergrove are Childs Road and Pilkington Road, which are classified as *secondary arterials* in the Clackamas County Plan. Lake Oswego and Rivergrove share planning responsibility with Clackamas County for these roads. Lake Oswego classifies Childs road as a *major collector*. Rivergrove's position is that the sections of Childs road and Pilkington road in our city should be classified as *neighborhood collectors*.

Traffic counts (Keech 1992) show that Childs Road has 1,900 ADT west of Pilkington, and 3000 east of Pilkington, and Pilkington Road has no current figures. The City's streets are adequate for present traffic volumes, and should have adequate capacity through the planning period. However, City residents have expressed concern about traffic safety on Childs Road. Clackamas county and Lake Oswego both have adopted plans which include turn lanes on Childs Road at its intersection with Pilkington. The turn lanes are a long range project and not expected to happen for 11 to 20 years.

In recent years, when Childs Road properties are partitioned or subdivided, Clackamas County has required a 10' dedication for the eventual widening of the road. Since the creation of several new subdivisions along Childs near Pilkington, the roadway in that area has become significantly wider than the remainder of Childs and concerns about speeding and safety have increased. Sections of the pedway have fallen into disrepair as the County has not required developers to re-install raised safety bumps when repaving. Rivergrove has reservations about any widening of Childs Road and is considering steps to give the City a role as an active participant in the planning process.

All other streets are local. Clackamas County maintains all public roads within Rivergrove, except Childs Road west of 65th and West Road. In the past decade, Clackamas County has declined to accept responsibility for maintenance of new roads. Therefore, since that time, all streets in new subdivisions are privately owned by the individual property owners. These streets are open for public access, but not public parking.

In order to promote efficient vehicular and pedestrian circulation throughout the city, subdivisions and site developments of more than one acre should provide street connectivity whenever possible. Street connectivity is consistent with the Oregon Transportation Planning Rule (TPR) and satisfies Metro's street design guidelines that is described in Metro document entitled Creating Livable Streets, page 27 that reads in part:

"An interconnected internal street system that provides multiple routes to local destinations, as well as between adjacent developments, allow local trips to stay off the arterial network. Streets that converge at nodes and

transit stops provide pedestrians with the option of walking for some trips in a safe and comfortable environment. Those who chose to drive may exit to the arterial system or find a shorter and more direct route to a nearby destination on local streets. With an interconnected street system that provides multiple routes to local destinations, any single street will be less likely to be overburdened by excessive traffic. Police and fire response also benefits from a well-connected road system.”

VEHICLES:

The automobile is and will continue to be the major source of transportation for residents of Rivergrove, because other available transportation modes offer only limited access to their employment, shopping and recreation destinations. A recent survey indicated that, as their primary means of transportation to work, 75% of Rivergrove residents drove their car alone, while 9% carpoled, 8% rode the bus, 1% walked, and 7% worked at home.¹ Median travel time is 20-24 minutes.²

BUS SERVICE:

Tri-Met services Rivergrove with line #36, the Oregon City-South Shore bus route. Tri-Met has no plans to increase bus service to Rivergrove, but has taken actions to increase the number of areas easily accessible from Rivergrove. The institution of a Transit Center in Tualatin has connected Rivergrove to Tualatin, Tigard and Legacy Meridian Park Hospital, with express service to downtown Portland. Residents presently have access to Lake Oswego and Oregon City As service continues to improve and as automobile travel increases in cost, Tri-Met bus service will become an increasingly important mode of transportation for residents of Rivergrove.

Tri-met also supplies a necessary and important transportation service for disabled citizens of Rivergrove³. Regular bus service is an important means of travel for these citizens who cannot own or operate a private automobile. All buses are now fully accessible, and are equipped with either a boarding ramp or power lift to offer service to citizens confined to wheelchairs. Most buses have automatic systems that announce or illuminate the names of stops. Tri-Met operates the LIFT service for those unable to use standard buses.

BICYCLES & PEDESTRIANS:

Bikes have predominantly been used by Rivergrove residents for recreation rather than for transportation. However, as fuel prices continue to climb the bike will become a more attractive alternative to the automobile. Walking and biking on Childs and Pilkington roads has always been of concern, since enforcement of the 25-hour speed limit is not constant.

The construction of a bike\pedway along the south side of Childs, from Sycamore to Terry Street was a step in the right direction. A pathway has been planned by Clackamas County and the City of Lake Oswego for Pilkington Road

from Childs north to Jean. Rivergrove is committed to working with Clackamas County and Lake Oswego on these projects.

However, safety concerns on Childs Road continue. Clackamas County's own recent (November 1993) gave Childs Road the dubious distinction of, "the most dangerous road to walk on in Clackamas County." The bike/pedway, completed during the 1990s has provided a smoother place to walk, but maintenance by Clackamas County has been poor. Developers installing sewers were allowed to repave without replacing safety bumps, and the City should be more vigilant in this regard.

Because of Rivergrove's distance from its major employment and service centers walking to a commercial or retail destination is not a major transportation mode for its residents. However, walking for fitness and sheer enjoyment has increased since the construction of the pedway. Walking safety is likely to improve as the planned subdivisions are constructed, bringing sidewalks to replace the level pedway, and quieter connecting streets to stroll through.

Bicycling, though, will become an increasing concern on Childs Road, as the bike/pedway has become intermittent, as it is replaced by pedestrian-only sidewalks. The City must address this issue and encourage Clackamas County to provide a safe route for bicycles.

POLICIES:

1. The City shall continuously participate in transportation and circulation systems planning for the East Washington County and West Clackamas County areas to maintain a safe transportation system based on a functional mix of automobile, mass transit, bicycle, and pedestrian modes of travel for local and regional transportation requirements.
2. Roadways within Rivergrove shall be classified as and meet the specifications as described in the Standards Document and the classification shall be coordinated with the Interim Transportation Plan and plans of abutting jurisdictions.
3. The City shall cooperate with Tri-Met to increase mass transit ridership within the City, and shall publicize the availability of programs for the transportation disadvantaged citizens of Rivergrove.
4. The City should work with Metro, Lake Oswego, and Clackamas County to provide a safe bike route into Rivergrove along Childs and Pilkington Roads.
5. Childs Road is designated as a preferred location for a pedestrian/bicycle path from Lake Oswego Canal to 65th Street.
6. The City of Rivergrove will address bicycle issues through a bike & pedestrian plan for the City that connects with neighboring communities.

7. The City should embark on a study of its roads, including jurisdiction and maintenance agreements, to determine the best solution for long-term care and upkeep. Pending a best solution determination for maintenance, the City will consider private street approval that allows public access, with road maintenance provided by a homeowner's association or other means acceptable to the City. The City will utilize the private street design and construction standards adopted for Clackamas County.
8. The City should develop a Transportation System Plan (TSP) to define the City's needs and requirements for its roads.
9. The City should encourage and/or implement traffic control improvements or alterations aimed at improving pedestrian and bicycling safety.
10. The City should promote street connectivity as a principal design guideline in approving new subdivisions and site developments of more than one acre.
11. Improvements to transportation facilities should adequately and attractively transition to existing facilities.
12. Rivergrove's position is that the portions of Childs Road and Pilkington within the city limits should continue to be classified as neighborhood collectors.

ENDNOTES – GOAL # 12:

¹ City-Data.com, *Means of Transportation to Work (City of Rivergrove) 2008.*

² City-Data.com, *Travel Time to Work (City of Rivergrove) 2008.*

³ TriMet, *Information for Seniors & People with Disabilities*, <http://trimet.org/access/index.htm>

GOAL # 13: ENERGY CONSERVATION

GOAL: To manage and control land and uses developed on the land, so as to maximize the conservation of all forms of energy, based upon sound economic principles.

CONTEXT:

The role of the land use planning process with regard to energy conservation is to minimize the consumption of all forms of energy by managing and controlling land uses. Local governments can play an important role in this process by educating residents to the short-term and long-term benefits of energy conservation, and by making information available on alternative energy sources.

The City's existing pattern of land use is not as energy-efficient as it might be. Single family dwelling units on large individual lots are the primary land use. Commercial uses are located approximately one mile from the city limits, but the lack of safe, designated pedestrian paths or bikeways to those areas discourages access by these modes of travel. The lack of employment opportunities in Rivergrove encourages automobile commutes to distant employment centers.

Rivergrove produces none of its own energy supply and has no fossil fuel resources. As the main fuel source for heating homes, natural gas is predominant, used in 77% of Rivergrove's houses, followed by electricity (15 %), oil (7 %), and wood (2 %).¹

ALTERNATIVE ENERGY SOURCES:

In 2009, the City issued a development permit for the City's first geothermal heat pump, for a private home under construction. This is an example of an alternative source of energy that may prove to be well suited to Rivergrove's damp soils. In spite of the large stands of trees throughout parts of the City, there are plenty of residences where solar energy might be an option.

The Rivergrove newsletter and public meetings are excellent forums to educate citizens about energy conservation programs and tax credits for alternative energy equipment and energy-efficient appliances and building materials.

POLICIES

1. Support programs for household energy conservation.
2. Continue to encourage residents to conserve energy through articles in Rivergrove newsletters and other media.
3. Modify the Land Development Ordinance when necessary to enforce land use patterns, building forms, or siting practices which in common practice will reduce energy consumption or improve energy efficiency.

4. Find ways to encourage the use of alternative energy sources in Rivergrove homes.
5. Encourage the "filling-in" of vacant land.
6. Support development of a network of well-defined, safe pedestrian and bicycle paths.
7. Support use of mass transit (Tri-Met) and carpooling when possible for work and shopping trips.
8. Maintain the city park and boat ramp, and encourage Rivergrove residents to use these and other nearby recreational facilities.
9. Consider modifications to permitting fees for development applications on new or remodeled housing that include energy conservation or alternative energy use.
10. The City should encourage the use of geothermal, solar and other energy-saving methodologies.

ENDNOTE – GOAL # 13

¹ City-Data.com, *Heating Fuel in Houses (City of Rivergrove)* 2008.

GOAL #14: URBANIZATION

GOAL 14: To provide for an orderly and efficient transition from rural to urban land use, to accommodate urban population and urban employment inside urban growth boundaries, to ensure efficient use of land and to provide for a livable community.

CONTEXT:

The role of the land use planning process with regard to energy conservation is to minimize the consumption of all forms of energy by managing and controlling land uses. Local governments can play an important role in this process by educating residents to the short-term and long-term benefits of energy conservation, and by making information available on alternative energy sources.

POLICIES:

1. The City of Rivergrove is part of the Metro region and is subject to Metro's Urban Growth Boundary (UGB). The City will coordinate Goal 14 Land Use Issues with Metro pursuant to ORS 195.025.

EXEMPTED GOALS # 15 THROUGH 19

The City of Rivergrove has adopted exemptions to the following Statewide Planning Goals for the reasons indicated:

GOAL # 15: WILLAMETTE RIVER GREENWAY

The protection of the Willamette River Greenway is not at issue in this plan, since the entire planning area is outside the established Willamette River Greenway area.

GOAL # 16: ESTUARINE RESOURCES

The protection of Estuarine Resources is not at issue in this plan, since the entire planning area does not include or lie adjacent to Estuaries or their associated wetlands.

GOAL # 17: COASTAL SHORELANDS

The conservation of Coastal Shorelands is not at issue in this plan, since the entire planning area does not include Coastal Shoreland areas.

GOAL # 18: BEACHES AND DUNES

The conservation of Beaches and Dunes is not at issue in this plan, since the entire planning area does not include Beaches or Dunes.

GOAL # 19: OCEAN RESOURCES

The protection of Marine Resources is not at issue in this plan, since the entire planning area does not include or lie adjacent to the Pacific Ocean.

APPENDICES

Appendix A: City Map
Appendix B: Citizen Involvement
Appendix C: Open Spaces & Recreation
Appendix D: Natural Resources & Natural Hazards
Appendix E: Air, Water & Land Resources Quality
Appendix F: Housing & Population
Appendix G: Public Services

MAPS

Appendix A-1: Rivergrove City Limits Map
Appendix C-1: Open Spaces & Recreation
Appendix D-4: Floodplain & Floodway
Appendix D-5: Groundwater Hazards
Appendix D-7: Soils in Rivergrove
Appendix F-1: Land Use Inventory
Appendix G-3: Sanitary Sewer Availability

APPENDIX B: CITIZEN INVOLVEMENT

2008 Rivergrove City Survey Results – B-1

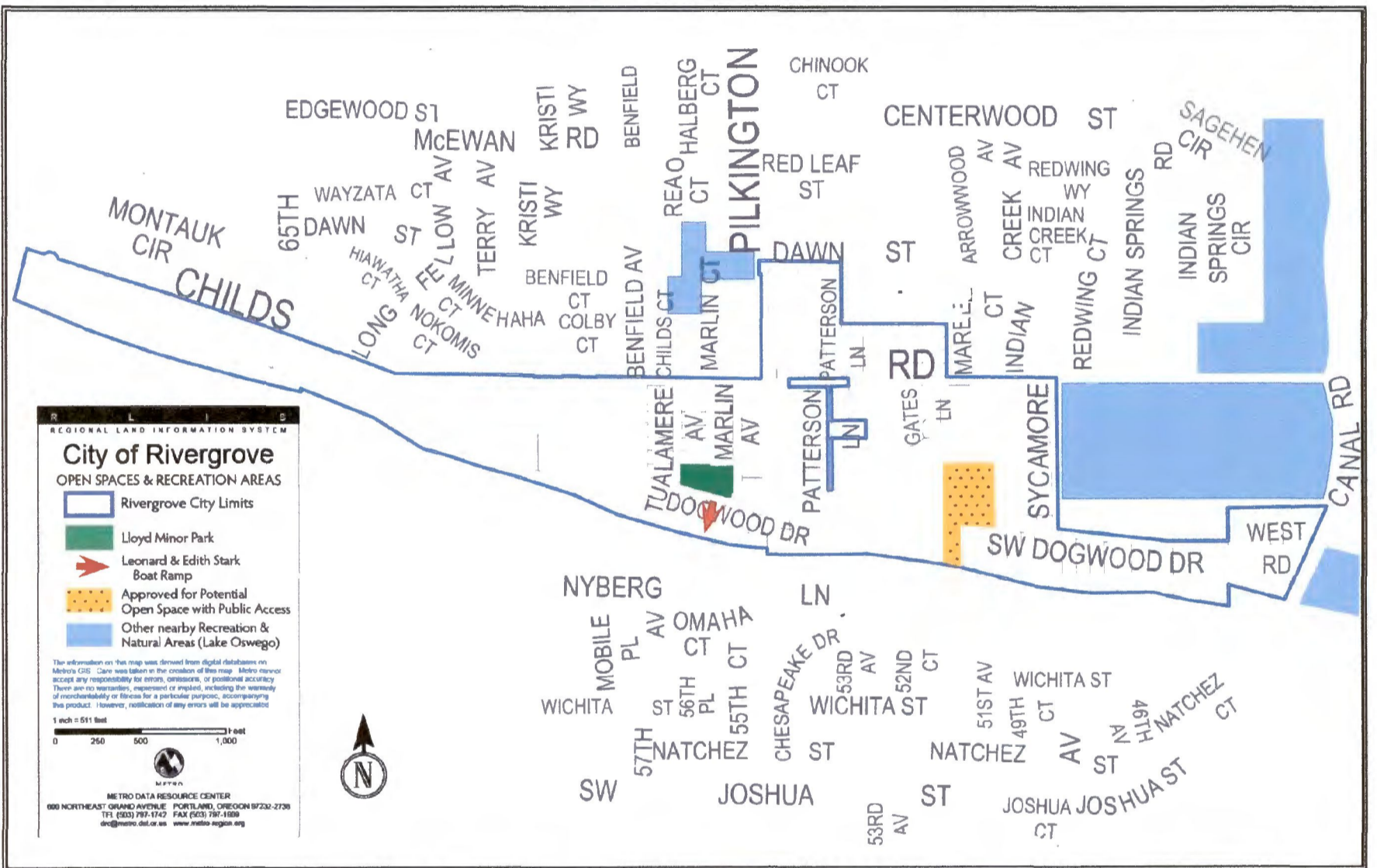
TRANSPORTATION						
		Auto	Bus	Bike	Walk	Other
Q1	What is your primary mode of transportation from home to work?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Percent & Total # of Responses	93.5% (58)	3.2% (2)	0% (0)	0% (0)	3.2% (2)
Q2	If you have a secondary mode of transportation, what is it?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Percent & Total # of Responses	13.9% (5)	11.1% (4)	25% (9)	38.9% (14)	11.2% (4)
	Please indicate whether you agree or disagree with the following statements					
		Strongly Agree	Agree	Disagree	Strongly Disagree	Don't Know
Q3	The average vehicle speed on Childs Rd is too fast	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Percent & Total # of Responses	29.7% (19)	29.7% (19)	29.7% (19)	6.3% (4)	4.7% (3)
Q4	Vehicles travel too fast on my street	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Percent & Total # of Responses	39.1% (25)	31.3% (20)	23.4% (15)	4.7% (3)	1.6% (1)
Q5	I feel safe walking in Rivergrove during the day.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Percent & Total # of Responses	34.8% (23)	59.1% (39)	3% (2)	1.5% (1)	1.5% (1)
Q6	I feel safe walking in Rivergrove at night.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Percent & Total # of Responses	18.2% (12)	51.5% (34)	18.2% (12)	6.1% (4)	6.1% (4)
Q7	Trimet bus service is adequate for my needs.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Percent & Total # of Responses	10.9% (7)	25% (16)	17.2% (11)	4.7% (3)	42.2% (27)
Q8	I feel safe biking in Rivergrove.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Percent & Total # of Responses	8.2% (5)	49.2% (30)	19.7% (12)	6.6% (4)	16.4% (10)
Q9	Rivergrove needs bikepaths.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Percent & Total # of Responses	38.7% (24)	29% (18)	16.1% (10)	3.2% (2)	12.9% (8)
Q10	Rivergrove needs more sidewalks and paths	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Percent & Total # of Responses	41.5% (27)	33.8% (22)	18.5% (12)	3.1% (2)	3.1% (2)
Q11	There is adequate street lighting in Rivergrove.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Percent & Total # of Responses	12.3% (8)	56.9% (37)	24.6% (16)	3.1% (2)	3.1% (2)
Q12	There is adequate landscaping along streets in Rivergrove.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Percent & Total # of Responses	6.2% (4)	44.6% (31)	33.8% (22)	7.7% (5)	7.7% (5)
Q13	New streets in Rivergrove are adequate to meet traffic needs.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Percent & Total # of Responses	10.9% (7)	48.4% (31)	12.5% (8)	7.8% (5)	20.3% (13)
Q14	Is there something else you would like to add about transportation in Rivergrove or any ideas or suggestions for improvements?					
NATURAL RESOURCES						
	Please indicate whether you agree or disagree with the following 15 statements	Strongly Agree	Agree	Disagree	Strongly Disagree	Don't Know
Q16	Minor Park is a great asset to Rivergrove	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Percent & Total # of Responses	34.9% (22)	47.6% (30)	3.2% (2)	3.2% (2)	11.1% (7)
Q17	Minor Park has all the facilities needed to serve its users	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Percent & Total # of Responses	9.7% (6)	17.7% (11)	25.8% (16)	16.1% (10)	30.6% (19)
Q18	Minor Park is used primarily by Rivergrove residents	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Percent & Total # of Responses	13.4% (9)	41.8% (28)	4.5% (3)	3% (2)	37.3% (25)
Q19	Stark Boat Ramp is a great asset to Rivergrove	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Percent & Total # of Responses	23.1% (15)	43.1% (28)	7.7% (5)	4.6% (3)	21.5% (14)
Q20	Stark Boat Ramp is used primarily by Rivergrove residents	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Percent & Total # of Responses	4.5% (3)	18.2% (12)	21.2% (14)	12.1% (8)	43.9% (29)
Q21	Access to the Tualatin River meets my needs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Percent & Total # of Responses	27.7% (18)	53.8% (35)	7.7% (5)	7.7% (5)	3.1% (2)
Q22	I regularly access the Tualatin River	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Percent & Total # of Responses	20.6% (13)	31.7% (20)	25.4% (16)	17.5% (11)	4.8% (3)
Q23	The environmental quality of the Tualatin River is acceptable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Percent & Total # of Responses	4.4% (3)	23.5% (16)	39.7% (27)	26.5% (18)	5.8% (4)
Q24	My recreational needs are met in Rivergrove	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q26	Landscaping in Minor Park is attractive	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Percent & Total # of Responses	0% (0)	23% (14)	39.3% (24)	21.3% (13)	16.4% (10)
Q27	Landscaping in the public right of way on streets is attractive	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Percent & Total # of Responses	3.2% (2)	24.2% (15)	41.9% (26)	16.1% (10)	14.5% (9)
Q28	Landscaping in Stark Boat Ramp is attractive	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Percent & Total # of Responses	0% (0)	16.9% (11)	40% (26)	18.5% (12)	24.6% (16)
Q29	Trees are a significant resource in Rivergrove	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Percent & Total # of Responses	50% (33)	40.9% (27)	3% (2)	0% (0)	6.1% (4)
Q30	Preservation of Trees should be a priority for Rivergrove	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Percent & Total # of Responses	43.3% (29)	38.8% (26)	13.4% (9)	3% (2)	1.5% (1)
Q31	Developers and property owners should be required to preserve trees	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Percent & Total # of Responses	41.2% (28)	35.3% (24)	16.2% (11)	2.9% (2)	4.4% (3)
Q32	Is there something else you would like to add about natural resources in Rivergrove?					

LAND USE

		Yes	No			
Q33	Has there been any new residential development near your home? (new homes built, new additions on existing homes, extensive land disturbance for new development, etc.)	<input type="radio"/>	<input type="radio"/>			
	Percent & Total # of Responses	90.5% (57)	9.5% (6)			
How do you rate the new development in Rivergrove on the following?						
		Very Good	Good	Bad	Very Bad	Don't Know
Q34	Attractiveness of Landscaping	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Percent & Total # of Responses	16.9% (10)	45.8% (27)	11.9% (7)	15.3% (9)	10.2% (6)
Q35	Attractiveness of Stormwater Management (i.e., ponds, outfalls)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Percent & Total # of Responses	1.6% (1)	19.7% (12)	27.9% (17)	19.7% (12)	31.1% (19)
Q36	Attractiveness of Subdivision Design	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Percent & Total # of Responses	8.2% (5)	41% (25)	29.5% (18)	8.2% (5)	13.1% (8)
Q37	Attractiveness of homes constructed (if any)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Percent & Total # of Responses	13.1% (8)	57.4% (35)	14.8% (9)	8.2% (5)	6.6% (4)
Q38	Attractiveness of Roadways	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Percent & Total # of Responses	4.9% (3)	52.5% (32)	24.6% (15)	9.8% (6)	8.2% (5)
Q39	Overall Attractiveness	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Percent & Total # of Responses	5% (3)	54.7% (34)	20% (12)	6.7% (4)	11.7% (7)
Q40	Integration with existing neighborhood home styles	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Percent & Total # of Responses	7% (4)	36.8% (21)	33.3% (19)	19.3% (11)	3.5% (2)
Q41	Integration with existing neighborhood design	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Percent & Total # of Responses	8.3% (5)	31.7% (19)	38.3% (23)	15% (9)	6.7% (4)
Q42	Integration with existing traffic patterns	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Percent & Total # of Responses	6.6% (4)	42.6% (26)	23% (14)	14.8% (9)	13.1% (8)
Q43	Overall Integration of the new development into your neighborhood	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Percent & Total # of Responses	6.5% (4)	38.7% (24)	32.3% (20)	11.3% (7)	11.3% (7)
Please indicate whether you agree or disagree with the following statements						
		Strongly Agree	Agree	Disagree	Strongly Disagree	Don't Know
Q44	Town homes and other multifamily dwellings in Rivergrove are acceptable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Percent & Total # of Responses	4.5% (3)	13.6% (9)	25.8% (17)	54.5% (36)	1.5% (1)
Q45	Are there townhomes or other multifamily houses near your home?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Percent & Total # of Responses	21.5% (14)	72.3% (47)	6.2% (4)		
Q46	Is there accessory housing (garage apartments, mother-in-law apartments, etc.) near your home?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Percent & Total # of Responses	16.7% (11)	57.6% (38)	25.8% (17)		
Q47	Would townhomes or other multifamily homes be acceptable near your home?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Percent & Total # of Responses	7.7% (5)	63.1% (41)	29.2% (19)		
Q48	Do you have specific Comments regarding housing density in Rivergrove?					

		Strongly Agree	Agree	Disagree	Strongly Disagree	Don't Know
Q49	Current subdivision signage is acceptable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Percent & Total # of Responses	3.6% (2)	56.4% (31)	23.6% (13)	3.6% (2)	12.7% (7)
Q50	Current signage on public property (boat ramp, Minor Park, and Rivergrove welcome sign) is acceptable.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Percent & Total # of Responses	9.2% (6)	66.2% (43)	13.8% (9)	1.5% (1)	9.2% (6)
Q51	Do you have specific Comments regarding signage in Rivergrove?					
Q52	Lot sizes in Rivergrove are too large.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Percent & Total # of Responses	1.6% (1)	6.3% (4)	47.6% (30)	42.9% (27)	1.6% (1)
Q53	Lot sizes in Rivergrove should be the same throughout the City	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Percent & Total # of Responses	6.3% (4)	26.6% (17)	42.2% (27)	14.1% (9)	10.9% (7)
Q54	Lot sizes in Rivergrove should be more varied.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Percent & Total # of Responses	1.7% (1)	27.6% (16)	43.1% (25)	12.1% (7)	15.5% (9)
Q55	Do you have specific Comments regarding lot sizes in Rivergrove?					
Q56	A building's "footprint" is the amount of space it takes up on the property (lot) Do you feel there should be a maximum building footprint in Rivergrove?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Percent & Total # of Responses	28.1% (18)	43.8% (28)	15.6% (10)	7.8% (5)	4.7% (3)
Q57	The yard sizes of new homes being built in Rivergrove are too small	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Percent & Total # of Responses	40.6% (26)	31.3% (20)	17.2% (11)	1.6% (1)	9.4% (6)
Q58	Is there something else you would like to add about land use in Rivergrove?					
About You						
Q59	What is your gender?	Male <input type="radio"/>	Female <input type="radio"/>			
	Percent & Total # of Responses	44.6% (29)	55.3% (34)			
Q60	How long have you lived in Rivergrove?	Less than 2 years <input type="radio"/>	2 to 5 years <input type="radio"/>	6 to 9 years <input type="radio"/>	10 years or more <input type="radio"/>	
	Percent & Total # of Responses	4.5% (3)	19.7% (13)	16.7% (11)	59.1% (39)	
Q61	How many people live in your household including yourself?					
Q62	Are you an owner or renter?	Owner <input type="radio"/>	Renter <input type="radio"/>	Other (please explain) <input type="radio"/>		
	Percent & Total # of Responses	100% (66)	0% (0)			
Q63	What type of house do you live in?	Single-family <input type="radio"/>	Duplex <input type="radio"/>	Multi-family <input type="radio"/>	Other (please explain) <input type="radio"/>	
	Percent & Total # of Responses	100% (65)	0% (0)	0% (0)	0% (0)	
Q64	Overall, how do you rate the livability of Rivergrove?	Very Good <input type="radio"/>	Good <input type="radio"/>	Bad <input type="radio"/>	Very Bad <input type="radio"/>	Don't Know <input type="radio"/>
	Percent & Total # of Responses	56.1% (37)	36.4% (24)	3% (2)	3% (2)	1.5% (1)
Q65	List the three best things about the quality of life in Rivergrove					
Q66	List three things that could be improved					



APPENDIX C-1
City of Rivergrove - 2010
OPEN SPACES & RECREATION AREAS MAP

APPENDIX D: NATURAL RESOURCES & NATURAL HAZARDS

FISH OF THE TUALATIN RIVER – D-1

The following species of fish are thought to inhabit the Tualatin River:

<u>SPECIE</u>		<u>STATUS</u>
Game Fish		
Fall Chinook Salmon	<i>Oncorhynchus tshawytscha</i>	S
Coho Salmon	<i>Oncorhynchus kisutch</i>	M
Winter Steelhead Trout	<i>Salmo gairdneri</i>	M
Cutthroat Trout	<i>Salmo clarki</i>	M
Channel Catfish	<i>Ictalurus punctatus</i>	R
Brown Bullhead	<i>Ictalurus nebulosus</i>	R
Yellow Perch	<i>Perca flavescens</i>	R
Largemouth Bass	<i>Micropterus salmoides</i>	R
Warmouth Bass	<i>Lepomis gulosus</i>	R
Bluegill	<i>Lepomis macrochirus</i>	R
White Crappie	<i>Pomoxis annularis</i>	R
Black Crappie	<i>Pomoxis nigromaculatus</i>	R
Pumpkinseed	<i>Lepomis gibbosus</i>	R
Crayfish	<i>Pacifastacus sp.</i>	R
Rainbow Trout	<i>Oncorhynchus mykiss</i>	S
Non-game Fish		
Carp	<i>Cyprinus carpio</i>	R
Northern Pike Minnow	<i>Ptychocheilus oregonensis</i>	R
Largescale Sucker	<i>Catostomus macrocheilus</i>	R
Redside Shiner	<i>Richardsonius balteatus</i>	R
Sculpins	<i>Cottus sp.</i>	R
Pacific Lamprey	<i>Lampetra tridentate</i>	R
Brook Lamprey	<i>Lampetra planeri</i>	R
Dace, Speckled	<i>Rhinichthys osculus</i>	R
Dace, Longnose	<i>Rhinichthys cataractae</i>	R
Mosquitofish	<i>Gambusia affinis</i>	R

M = Migratory

S = Suspected

R = Resident

Source: Oregon Department of Fish and Wildlife, updated 2010

Wildlife Resources - D-2

The following is a list of Wildlife Species Present (Known or Suspected) in the City of Rivergrove, Oregon:

Status Key: FSOC = Federal Species of Concern, ST = State Listed Threatened, SS-C = State Sensitive Critical, SS-V = State Sensitive Vulnerable, OCS = Oregon Conservation Strategy species

Amphibians

Common Name	Habitat / Special Needs	Status
Northwestern salamander	Riparian	
Long-toed salamander	Riparian	
Pacific giant salamander	Riparian	
Ensatina	Riparian	
Roughskin newt	Riparian	
Western red-backed salamander	Riparian	
Western toad	Wetlands, ponds, lakes for breeding	SS-V, OCS
Pacific treefrog	Wetlands	
Red-legged frog	Ponds and wetlands with emergent plants for breeding, moist forest for over-wintering	FSOC, SS-V, OCS

Reptiles

Common Name	Habitat / Special Needs	Status
Western painted turtle	Ponds, lakes, slow-moving rivers/streams; open ground for nesting, basking structures	SS-C, OCS
Western pond turtle	Ponds	FSOC, SS-C, OCS
Northern alligator lizard	Brush	
Southern alligator lizard	Brush	
Western fence lizard	Varied, woodland, grassland	
Western skink	Open moist land	
Rubber boa	Varied, grassland, forest	
Racer	Oak woodland, grasslands, brush	
Ringneck snake	Wet meadows, conifers, mixed forest	
Gopher snake	Dry brush	
Western terrestrial garter snake	Fields, brush	
Northwestern garter snake	Fields, brush, gardens	
Common garter snake	Fields, brush, gardens	

Birds

Common Name	Habitat	Status
Great blue heron	Ponds, marshes, rivers	
Green heron	Ponds, marshes, rivers	
Canada goose	Ponds, grassy fields	
Wood duck	Riparian	
Mallard	Ponds, marshes, riparian	
Pintail	Ponds, marshes, riparian	

Northern shoveler	Ponds, marshes, riparian	
Blue-winged teal	Ponds, marshes, riparian	
Cinnamon teal	Ponds, marshes, riparian	
Hooded merganser	Ponds, marshes, riparian	
Common merganser	Ponds, marshes, riparian	
Turkey vulture	Open fields, forested area	
Osprey	Open fields, forested area	
Bald eagle	Open areas, some trees, near water	ST, OCS
Northern harrier	Varied, fields, marshes open woods	
Sharp-shinned hawk	Coniferous forests near open areas	
Cooper's hawk	Brushy areas	
Red-tailed hawk	Open fields	
American kestrel	Open fields	
Peregrine falcon	Open fields	SS-V, OCS
California quail	Brushy lowlands, riparian, open	
American coot	Marshes, riparian	
Killdeer	Grassy areas near water	
Common snipe	Wet meadows	
Gulls spp.	Agricultural lands, water, garbage	
Band-tailed pigeon	Forested areas	FSOC, OCS
Mourning dove	Douglas fir groves, open areas, brush	
Barn owl	Open, semi-open areas, suburban	
Western screech owl	Brushy areas	
Great horned owl	Brushy areas	
Barred owl	Deep, moist forests, swampland	
Common nighthawk	Forest, open areas	SS-C, OCS
Vaux's swift	Chimneys, old growth forests	
Anna's hummingbird	Flowering plants	
Rufous hummingbird	Flowering plants	
Belted kingfisher	Riparian	
Red breasted sapsucker	Douglas fir, other treed areas	
Downy woodpecker	Deciduous forest, riparian	
Hairy woodpecker	Mature deciduous or mixed woods	
Northern flicker	Forested areas, riparian	
Pileated woodpecker	Mature stands of mixed woods	
Olive-sided flycatcher	Open, older coniferous forest, riparian forest; snags/prominent trees	FSOC, SS-V, OCS
Western wood-pewee	Deciduous, coniferous woods, riparian	
Little willow flycatcher	Brushy patches of vegetation adjacent to water for nesting and foraging	SS-V, OCS
Pacific-slope flycatcher	Brush, riparian	
Tree swallow	Varied	
Violet-green swallow	Varied	
Northern rough-winged swallow	Varied	
Cliff swallow	Varied	
Barn swallow	Varied	
Steller's jay	Brush	
Western scrub-jay	Brush	
American crow	Open areas	
Black-capped chickadee	Deciduous trees	
Chestnut backed chickadee	Conifers	
Bushtit	Brush	
Red breasted nuthatch	Conifers	
Slender-billed nuthatch	Mature oak trees for foraging, nesting	SS-V, OCS

Brown creeper	Woodlands	
Bewick's wren	Brush	
House wren	Brush	
Winter wren	Brush	
Marsh wren	Wetlands	
Golden-crowned kinglet	Conifers	
Swainson's thrush	Conifer and deciduous trees	
American robin	Varied	
Varied thrush	Brush, forest	
Cedar waxwing	Brush, open areas	
Cassin's vireo	Coniferous, mixed forest, riparian	
Hutton's vireo	Pine, oak, mixed forest	
Warbling vireo	Tall deciduous shade trees	
Western bluebird	Woodlands near clearings	SS-V, OCS
Orange-crowned warbler	Brush	
Nashville warbler	Open, second-growth deciduous woods	
Yellow warbler	Riparian	
Yellow-rumped warbler	Brush, riparian	
Black-throated gray warbler	Dry deciduous, coniferous scrub	
MacGillivray's warbler	Low brush	
Common yellow throat	Brush, wet areas	
Wilson's warbler	Dense riparian areas	
Western tanager	Open conifers	
Black-headed grosbeak	Brush, riparian	
Lazuli bunting	Brush, open areas	
Spotted towhee	Dry brush with diverse plants	
Chipping sparrow	Open areas of herbaceous understory for foraging; oak woodlands	OCS
Oregon vesper sparrow	Open fields, scattered trees	FSOC, SS-C, OCS
Savannah sparrow	Fields with grass or weed cover	
Song sparrow	Brush patches	
White-crowned sparrow	Woodlands	
Dark-eyed junco	Forests	
Red-winged blackbird	Fields	
Brewer's blackbird	Wooded swampland	
Brown headed cowbird	Open areas	
Bullock's oriole	Shade trees	
Purple finch	Conifer	
House finch	Shrubs, cropland	
Pine siskin	Conifers	
Lesser goldfinch	Trees, brush, weeds	
American goldfinch	Trees, brush, weeds	
Evening grosbeak	Seeded trees	

Mammals

Common Name	Habitat	Status
Vagrant shrew	Riparian, wet meadows, grasslands	
Pacific marsh shrew	Riparian areas with mature trees	
Coast mole	Forests	
Townsend's mole	Moist organic soil	
California myotis	Varied, open areas	SS-V, OCS
Yuma myotis	Dry forests	FSOC
Little brown myotis	Varied, moist areas	

Long-legged myotis	Forests	FSOC, SS-V, OCS
Fringed myotis	Dry forests	FSOC, SS-V, OCS
Long-eared myotis	Coniferous forests	FSOC
Silver haired bat	Forests	FSOC, SS-V, OCS
Big brown bat	Forests	
Hoary bat	Treed areas near water	SS-V, OCS
Brush rabbit	Brush, riparian	
Black-tailed jackrabbit	Open grasslands	SS-V
California ground squirrel	Brush, cropland	
Western gray squirrel	Mature oaks	SS-V, OCS
Douglas squirrel	Coniferous forests	
Northern flying squirrel	Mature forests	
Western pocket gopher	Open grassy areas	
Camas pocket gopher	Sandy areas	FSOC
American beaver	Riparian	
Deer mouse	Varied	
Dusky-footed woodrat	Douglas fir	
Bushy-tailed woodrat	Varied, coniferous forest	
Western red-backed vole	Mature Douglas fir	
Gray-tailed vole	Grasslands	
Townsend's vole	Meadows	
Muskrat	Riparian	
Porcupine	Douglas fir, woodland	
Coyote	Woodlots, riparian	
Red fox	Fields, brush	
Raccoon	Riparian	
Long-tailed weasel	Riparian	
Mink	Riparian	
Western spotted skunk	Forest, woodlands	
Striped skunk	Brush, riparian	
Northern river otter	Riparian	
Bobcat	Brush, broken forest, swamps, grassland	
Black-tailed deer	Woodlots, riparian	

Non-native Invasive Species

American bullfrog
Red eared slider turtle
Common snapping turtle
Ring-necked pheasant
Rock dove (pigeon)
Eurasian collared-dove
European starling
English house sparrow
Mute swan
Virginia opossum
Eastern cottontail
Eastern fox squirrel
Eastern gray squirrel
House mouse
Norway rat
Nutria

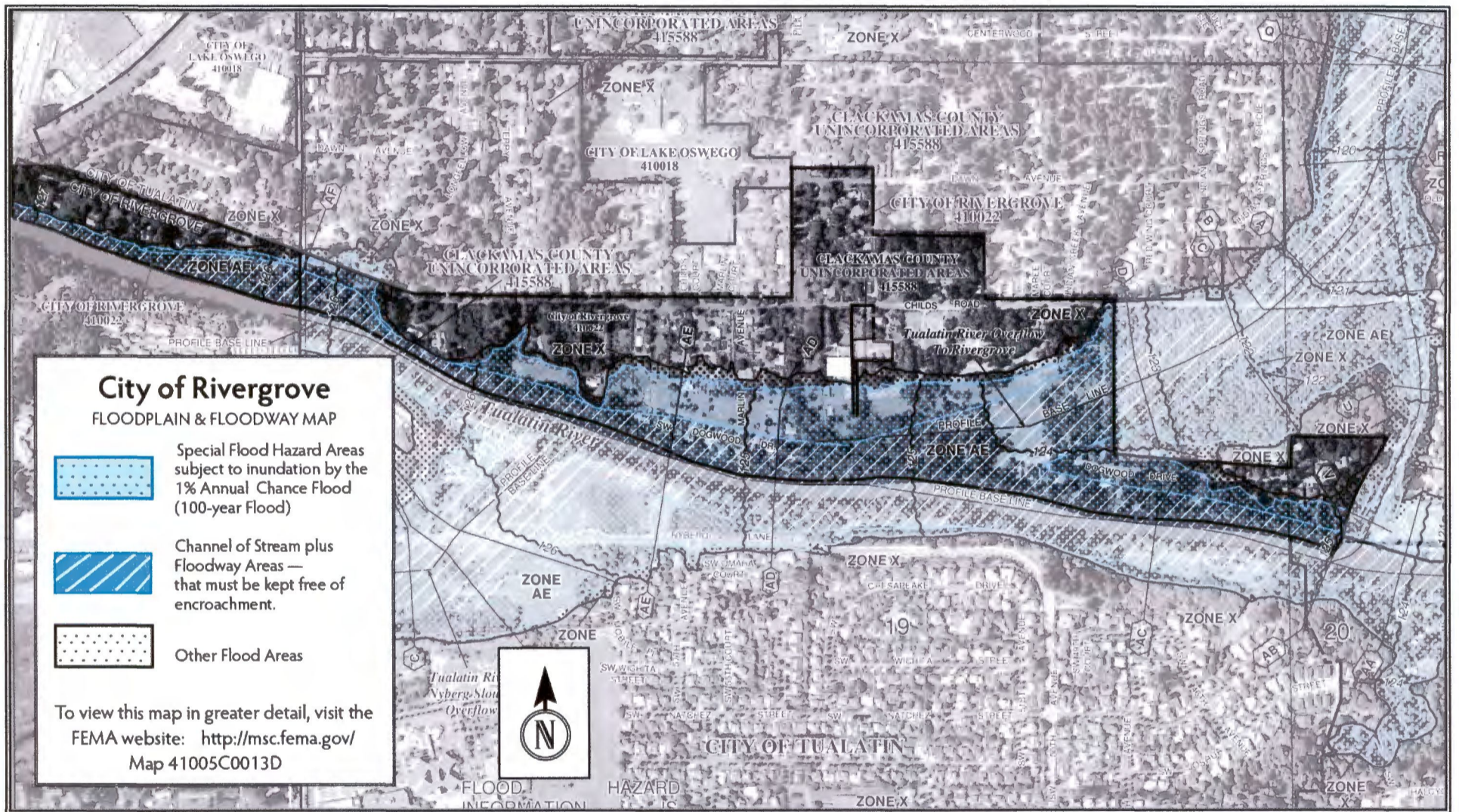
Source: Oregon Department of Fish and Wildlife, updated 2010

Native Plant Inventory - D-3

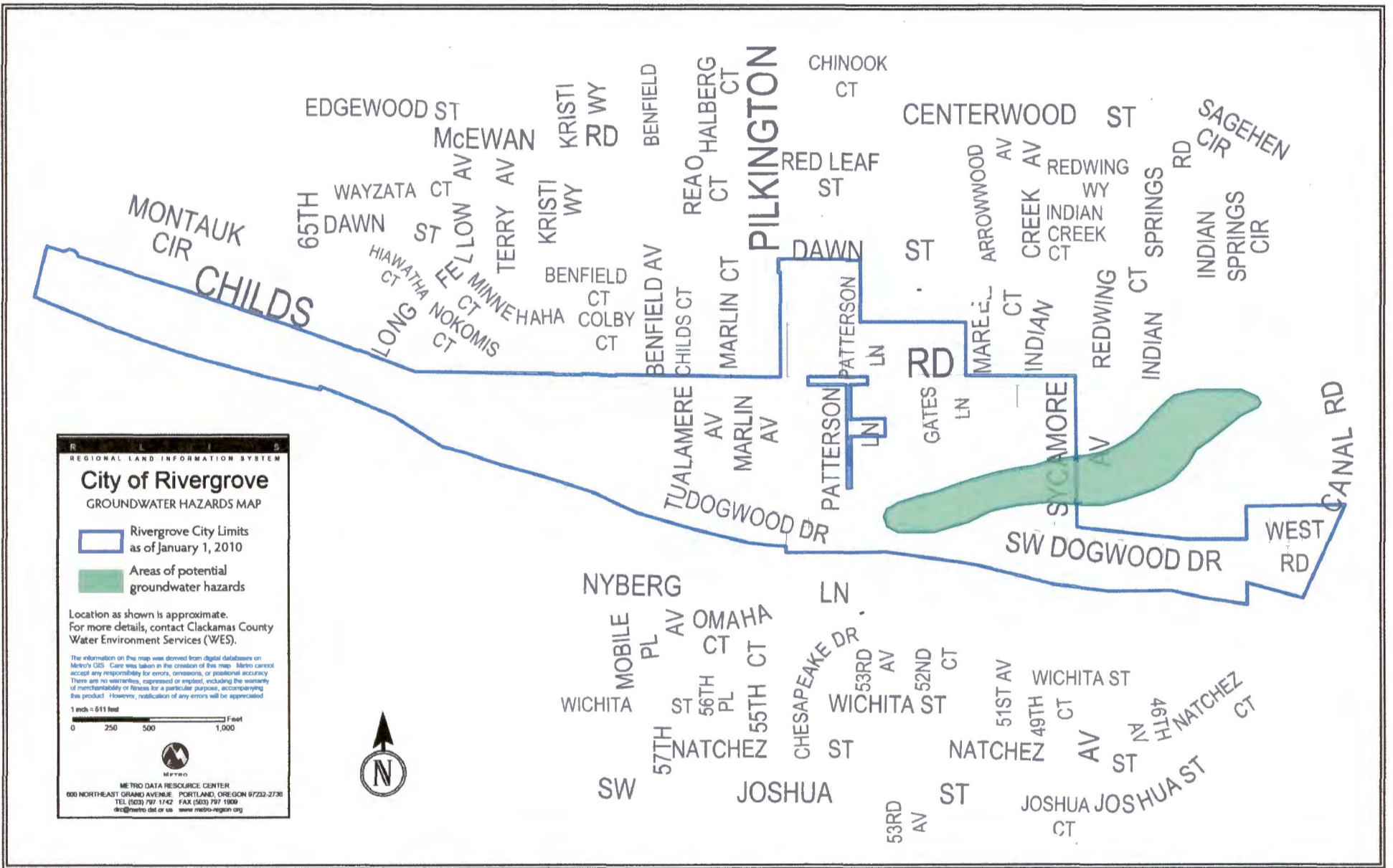
A complete, detailed list of native plants for the Portland Metropolitan Area can be found at the following website:

<http://www.portlandonline.com/bps/index.cfm?c=45131>

Scroll down for links to lists in pdf format of Native Plants and Invasive Plants.



APPENDIX D-4
City of Rivergrove Floodplain & Floodway Map
Federal Emergency Management Agency (FEMA)
June 17, 2008
FIRM - Flood Insurance Rate Map 41005C0013D



APPENDIX D-5
City of Rivergrove
GROUNDWATER HAZARD MAP

SOILS IN RIVERGROVE - D-6

The following soils are found in Rivergrove. They are mapped on the following page.
Data: U.S. Department of Agriculture, National Resources Conservation Service, July 2010

Clackamas County, Oregon

16—Chehalis silt loam

Map Unit Setting

Elevation: 50 to 1,200 feet
Mean annual precipitation: 40 to 60 inches
Mean annual air temperature: 52 to 54 degrees F
Frost-free period: 165 to 210 days

Map Unit Composition

Chehalis and similar soils: 85 percent
Minor components: 2 percent

Description of Chehalis Setting

Landform: Flood plains
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Mixed alluvium

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high
(0.57 to 1.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: Occasional
Frequency of ponding: None
Available water capacity: High (about 11.4 inches)

Interpretive groups

Land capability classification (irrigated): 2w
Land capability (non-irrigated): 2w

Typical profile

0 to 7 inches: Silt loam
7 to 44 inches: Silty clay loam
44 to 60 inches: Stratified fine sandy loam to silty clay loam

Minor Components

Wapato

Percent of map unit: 2 percent
Landform: Flood plains
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear

56—McBee silty clay loam

Map Unit Setting

Elevation: 50 to 1,200 feet

Mean annual precipitation: 40 to 60 inches

Mean annual air temperature: 52 to 54 degrees F

Frost-free period: 165 to 210 days

Map Unit Composition

McBee and similar soils: 85 percent

Minor components: 4 percent

Description of McBee

Setting

Landform: Flood plains

Landform position (three-dimensional): Tread

Down-slope shape: Linear

Across-slope shape: Linear

Parent material: Mixed alluvium

Properties and qualities

Slope: 0 to 3 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Moderately well drained

Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.57 in/hr)

Depth to water table: About 24 to 36 inches

Frequency of flooding: Occasional

Frequency of ponding: None

Available water capacity: High (about 11.6 inches)

Interpretive groups

Land capability classification (irrigated): 2w

Land capability (non-irrigated): 2w

Typical profile

0 to 15 inches: Silty clay loam

15 to 48 inches: Silty clay loam

48 to 60 inches: Clay loam

Minor Components

Wapato

Percent of map unit: 3 percent

Landform: Flood plains

Landform position (three-dimensional): Tread

Down-slope shape: Linear

Across-slope shape: Linear

Aquolls

Percent of map unit: 1 percent

Landform: Flood plains

76B—Salem silt loam, 0 to 7 percent slopes

Map Unit Setting

Elevation: 200 to 650 feet

Mean annual precipitation: 40 to 60 inches
Mean annual air temperature: 50 to 54 degrees F
Frost-free period: 165 to 210 days

Map Unit Composition

Salem and similar soils: 85 percent

Description of Salem

Setting

Landform: Stream terraces
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium

Properties and qualities

Slope: 0 to 7 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 1.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water capacity: Low (about 4.6 inches)

Interpretive groups

Land capability classification (irrigated): 2s
Land capability (non-irrigated): 2s

Typical profile

0 to 8 inches: Silt loam
8 to 24 inches: Gravelly clay loam
24 to 60 inches: Very gravelly loamy sand

84—Wapato silty clay loam

Map Unit Setting

Elevation: 100 to 1,500 feet
Mean annual precipitation: 40 to 60 inches
Mean annual air temperature: 52 to 54 degrees F
Frost-free period: 165 to 210 days

Map Unit Composition

Wapato and similar soils: 85 percent
Minor components: 10 percent

Description of Wapato

Setting

Landform: Flood plains
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium

Properties and qualities

Slope: 0 to 3 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Poorly drained

Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.57 in/hr)

Depth to water table: About 0 to 6 inches

Frequency of flooding: Frequent

Frequency of ponding: Frequent

Available water capacity: High (about 10.3 inches)

Interpretive groups

Land capability classification (irrigated): 3w

Land capability (non-irrigated): 3w

Typical profile

0 to 18 inches: Silty clay loam

18 to 45 inches: Silty clay loam

45 to 60 inches: Silty clay

Minor Components**Cove**

Percent of map unit: 6 percent

Landform: Flood plains

Landform position (three-dimensional): Dip

Down-slope shape: Linear

Across-slope shape: Linear

Humaquepts

Percent of map unit: 4 percent

Landform: Flood plains

91A—Woodburn silt loam, 0 to 3 percent slopes**Map Unit Setting**

Elevation: 150 to 400 feet

Mean annual precipitation: 40 to 50 inches

Mean annual air temperature: 52 to 54 degrees F

Frost-free period: 165 to 210 days

Map Unit Composition

Woodburn and similar soils: 85 percent

Minor components: 6 percent

Description of Woodburn**Setting**

Landform: Terraces

Landform position (three-dimensional): Tread

Down-slope shape: Linear

Across-slope shape: Linear

Parent material: Stratified glaciolacustrine deposits

Properties and qualities

Slope: 0 to 3 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: About 25 to 32 inches
Frequency of flooding: None
Frequency of ponding: None
Available water capacity: High (about 12.0 inches)

Interpretive groups

Land capability classification (irrigated): 2w
Land capability (non-irrigated): 2w

Typical profile

0 to 16 inches: Silt loam
16 to 38 inches: Silty clay loam
38 to 60 inches: Silt loam

Minor Components

Huberly

Percent of map unit: 3 percent
Landform: Swales on terraces
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear

Dayton

Percent of map unit: 2 percent
Landform: Terraces
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear

Aquolls

Percent of map unit: 1 percent
Landform: Flood plains

91B—Woodburn silt loam, 3 to 8 percent slopes

Map Unit Setting

Elevation: 150 to 400 feet
Mean annual precipitation: 40 to 50 inches
Mean annual air temperature: 52 to 54 degrees F
Frost-free period: 165 to 210 days

Map Unit Composition

Woodburn and similar soils: 90 percent
Minor components: 4 percent

Description of Woodburn

Setting

Landform: Terraces
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Stratified glaciolacustrine deposits

Properties and qualities

Slope: 3 to 8 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: About 25 to 32 inches
Frequency of flooding: None
Frequency of ponding: None
Available water capacity: High (about 12.0 inches)

Interpretive groups

Land capability classification (irrigated): 2e
Land capability (non-irrigated): 2e

Typical profile

0 to 16 inches: Silt loam
16 to 38 inches: Silty clay loam
38 to 60 inches: Silt loam

Minor Components

Huberly

Percent of map unit: 2 percent
Landform: Swales on terraces
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear

Aquolls

Percent of map unit: 1 percent
Landform: Flood plains

Dayton

Percent of map unit: 1 percent
Landform: Terraces
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear

Washington County, Oregon

9—Chehalis silty clay loam, occasional overflow

Map Unit Setting

Elevation: 100 to 300 feet
Mean annual precipitation: 40 to 60 inches
Mean annual air temperature: 52 to 54 degrees F
Frost-free period: 165 to 210 days

Map Unit Composition

Chehalis, occasional flooding, and similar soils: 85 percent
Minor components: 4 percent

Description of Chehalis, Occasional Flooding Setting

Landform: Flood plains
Landform position (three-dimensional): Tread
Down-slope shape: Linear

Across-slope shape: Linear
Parent material: Mixed alluvium

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 1.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: Occasional
Frequency of ponding: None
Available water capacity: High (about 11.5 inches)

Interpretive groups

Land capability classification (irrigated): 2w
Land capability (non-irrigated): 2w

Typical profile

0 to 16 inches: Silty clay loam
16 to 45 inches: Silty clay loam
45 to 60 inches: Silt loam

Minor Components

Wapato

Percent of map unit: 4 percent
Landform: Flood plains
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear

21C—Hillsboro loam, 7 to 12 percent slopes

Map Unit Setting

Elevation: 160 to 240 feet
Mean annual precipitation: 40 to 50 inches
Mean annual air temperature: 52 to 54 degrees F
Frost-free period: 165 to 210 days

Map Unit Composition

Hillsboro and similar soils: 90 percent

Description of Hillsboro

Setting

Landform: Terraces
Landform position (three-dimensional): Riser
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Silty and loamy old alluvium

Properties and qualities

Slope: 7 to 12 percent
Custom Soil Resource Report

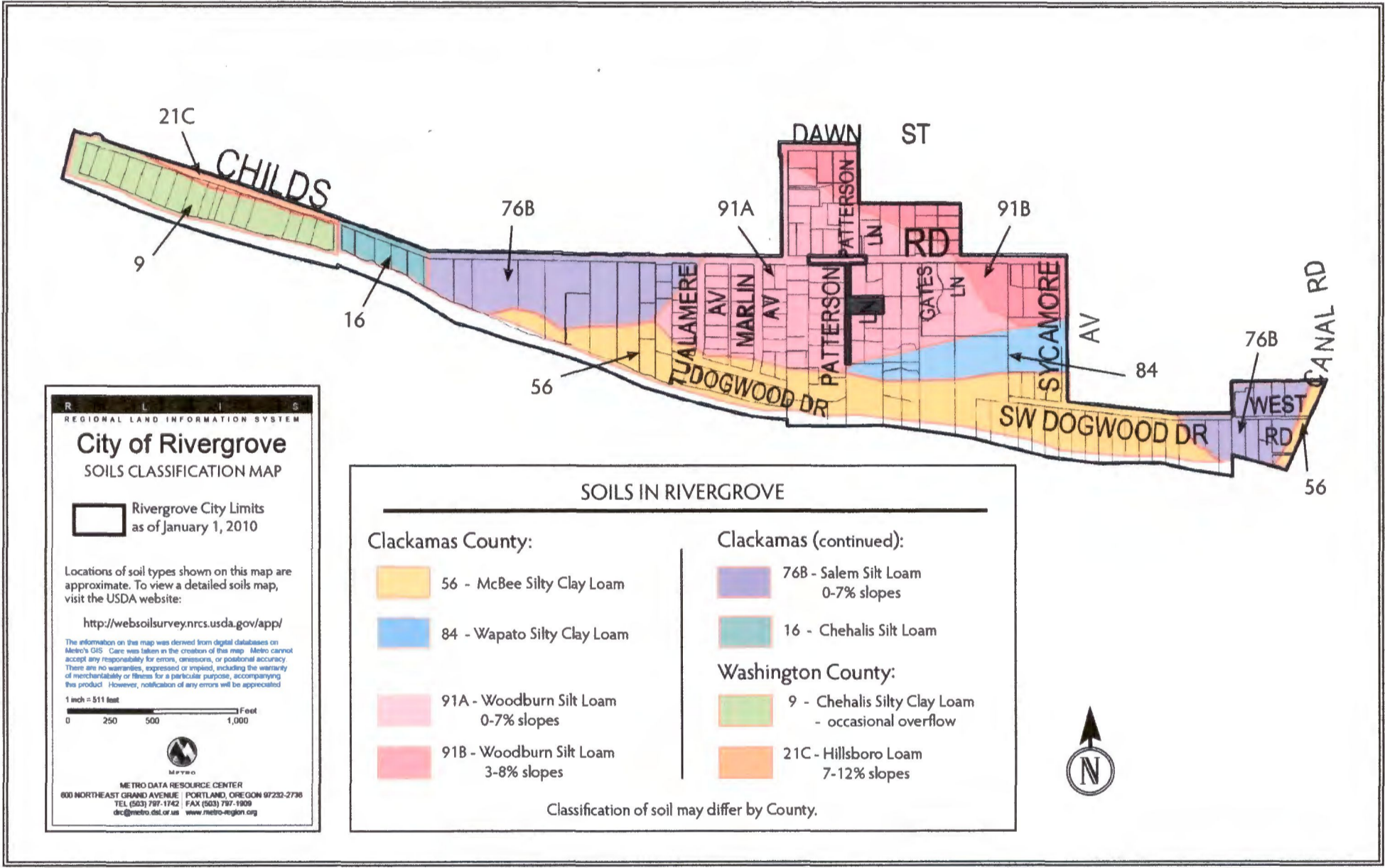
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high
(0.57 to 1.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water capacity: High (about 10.6 inches)

Interpretive groups

Land capability classification (irrigated): 2e
Land capability (non-irrigated): 2e

Typical profile

0 to 15 inches: Loam
15 to 48 inches: Loam
48 to 57 inches: Fine sandy loam
57 to 81 inches: Fine sand



REGIONAL LAND INFORMATION SYSTEM

City of Rivergrove

SOILS CLASSIFICATION MAP

Rivergrove City Limits as of January 1, 2010

Locations of soil types shown on this map are approximate. To view a detailed soils map, visit the USDA website:
<http://websoilsurvey.nrcs.usda.gov/app/>

The information on this map was derived from digital databases on Metro's GIS. Care was taken in the creation of this map. Metro cannot accept any responsibility for errors, omissions, or positional accuracy. There are no warranties, expressed or implied, including the warranty of merchantability or fitness for a particular purpose, accompanying this product. However, notification of any errors will be appreciated.

1 inch = 511 feet

0 250 500 1,000 Feet

METRO DATA RESOURCE CENTER
 600 NORTHEAST GRAND AVENUE PORTLAND, OREGON 97232-2736
 TEL (503) 797-1742 FAX (503) 797-1909
 drc@metro.dst.or.us www.metro-region.org

SOILS IN RIVERGROVE

Clackamas County:	Clackamas (continued):
56 - McBee Silty Clay Loam	76B - Salem Silt Loam 0-7% slopes
84 - Wapato Silty Clay Loam	16 - Chehalis Silt Loam
91A - Woodburn Silt Loam 0-7% slopes	Washington County:
91B - Woodburn Silt Loam 3-8% slopes	9 - Chehalis Silty Clay Loam - occasional overflow
	21C - Hillsboro Loam 7-12% slopes

Classification of soil may differ by County.



APPENDIX D-7
 City of Rivergrove - 2010
 SOILS MAP

APPENDIX E: AIR, WATER & LAND RESOURCES QUALITY

WATER RESOURCES E-1

Tualatin River

The Tualatin River originates approximately 75 miles to the west in the Coast Range. The watershed of the river includes the entire planning area and has a total acreage of 712 square miles. The river flows into the Willamette River.

Water Quality

Status of compliance with DEQ water quality standards:

- Temperature - does not comply
- Dissolved oxygen - does not comply
- Coliform bacteria - does not comply
- Turbidity - complies
- pH - complies

As the above information suggests, the Tualatin River has generally poor water quality. There are several reasons for this disturbing fact.

Up to 34 sewerage facilities have discharged their often poorly treated waste into the river simultaneously. Additionally, many septic tanks near the river are not functioning properly and thus contribute to the degradation of the water quality in the river.

These problems are aggravated by low summer flows. During summer months, more water is owed out in consumption withdrawal rights than flows thru the channel. Therefore, while winter flows average 1500 cubic feet per second, summer flows decrease to as low as 10 cfs.

The low summer flows are directly responsible for high summer temperatures (recorded as high as 78 degrees F.). These very high temperatures coupled with the high levels of phosphates and nitrogen from the sewerage discharge are responsible for the profusion of algae characteristic of the river. The algae consume the dissolved oxygen in the river.

The end result of the low water quality is the threatened survival of many of the fish specie in the river. Temperature over 68 degrees have a detrimental effect on many fish species, and dissolved oxygen is a necessary element for their survival.

Improperly functioning septic tanks in Rivergrove contribute to the water quality problems of the Tualatin River. Many of the septic tanks in the City are located on soils for which they are not suited or at densities which are greater than the soil's ability to treat the discharge.

The water quality of the Tualatin River has improved in recent years. This improvement is attributed primarily to the improved treatment of sewerage discharged by facilities located along the river, and to a new storage reservoir at Scoggins Creek which has augmented the meager summer flows.

Rivergrove can aid the improvement of the water quality of the Tualatin River by linking into a properly functioning sewerage facility. Until then, septic tank permits should be issued only if soil conditions at their proposed locations can ensure their sanitary functioning.

Groundwater

A formation of Columbia River Basalt forms an aquifer which underlies the entire planning area. This formation is very porous and thus is an excellent source of groundwater.

The groundwater source is recharged by the percolation of water through the soil. Wetlands and periodic flooding are important mechanisms in the recharging of groundwater supplies. Development creates impervious surfaces which inhibit the recharge potential of the soils. Loss of vegetation also decreases the recharge of groundwater by increasing the rate of surface runoff of the soils.

Only a small proportion of the land in Rivergrove is developed. The 110 dwelling units in the City and the roads total approximately 16 acres of impervious surface (based on 2000 square feet per unit). This constitutes approximately 15 percent of the total land in the City. Further development will increase this ratio and decrease the recharging capability of the soils.

Groundwater hazards are realized either by the contamination of the water or by the depletion of the source which can cause sinking of the soils above it. At present, neither of these potential hazards are a problem in the planning area. However, some of the subsurface disposal systems in the City are located in areas with a high water table and they are thus potential sources of contamination.

TUALATIN RIVER QUALITY – E-2
Tualatin RiverKeepers Newsletter Summer 2009

THE GREEN HERON HERALD

Watershed Watch/Citizen Action

DEQ Report Shows Tualatin River Leads State in Water Quality Decline

A report from Oregon Department of Environmental Quality (DEQ) states that three monitoring sites on the Tualatin River show the biggest decline in Water Quality Index of the 127 sites analyzed over a ten year period.

The Oregon Water Quality Index (OWQI) is a single number that expresses water quality by integrating measurements of eight water quality variables: temperature, dissolved oxygen, biochemical oxygen demand, pH, ammonia+ nitrate nitrogen, total phosphorus, total solids, and E. coli. Its purpose is to provide a simple and concise method for expressing the ambient water quality of Oregon's streams. The index allows users to easily interpret data. The OWQI improves comprehension of general water quality issues, communicates water quality status, and illustrates the need for and effectiveness of protective practices.

Of the 127 sites with sufficient data to measure trends, seven had significant increases in water quality and 31 had significant

decreases in water quality, while the rest showed no significant trend in either direction. Five of the six monitored sites in the Tualatin basin showed significant declines in water quality. The Rood Bridge site showed no trend in water quality.

It is important to note that all data used in this report were collected before the Wapato Lake Discharge that caused the toxic cyanobacteria outbreak and cost the Joint Water Commission over \$285,000 in extra filtration costs.

Scores on the OWQI range from 10 to 100. Scores that are less than 60 are considered very poor; 60-79 poor; 80-84 fair; 85-89 good; and 90-100 excellent. To account for differences in water quality between low flow summer months (June - September) and higher flow fall, winter, and spring (October - May), average values for these two periods were calculated and compared.

OWQI Status and Trends Summary for Tualatin Basin Sites

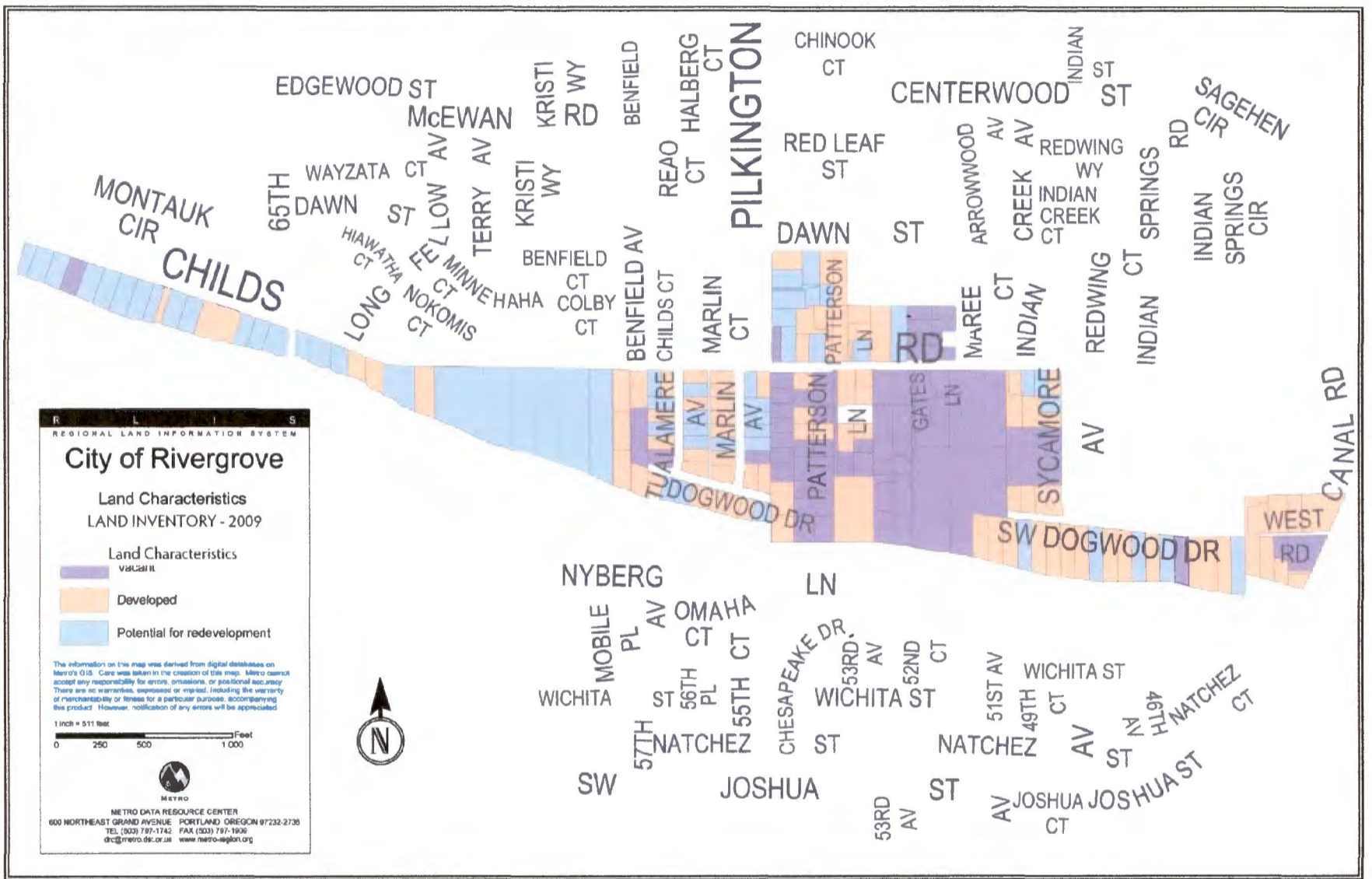
Site	Score	Category	Trend	Magnitude
Beaverton Creek at Cornelius Pass Road (Orenco)	53	Very Poor	Declining	-5.0
Fanno Creek at Bonita Road (Tigard)	63	Poor	Declining	-5.0
Tualatin River at Boones Ferry Road	54	Very Poor	Declining	-19.0
Tualatin River at Elsner Road	59	Very Poor	Declining	-24.3
Tualatin River at HWY 210 (Scholls)	56	Very Poor	Declining	-28.1
Tualatin River at Rood Bridge	80	Fair	No Trend	No Trend

When asked which parameters of the OWQI were leading the decline for the Tualatin River, DEQ staff had no explanation. Tualatin Riverkeepers Citizen Action Committee is examining the data provided by DEQ to answer this question. Links to the DEQ data and OWQI report are posted at www.tualatinriverkeepers.org/advocacy.html.

Citizen Action Committee Investigates Declining Water Quality Trends

On June 24 Tualatin Riverkeepers Citizen Action Committee will meet to discuss our investigation of a significant decline in the Water Quality Index on the Tualatin River as measured by Oregon Department of Environmental Quality. The meeting starts at 6:30pm and is held at Max's Fanno Creek Brew Pub, 12562 SW Main Street in Tigard. The public is welcome.





APPENDIX F-1
City of Rivergrove - 2009
LAND INVENTORY MAP

Land Inventory Data - F-2

This Land Inventory, as of 2009, was prepared by Metro for the City of Rivergrove.

Methodology:

1. Tax lots within the City of Rivergrove were identified
2. Where building value did not equal 0, a ratio was calculated of land value/building value
3. The lots whose ratio was greater than 1, the assumption for potential redevelopment was made

"TYPE" field definitions:

- 1 = Vacant
- 2 = Developed (including those under construction in 2009)
- 3 = Potentially redevelopable

Data Sources: RLIS, 2009 Vacant Land Inventory, Clackamas & Washington County assessment records

June 10, 2010

Summary statistics for City of Rivergrove tax lot analysis

Number of vacant lots = 61
Area of vacant lots = 31.72 acres

Number of developed lots = 90
Area of developed lots = 39.28 acres

Number of lots with potential for redevelopment = 54
Area of lots with potential for redevelopment = 24 acres

Number of lots within the City of Rivergrove = 205
Total area of the tax lots in the City of Rivergrove = 96 acres

Notes:

Acreages do not include street rights -of -way or areas of water.
Parks in Metro's definition are counted as Developed

Rivergrove Housing Data & Values – 2009 – F-3

Data Sources:

Clackamas & Washington County Tax Assessors 2009
U.S. Census 2000

Housing Data:

Houses built between 1900 and 2000: 107
Houses built between 2000 and 2009: 30

Total homes in Rivergrove (2009): 137

(This calculation took into account homes that were demolished and rebuilt. The total shown---137---was the actual number of homes in Rivergrove in summer of 2009.)

Housing Values 2000 & 2009:

<u>Value</u>	<u>2000 (% of total in each range)</u>	<u>2009</u>
\$100,000 to \$199,000	36.7%	0%
\$200,000 to \$299,000	31.6	23.4
\$300,000 to \$499,000	27.6	41.6
\$500,000 to \$999,000	4.0	28.0
\$1,000,000 or more	0	6.0
Median value:	\$232,500	\$359,411

Affordability:

Based on the median value of a home in Rivergrove in 2009, using a standard mortgage formula, the income needed to purchase here are two estimates, based on down payments of \$20,000 and \$10,000 respectively:

- With 20% down and no other debts a purchaser would have needed an income of about \$54,000 per year and credit scores of 730 for a 4.625% 30 year fixed mortgage with a P&I payment of \$1480 plus \$400 taxes and insurance.
- With 10% down they would have a P&I payment of \$1665 plus \$400 Taxes, Insurance and \$140 mortgage insurance. They would need closer to \$64k to qualify using 40%/40% ratios.

Median Income – F-4

The most recent actual Census income data source for the City of Rivergrove was the 2000 Census, which showed a median household income of \$85,000. Rivergrove has too small a population to be included in other surveys, so it is necessary to calculate the current figure.

Methodology:

Using the Census 2000 figures for other larger areas in proximity to Rivergrove, and comparing each location with income results from the American Community Survey (ACS) 2006-2008, the ratio of income gain for each, over that time period, was calculated. Selecting the location most culturally and economically like Rivergrove (the City of Lake Oswego), that ratio (1.16) was used to estimate Rivergrove's median income for 2008.

Calculations:	Clackamas County	Washington County	Lake Oswego	Tualatin	Rivergrove
Census 2000	\$52,080	\$52,122	\$71,597	\$55,762	\$85,000
ACS 2006-8	\$63,093	\$64,202	\$83,486	\$65,317	n/a
Gain ratio	1.21	1.23	1.16	1.17	n/a

Applying this ratio to Rivergrove's 2000 figure gives an estimated median household income of \$98,600 for the year 2008.

Selected Data from U.S. Census Bureau, Census 2000 - F-5
for The City of Rivergrove, OR

[Note: This will be replaced by data from the 2010 Census when it is available.]

General Demographic Characteristics: 2000

	Number	Percent
Total Population	324	100.0%
Household By Type	Number	Percent
Total Households	117	100.0%
Family Households (families)	88	75.2%
With own children under 18 years	40	34.2%
Married-couple family	81	69.2%
With own children under 18 years	38	32.5%
Female householder, no husband present	4	3.4%
With own children under 18 years	2	1.7%
Nonfamily households	29	24.8%
Householder living alone	22	18.8%
Householder 65 years and over	5	4.3%
Households with individuals under 18 years	41	35.0%
Households with individuals 65 years and over	19	16.2%
Housing Occupancy		
Total housing units	122	100.0%
Occupied housing units	117	95.9%
Vacant housing units	5	4.1%
For seasonal, recreational, or occasional use	1	0.8%
Homeowner vacancy rate (percent)	2.8%	(x)
Rental vacancy rate (percent)	0.0%	(x)
Housing tenure		
Occupied housing units	117	
Owner-occupied occupied units	103	
Renter occupied units	14	

Selected Housing Characteristics: 2000

	Number	Percent
Total housing units	120	100.0%
Year structure built		
1999 to March 2000	3	2.5%
1995 to 1998	6	5.0%
1990 to 1994	2	1.7%
1980 to 1989	11	9.2%
1970 to 1979	14	11.7%
1960 to 1969	55	45.8%
1940 to 1959	21	17.5%
1939 or earlier	8	6.7%
Rooms		
1 room	0	0.0%
2 rooms	0	0.0%
3 rooms	0	0.0%
4 rooms	5	4.2%
5 rooms	18	15.0%
6 rooms	28	23.3%
7 rooms	24	20.0%
8 rooms	25	20.8%
9 or more rooms	20	16.7%
Median (rooms)	6.9	(x)
Occupied housing units	118	100.0%
Year householder moved into unit		
1999 to March 2000	16	13.6%
1995 to 1998	31	26.3%
1990 to 1994	16	13.6%
1980 to 1989	40	33.9%
1970 to 1979	9	7.6%
1969 or earlier	6	5.1%
Specified owner-occupied occupied units	98	
Home value		
Less than \$50,000	0	0.0%
\$50,000 to \$99,999	0	0.0%
\$100,000 to \$149,999	6	6.1%
\$150,000 to \$199,999	30	30.6%
\$200,000 to \$299,999	31	31.6%
\$300,000 to \$499,999	27	27.6%
\$500,000 to \$999,999	4	4.1%
\$1,000,000 or more	0	0.0%
Median (dollars)	232,500	(x)
Specified renter occupied units	15	
Gross rent		
Less than \$200	0	0.0%
\$200 to \$299	0	0.0%
\$300 to \$499	0	0.0%
\$500 to \$749	0	0.0%
\$750 to \$999	5	33.3%
\$1,000 to \$1,499	7	46.7%
\$1,500 or more	3	20.0%
No cash rent	0	0.0%
Median (dollars)	1,313	(x)

Selected Economic Characteristics: 2000

	Number	Percent
Income in 1999		
Households	112	100.0%
Less than 10,000	0	0.0%
\$10,000 to \$14,999	3	2.7%
\$15,000 to \$24,999	4	3.6%
\$25,000 to \$34,999	12	10.7%
\$35,000 to \$49,999	9	8.0%
\$50,000 to \$74,999	24	21.4%
\$75,000 to \$99,999	16	14.3%
\$100,000 to \$149,999	26	23.2%
\$150,000 to \$199,999	18	16.1%
\$200,000 or more	0	0.0%
Median household income (dollars)	85,000	(x)
Families		
	84	100.0%
Less than 10,000	0	0.0%
\$10,000 to \$14,999	2	2.4%
\$15,000 to \$24,999	2	2.4%
\$25,000 to \$34,999	7	8.3%
\$35,000 to \$49,999	5	6.0%
\$50,000 to \$74,999	16	19.0%
\$75,000 to \$99,999	17	20.2%
\$100,000 to \$149,999	24	28.6%
\$150,000 to \$199,999	11	13.1%
\$200,000 or more	0	0.0%
Median family income (dollars)	93,212	(x)

	Number below poverty level	Percent below poverty level
Poverty status in 1999		
Families	4	4.8%
With related children under 18 years	4	9.3%
With related children under 5 years	2	15.4%

Population estimates for Oregon and its incorporated cities: April 1, 1990 to July 1, 2006

County and City	July 1 Population Estimates							Census Population	
	2006	2005	2004	2003	2002	2001	2000	4/1/2000	4/1/1990
Clackamas									
Rivergrove (part)**	315	315	310	290	290	290	290	287	267
Washington									
Rivergrove (part)**	35	35	30	30	30	30	35	37	27

Population estimates for incorporated cities located in more than one county

City and County	July 1 Population Estimates							Census Population	
	2006	2005	2004	2003	2002	2001	2000	4/1/2000	4/1/1990
Rivergrove	350	350	340	320	320	320	325	324	294
in Clackamas	315	315	310	290	290	290	290	287	267
in Washington	35	35	30	30	30	30	35	37	27

Rank of incorporated cities by July 1, 2006 population size

City	Rivergrove
Population	350
Rank	#204 of 241

Incorporated city population for July 1, 2006 and 2000-2006 Change

City	Population Estimate July 1, 2006	Census Count April 1, 2000	Population Change 2000-2006	Percentage Change 2000-2006
Rivergrove	350	324	26	8.0%

APPENDIX G: PUBLIC SERVICES

RIVERGROVE PUBLIC SERVICES – G-1

SERVICE	AREA SERVED	PURVEYOR	REMARKS
Schools	All of Rivergrove	Lake Oswego School District	
Police	All of Rivergrove	Clackamas County Sheriff's Dept.	
Fire	All of Rivergrove	Tualatin Valley Fire and Rescue	
Garbage collection	All of Rivergrove	Allied Waste	
Sewer	Clackamas county	Lake Oswego	
	Washington county	United Sewerage Agency - Tualatin	
Water	Clackamas County	Rivergrove Water District	
	Washington County	City of Tualatin	
Health	Clackamas County	Clackamas County Health Dept. Clinic	1425 Beavercreek Rd. Oregon City 12250 SW 2 nd Ave. Beaverton 97214
	Washington County	Washington County Health Dept. Clinic	
	All of city	Meridian Park Hospital	19300 SW 65th Tualatin
Governmental Services	All of city	Rivergrove, Washington and Clackamas counties	

AFFECTED AGENCIES - G-2

State:

Department of Land Conservation and Development

Oregon State Highway Division, Metropolitan Section
5821 NE Glisan, Portland, Oregon 97213

Department of Transportation
525 Trade Street SE, Salem, Oregon 97310

Department of Environmental Quality
1234 SW Morrison Street, Portland, Oregon 97205

Department of Fish and Wildlife
P.O. Box 3503, Portland, Oregon 97208

Regional:

Metropolitan Service District
527 SW Hall Street, Portland, Oregon 97201

Tri-Met
520 SW Yamhill Street, Portland, Oregon 97204

County:

Washington County Planning Department
150 N First Street, Hillsboro, Oregon 972123

Clackamas County Department of Environmental Services
902 Abernathy Road, Oregon City, Oregon 97034

Local:

Lake Oswego School District
2455 SW Country Club Road, Lake Oswego, Oregon 97034

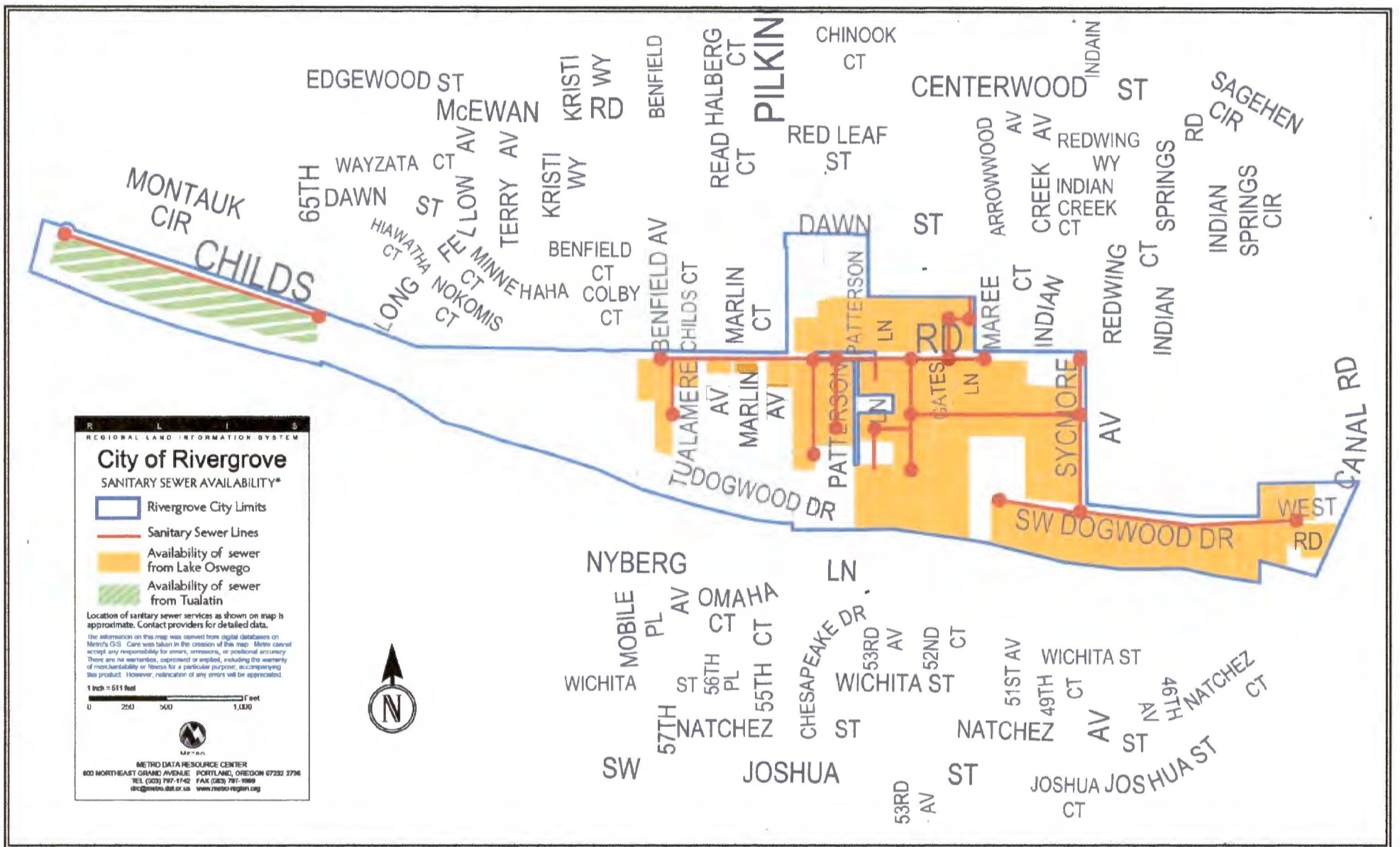
Tualatin Rural Fire District
P.O. Box 127, Tualatin, Oregon 97062

Rivergrove Water District
17725 SW Boones Ferry Road, Lake Oswego, Oregon 97034

Clackamas County Sheriff's Department
2223 Kaen Road, Oregon City, Oregon 97034

City of Lake Oswego
348 N. State Street, Lake Oswego 97034

City of Durham
P.O. Box 23483, Tigard, Oregon 97223



APPENDIX G-3
City of Rivergrove - 2010
SANITARY SEWER AVAILABILITY MAP

CITY OF RIVERGROVE COMPREHENSIVE PLAN FINDINGS

The City of Rivergrove is amending its Comprehensive Plan, a document that characterizes the City and formally states its goals and policies. The goals and policies provide a framework and basis for city code, including development code.

The process has been performed according to state guidelines and requirements. The current Comprehensive Plan was adopted in 1989, with an amendment to the Transportation Element in 1993. Although there was no formal request by the Department of Land Conservation and Development (DLCD) to review and update it, the statistical data was out of date and the City felt that it was appropriate to update and amend our plan.

The process was started several years ago when a Citizens' Advisory Committee was created to serve as a conduit for citizen involvement in revising the Plan. A community survey was conducted in June 2008, followed by a series of widely advertised community meetings on specific statewide goals. Copies of the Plan and updates were made available online or at City Hall.

A Citizens' Action Group was formed in 2009 to assemble data collected from these many sources and from published government statistics, to determine which parts of the plan needed to be amended and to submit a draft amendment to the Rivergrove Planning Commission.

The document has been reviewed by DLCD, and reviewers from other government entities such as Metro and ODOT. The reviewers' requirements and recommendations deemed appropriate to our city have been incorporated after public hearings at both Planning Commission and City Council.

A number of the specific comments from citizen testimony at the public hearings have been incorporated into the document

City Council also received comments from one citizen regarding the process used to amend the Plan. Before submitting the plan for adoption, Council addressed specific comments from that citizen as follows:

1. There was a comment that there the most recent draft was not the Plan shown online. Although the error covered a brief time period, in an abundance of caution, the City re-noticed the public hearing.
2. There was a comment that the notice was given for the public hearing was in error. A review of the notice procedure by Council and the City Attorney showed that correct notice had been given.
3. There was a comment that the citizens' involvement process was not performed according to requirements. The City worked closely with DLCD and has been assured by DLCD that sufficient citizen involvement was included in the process.
4. There was a comment that the City's notice incorrectly referenced the pending plan by ordinance number—that an ordinance was not required. However the Council will adopt the amended Plan by means of an ordinance.
5. There was a comment that Goal #2, Policy 4 is misleading or contains insufficient language. Similar language appears in other (adopted) Plans, and was reviewed by DLCD without comment.

6. There was a comment that Resolution 22, passed by the Rivergrove City Council and sent to DLCD in 1976 was done incorrectly—that Resolution 22, naming the Planning Commission as Rivergrove’s Citizen Involvement Committee, did not abide by OAR 660-015-0000(1) in stating the rationale for such a choice. City Council indicated that the rationale for a tiny city like Rivergrove, where sufficient volunteers are difficult to recruit, was that it makes sense to allow the Planning Commission to fulfill the role of CIC also. A letter was sent by the mayor to DLCD asking to be notified if the City was not in conformance with the administrative rules regarding this matter and DLCD did not indicate that there was any non-conformance.
7. There was a comment that no minutes had been provided by the City for the CAC and CAG meetings. However minutes for are contained in the record.
8. There was a comment that the Community Survey conducted in June 2008 was not an acknowledged Citizen Involvement process. The City’s response was that it was simply one element of citizen involvement that included other events such as community meetings by the CAC, discussion of the Plan at Planning Commission and City Council meetings, the formation of a CAG, and two public hearings.
9. There was a comment that Metro Regional plans such as the 2035 RTP were not addressed. The City responded by indicating that Metro’s regional plans were indeed addressed and that Metro was of great assistance in the preparation of the plan and maps. In addition, Metro reviewed the draft amendment and provided input that was incorporated in the final plan.

DECISION-MAKING CRITERIA: STATEWIDE PLANNING GOALS

Compliance with the Statewide Planning Goals is a specific requirement for changes to the Comprehensive Plan. For the plan to be approved by DLCD it must comply with statewide planning goals.

Goal 1 Citizen Involvement

To develop a citizen involvement program that insures the opportunity for citizens to be involved in all phases of the planning process.

Analysis: A brief summary of the public involvement program for the CAC/CAG and the general public was provided above. In accordance with this goal, the public involvement program involved measures to enhance participation including a Community Survey and public hearings before the Planning Commission and City Council. At all times the draft plan was available for review by the public. This open process encouraged participation by any interested citizen and all evidence submitted into the written record was considered.

The Council finds this goal is satisfied.

Goal 2 Land Use Planning

To establish a land use planning process and policy framework as a basis for all decision and actions related to use of land and to assure an adequate factual base for such decisions and actions.

Analysis: Each Plan section includes a Goal statement supported by additional Context as well as Policies identified to implement each Goal. The survey identifying community objectives provided the basis for the Land Use Planning, Recreational Needs, Transportation, Water, Stormwater, Sanitary Sewer and Natural Resources elements, helping assure the proper factual basis for decisions in updating the maps, goals, policies and implementation measures.

The Council finds this goal is satisfied.

Goal 3 Agricultural Lands and Goal 4 Forest Lands

Analysis: By definition, Rivergrove does not have rural resource lands such as for agricultural or forest use within its city limits and therefore those goals are not applicable.

The Council finds these goals are not applicable.

Goal 5 Open Spaces, Scenic and Historic Areas, and Natural Resources

To protect natural resources and conserve scenic and historic areas and open spaces.

Analysis: Goal 5 resources are addressed in detail in the Natural Resource Inventory (Appendix D). A detailed review of the Goal 5 resources within the study area, including wetlands, streams, riparian area, wildlife habitat and other resources was conducted. The Plan highlights the need to protect a seasonal wetland in the eastern section of the City through the establishment of a Water Quality Resource Area with a plan policy commitment to complete a local wetland inventory in the future. The Plan also emphasizes the value of large trees for animal habitat and encourages their survival through reforestation efforts to create groves. Existing open spaces are mapped at Appendix D. These areas along with lands within the Tualatin River Greenway will be designated open spaces for protection in the future. Plan goals and policies for preserving open space and tree cover, protecting scenic views, preserving and conserving natural resources and water quality have been provided.

The Council finds this goal is satisfied.

Goal 6 Air, Water and Land Resources Quality

To maintain and improve the quality of the air, water and land resources of the state.

Analysis: The Comprehensive Plan policies require that development practices comply with regional, state, and federal standards for air and water quality, to protect water quality from erosion and sediment, and to minimize the effects of noise. An inventory of water resources is set out in Appendix E. These goals and policies are implemented through the City's grading and erosion control ordinances, water quality resource protection regulations, development standards, and nuisance laws. DEQ regulates air quality but the Plan recognizes the link between air quality and transportation (through vehicle emissions) and includes policies intended to reduce impacts from single-occupancy vehicles. The City will comply with all applicable state and federal air, water, solid waste and hazardous waste regulations.

The Council finds this goal is satisfied.

Goal 7 Areas Subject to Natural Disasters and Hazards

To protect life and property from natural disasters and hazards.

Analysis: Appendix D-4 of the Plan illustrates that a large portion of the City is located within the floodplain and many dwelling within the City are located within this floodplain. In order to address this, the Plan calls for participation in the FEMA flood insurance program specifying building criteria for structures built within the 100-year floodplain. The Plan calls for the implementation of regulations to reduce surface water runoff and the preservation of natural drainageways.

The Council finds this goal is satisfied.

Goal 8 Recreational Needs

To satisfy the recreational needs of the citizens of the state and visitors, and, where appropriate, to provide for the siting of necessary recreational facilities including destination resorts.

Analysis: The Plan identifies Lloyd Minor Park, the Stark Boat Ramp as well as other nearby recreation activities available to Rivergrove residents. Specific plan policies related to this Goal include exploring the potential for joint park development with Clackamas County or Lake Oswego and to improve the Tualatin River water quality and allow access to its recreational opportunities.

The Council finds this goal is satisfied.

Goal 9 Economic Development

To provide adequate opportunities throughout the state for a variety of economic activities vital to the health, welfare, and prosperity of Oregon's citizens.

Analysis: Given its small size and restricted access to public sewer lines, Rivergrove is an entirely residential community whose residents are dependent on the greater Portland Metro area for finding commercial and employment opportunities. The Plan calls for maintaining this largely residential character but also suggest a very small commercial node serving residents may be explored.

The Council finds this goal is satisfied.

Goal 10 Housing

To provide for the housing needs of citizens of the state.

Analysis: Rivergrove's land use inventory is summarized in Appendix F. All of the land in the City is zoned Residential, with a minimum lot size of 10,000 square feet. The City's small size coupled with large areas encumbered by wetlands, riparian corridors and within the floodplain, leaves only a very small amount of available vacant land. Rivergrove has annexed all pockets of land and is completely bounded by other cities and the Tualatin River. For these reasons, there is little the City can do to affect housing costs. However, although Rivergrove is exempt from meeting DLCD's minimum residential density requirements, it has identified a number of strategies for encouraging infill development.

The Council finds this goal is satisfied.

Goal 11 Public Facilities and Services

Attachment B – Rivergrove Ordinance No. 79-2011

PDX_DOCS:466557.3

To plan and develop a timely, orderly, and efficient arrangement of public facilities and services to serve as a framework for urban and rural development.

Analysis: The updated Public Facilities and Services Goal address the following public facilities and services: education, police, fire protection, water, sewer, health services, energy and communications services, transportation and governmental services. The Plan explains that most urban services are provided through intergovernmental agreements with other cities, service districts or by Clackamas County. Various service providers are identified in the Plan as well as in a table at Appendix G. Although public sewer service is available in some places, many Rivergrove residents do not have access to a public sewer and rely on septic system. The Plan calls for continued cooperation with the City of Lake Oswego to develop future sewage master plans to expand service as urban levels of development occur.

The Council finds this goal is satisfied.

Goal 12 Transportation

To provide and encourage a safe, convenient, and economic transportation system.

Analysis: The Plan identifies the principle streets within the City and traffic counts show that the City's streets are adequate to accommodate present traffic volumes well into the future. Although automobile travel will continue to be the major mode of transportation to and from the City, the Plan calls for increased mass transit ridership and the enhancements of safe bicycle routes through the City. Traffic control improvements are also identified to increase pedestrian safety.

The Council finds this goal is satisfied.

Goal 13 Energy Conservation

To conserve energy.

Analysis: Although the Plan explains that the City's existing pattern of land use is not as energy-efficient as it might be, the Plan identifies some steps the City will take to alter that course including revising land use regulations encourage the use of energy efficient building practices and alternative energy use, support the development of safe pedestrian and bicycle paths and the use of mass transit.

The Council finds this goal is satisfied.

Goal 14 Urbanization

To provide for an orderly and efficient transition from rural to urban land use.

Analysis: The City does not contain any rural lands and all urban pockets have been annexed to the City. In addition, the transportation, parks, trails, water, and sewer services identified within the Plan address orderly extension of services to accommodate growth.

The Council finds this goal is satisfied.

Goals 15 through 19

Attachment B – Rivergrove Ordinance No. 79-2011

PDX_DOCS:466557.3

The City does not contain any of resources identified in these Goals.

The Council finds these goals are not applicable.

SUMMARY AND CONCLUSION

After reviewing all of the evidence in the record and the testimony provided through the public hearing process, the City Commission finds that the criteria for the approval of the Rivergrove Comprehensive Plan have been met.

City of R
P.O. Box 1
Lake Oswego, OR 97033



PORTLAND, OR 972 2
TUE 14 JUN 2011

DEPT OF

JUN 15 2011

LAND CONSERVATION
AND DEVELOPMENT

to: Dept of Land Conservation + Development
Attn: Plan Amendment Specialist
635 Capitol St. Suite 150
Salem, OR 97301-2540

