

City of Duvall 2015 Comprehensive Plan

Adopted by City Council June 7, 2016
Resolution No. 16-09

Duvall is



a family-friendly community with an abundance of trails, parks, and open space. Duvall's vibrant Old Town overlooks the Snoqualmie River and offers something for everyone. New businesses and the entrepreneurial spirit are encouraged, providing residents unique local services and products. Residents gather year-round to enjoy the arts, music, and community events, celebrating Duvall's distinctive culture, all while embracing the natural beauty of the Snoqualmie Valley. Duvall is an evolving city that honors its rural and agricultural heritage, while remaining on the cutting edge of technology, innovation, and sustainability.

Vision Statement

Acknowledgements

MEMBERS OF THE DUVALL COMMUNITY

CITY COUNCIL

Will Ibershof, Mayor
Dianne Brudnicki
Leroy Collinwood
Scott Thomas
Becky Nixon
Gary Gill
Amy Ockerlander

PLANNING COMMISSION - 2016

Veronika Williams, Chair
Ronn Mercer, Vice Chair
Dick Winn, Vice Chair
James Deal
Eric Preston
Margie Coy

PLANNING COMMISSION - 2015

Ryan Deason
(all other commissioners consistent to 2016)

CONSULTANT TEAM

BHC Consultants
Environmental Science Associates (ESA)
Property Counselors

CITY STAFF

Matthew Morton, City Administrator
Lara Thomas, Planning Director
Troy Davis, Senior Planner
Anne Wright-Cunniff, Administrative Assistant
Boyd Benson, PE, LEG, City Engineer, Public Works

COMPREHENSIVE PLAN ADVISORY COMMITTEE

Michelle Britt
Ray Burhen
Gerard Cattin
Angie Clark-Sulzer
Damien Foletto
Greg Garat
Roger Lange
Scott Lennon
Charlene McFarland
Ronn Mercer
Kerry Minietta
Kim Piira
Mat Questad
Gary Rutledge
Ben Swanson
Scott Thomas
Jason Walker
Dave Weinstein
Veronika Williams
Dick Winn
Jeff Wolf
Matt Higgins
Andi Griffin

TABLE OF CONTENTS

Vision Statement

Acknowledgements

Acronyms and Glossary AG-1

CHAPTER 1. Introduction 1-1

1.1	Purpose and Intent.....	1-1
1.2	Previous Updates and Studies.....	1-1
1.2.1	City Wide Visioning Plan.....	1-1
1.2.2	Duvall Downtown Sub-Area Plan.....	1-1
1.2.3	2004 Comprehensive Plan Update.....	1-1
1.2.4	Other Minor Comprehensive Plan Updates.....	1-1
1.2.5	Economic Strategic Plan.....	1-2
1.3	2015 Update Process.....	1-2
1.3.1	Appointed and Elected officials.....	1-2
1.3.2	Community Survey.....	1-2
1.3.3	Open House and workshops.....	1-3
1.4	Contents of the Comprehensive Plan Update.....	1-3
1.4.1	Elements Mandated by GMA.....	1-3
1.4.2	Consistency with County-wide Polices and Puget Sound Regional Council's Vision 2040.....	1-4
1.4.3	2035 Vision.....	1-5
1.4.4	New Environment and Sustainability Element.....	1-5
1.4.5	Revised Goals and Policies.....	1-6
1.4.6	State Environmental Policy Act (SEPA) Review.....	1-6
1.5	References.....	1-7

CHAPTER 2. Land Use Element..... 2-1

2.1	Introduction.....	2-1
2.1.1	Purpose and Intent.....	2-1
2.2	Goals and Policies.....	2-1
2.3	Land Use Element Analysis.....	2-7
2.3.1	Regulatory Setting.....	2-7
2.3.2	Existing Conditions.....	2-10
2.3.3	Duvall's Urban Growth Area.....	2-14
2.3.4	Growth Targets and Development Capacity.....	2-17
2.3.5	Mixed-use, Commercial, and Industrial Development.....	2-20
2.4	Land Use Designations.....	2-21



2.4.1	Mixed-Use (MU).....	2-21
2.4.2	Residential – 4 - 4.5 units per acres (R4-4.5).....	2-21
2.4.3	Residential – 6 units per acre (R-6).....	2-21
2.4.4	Residential – 8 units per acre (R-8).....	2-21
2.4.5	Residential – 12 units per acre (R-12).....	2-22
2.4.6	Residential – 20 units per acre (R-20).....	2-22
2.4.7	Parks and Open Space (PO)	2-22
2.4.8	Commercial (CO).....	2-22
2.4.9	Light Industrial (LI)	2-22
2.4.10	Public Facilities (PF).....	2-22
2.4.11	Urban Growth Area Reserve (UGAR)	2-22
2.5	Design Standards	2-23
2.6	References.....	2-23
CHAPTER 3. Housing Element.....		3-1
3.1	Introduction.....	3-1
3.1.1	Purpose and Intent.....	3-1
3.2	Goals and Policies.....	3-1
3.3	Housing Element Analysis.....	3-5
3.3.1	Overview	3-5
3.3.2	Population and Household Allocations	3-6
3.3.3	Puget Sound Regional Council Forecasts	3-6
3.3.4	Demographics	3-7
3.3.5	Projection of Future Housing Demand.....	3-10
3.3.6	Income and Housing Costs.....	3-11
3.3.7	Housing for Special Needs.....	3-17
3.4	References.....	3-17
CHAPTER 4. Parks and Recreation Element		4-1
4.1	Introduction.....	4-1
4.1.1	Purpose and Intent.....	4-1
4.2	Goals and Policies.....	4-1
4.3	Parks and Recreation Element Analysis	4-6
4.3.1	Regulatory Setting.....	4-6
4.3.2	Park Planning Process	4-7
4.3.3	Parks Inventory	4-7
4.3.4	Inventory of Parks, Trails, and open space	4-9
4.3.5	Inventory of Existing City-Owned Parks and Open Space	4-9
4.3.6	Demand and Need Analysis	4-12
4.3.7	Paying for Parks	4-14



4.4	References.....	4-14
CHAPTER 5. Economic Development Element.....		5-1
5.1	Introduction.....	5-1
5.1.1	Purpose and Intent.....	5-1
5.2	Goals and Policies.....	5-2
5.3	Economic Development Analysis.....	5-5
5.3.1	Economic Conditions, Forecasts, and Trends	5-5
5.3.2	Economic Opportunities.....	5-10
5.3.3	Competitive Position.....	5-25
5.4	References.....	5-34
CHAPTER 6. Transportation Element.....		6-1
6.1	Introduction.....	6-1
6.1.1	Purpose and Intent.....	6-1
6.2	Goals and Policies.....	6-1
6.3	Transportation Element Analysis.....	6-7
6.3.1	General Overview	6-7
6.3.2	Regulatory Setting.....	6-8
6.3.3	Transportation System	6-9
6.3.4	Transportation Improvement Program.....	6-13
6.3.5	Healthy Communities.....	6-13
6.3.6	Transportation Demand Management	6-14
6.3.7	Transportation Finance Plan.....	6-15
6.3.8	Intergovernmental Coordination	6-15
6.4	References.....	6-16
CHAPTER 7. Capital Facilities Element.....		7-1
7.1	Introduction.....	7-1
7.1.1	Purpose and Intent.....	7-1
7.2	Goals and Policies.....	7-2
7.3	Capital Facilities Element Analysis	7-12
7.3.1	General Overview	7-12
7.3.2	Regulatory Setting.....	7-13
7.3.3	Capital Facilities Inventory, Planning, and Funding Strategies	7-14
7.3.4	Locating Facilities and Services.....	7-22
7.3.5	Reassessment Strategy	7-22
7.4	References.....	7-22
CHAPTER 8. Environment and Sustainability Element.....		8-1
8.1	Introduction.....	8-1
8.1.1	Purpose and Intent.....	8-1



8.2	Goals and Policies.....	8-1
8.2.1	Sustainability.....	8-1
8.2.2	Natural Environment.....	8-9
8.2.3	Shoreline Management.....	8-18
8.3	Environment and Sustainability Analysis.....	8-27
8.3.1	Sustainability.....	8-27
8.3.2	Environmental Setting.....	8-29

LIST OF TABLES

Table LU-1.	2015 Existing Residential Counts	2-18
Table LU-2.	Housing Units and Population Projections for Urban Growth Areas.....	2-18
Table LU-3.	Total Number of Housing Units in 2035	2-19
Table LU-4.	Residential Housing Units 2035 Growth Target and Capacity	2-19
Table LU-5.	Jobs to Household Targets and Jobs/Housing Ratio	2-20
Table LU-6.	Employment Development Capacity.....	2-20
Table PR-1.	City of Duvall Parks and Recreation LOS Standards.....	4-12
Table PR-2.	Ten-year demand for parks based on the City of Duvall’s level of service.....	4-13
Table ED-1.	Comparison of Demographic Conditions, Duvall vs. King County 2010.....	5-6
Table ED-2.	Comparison of Population and Employment Target Forecasts, King County and Duvall	5-8
Table ED-3.	Duvall Employment Target and Capacity	5-9
Table ED-4.	Comparison of Shopping Center Characteristics.....	5-12
Table ED-5.	Duvall Retail Leakage 2012	5-14
Table ED-6.	Washington State Visitor Spending Factors and Overnight Visitor Volumes	5-21
Table ED-7.	Trip Activities by Type of Visitor	5-22
Table ED-8.	Comparative Apartment Market Conditions-Fall 2013.....	5-24
Table ED-9.	City of Duvall Revenue and Expense Trends , General Fund and Special Revenue Funds	5-26
Table ED-10.	Comparison of Per Capita Revenue and Expenses for General and Special Revenue Funds, Duvall and AWC Residential Cities 2012	5-30
Table T-1.	Vehicle Traffic Forecast.....	6-12

LIST OF FIGURES

Figure LU-1.	Major Existing Land Uses in Duvall City Limits.....	2-10
Figure LU-2.	Major Existing Land Uses in Duvall Urban Growth Areas.....	2-11
Photo H-1.	Open Space Urban Subdivision.....	3-2



Photo H-2.	Corner Attached Housing	3-2
Photo H-3.	Mixed-use housing	3-5
Photo H-4.	Example of a green street	3-16
Figure PR-1.	City of Duvall Park System.....	4-10
Figure PR-2.	Existing Trails and Sidewalks	4-11
Figure ED-1.	Growth in Duvall Taxable Retail Sales	5-10
Figure ED-2.	Comparison of Per Capita Taxable Retail Sales.....	5-11
Figure ED-3.	Central Puget Sound Cluster Employment Dynamics.....	5-16
Figure ED-4.	Information Technology Jobs by Location Central Puget Region	5-18
Figure ED-5.	Washington State Visitor Spending 2002-2011 (\$1000).....	5-20
Figure ED-6.	City of Duvall General Fund and Special Revenue Funds Trends.....	5-28
Figure ED-7.	City of Duvall General Fund and Special Revenue Funds Expenditure Trends	5-29
Figure ED-8.	Comparison of Per Capita Revenues General Fund and Special Revenue Funds 2012..	5-32
Figure ED-9.	Comparison of Per Capita Expenditures General Fund and Special Revenue Funds 2012.....	5-33
Figure T-1.	City of Duvall Street Classifications	6-11
Figure CF-1.	Duvall Wastewater Treatment Plant.....	7-5
Figure CF-2.	Capital Facilities Overview	7-16
Figure CF-3.	Utilities Overview	7-17
Figure CF-4.	Depot Park.....	7-18
Figure CF-5.	Duvall Fire Station 66	7-20
Figure CF-6.	Cedarcrest High School in the Riverview School District	7-20

LIST OF PHOTOS

Photo LU-1.	Old Town Duvall Source: NW Escapes, King5	2-2
Photo LU-2.	Downtown Duvall in 2014	2-11
Photo LU-3.	View from Big Rock Ball Field.....	2-13
Photo PR-1.	Elementary school students at a nature trail dedication ceremony.....	4-1
Photo PR-2.	Big Rock Ball Fields	4-4
Photo PR-3.	Informational sign at McCormick Park.....	4-5
Photo T-1.	On-street parking in Old Town.....	6-5
Photo T-2.	King County Metro bus	6-5
Photo T-3.	Bicycle lane through neighborhood.....	6-14
Photo ES-1.	Duvall Days Parade	8-2
Photo ES-2.	Play structure at Judd Park	8-3
Photo ES-3.	Booth at Duvall Farmers Market.....	8-4
Photo ES-4.	Snoqualmie Valley Trail.....	8-10



Photo ES-5. Chinook Salmon8-13

Photo ES-6. View of forested hillside8-17

Photo ES-7. Entrance to McCormick Park8-21

Photo ES-8. Taylor’s Landing boat launch.....8-24

Photo ES-9. Snoqualmie River viewed from McCormick Park8-29

ACRONYMS

ADA	American with Disabilities Act
ADU	Accessory Dwelling Units
AMI	Area Median Income
ARCH	A Regional Coalition for Housing
AWC	Association of Washington Cities
BMP	Best Management Practice
BPA	Bonneville Power Administration
CF	Capital Facilities Element
CIP	Capital Improvement Plan
CPP	Countywide Planning Policies
CPTED	Crime Prevention Through Environmental Design
CTR	Commute Trip Reduction
CWPP	Countywide Planning Policies
Ecology	Washington State Department of Ecology
ED	Economic Development Element
EIS	Environmental Impact Statement
EPF	Essential Public Facilities
ERU	Equivalent Residential Unit
ES	Environment and Sustainability Element
FIRES	Finance, Insurance, Real Estate, and Services
FTE	Full Time Employee
GMA	Growth Management Act
HAI	Housing Affordability Index
IT	Information technology
KC	King County
KCD	King Conservation District
LEED	Leadership in Energy and Environmental Design
LGFRS	Local Government Financial Reporting System
LID	Low Impact Development
LOS	Level of Service



NPDES	National Pollution Discharge Elimination System
OFM	Office of Financial Management
PAA	Potential Annexation Area
PO	Parks and Open Space land use designation
PR	Parks and Recreation Element
PSE	Puget Sound Energy
PSRC	Puget Sound Regional Council
PTOS	Parks, Trails, and Open Space Plan
RCO	Recreation and Conservation Office
RCW	Revised Code of Washington
REET	Real estate Excise Tax
SCTF	Secure Community Transition Facilities
SEPA	State Environmental Policy Act
SID	Special Improvements District
SPU	Seattle Public Utilities
SVT	Snoqualmie Valley Trail
SWOT	Strengths, Weaknesses, Opportunities, and Threats
TDM	Transportation Demand Management
TIF	Traffic Impact Fees
TIP	Transportation Improvement Program
UGA	Urban Growth Area (North/Southeast/Southwest/Proposed South)
UGAR	Urban Growth Area Reserve (North/South)
WAC	Washington Administrative Code
WSDOT	Washington State Department of Transportation
WUTC	Washington Utilities and Transportation Commission
WWTP	Waste Water Treatment Plan



GLOSSARY

Accessory Dwelling: “Accessory unit” means a second dwelling unit either in or added to an existing single-family detached dwelling, or in a separate accessory structure on the same lot as the main dwelling, for use as a complete, independent living facility with provision within the accessory apartment for cooking, eating, sanitation, and sleeping. Such a dwelling is an accessory use to the main dwelling. Accessory units are also commonly known as “mother-in-law” units or “carriage houses.”

Best Management Practices: These are defined by the Washington State Department of Ecology as physical, structural, and/or managerial practices that, when used singly, or in combination, prevent or reduce pollution of water.

Character: Community character is sum of all the attributes and assets that make a community unique, and that establish a sense of place for its residents. Factors that contribute to community character include parking and transportation, building design, natural features, and other similar features.

Clustering: Clustering is a development technique that allows for the on-site transfer of density so that lots are concentrated in one portion of the site leaving the remaining portion of the site as open space.

Compatible: Land use compatibility means that uses can coexist in proximity to each other without resulting in undue negative impacts on either use. For example, an automobile assembly plant would be unlikely to be compatible with residential uses. Residential uses at varying densities, however, could be compatible with each other as could some residential and commercial uses.

The standard for what is and is not compatible is determined by a number of factors, including the type of uses, the community’s historic development pattern and expectations and local development and design standards.

Concurrency: Concurrency is a land use planning and implementation tool, introduced in the Washington State Growth Management Act (GMA), which is designed to ensure that necessary public facilities and services to support new development are available and adequate (based on adopted Level of Service standards) at the time the impacts of new development occur.

Congestion: Congestion results when traffic demand approaches exceed the available capacity of the system. Traffic demands vary significantly depending on the season of the year, the day of the week and the time of day. The capacity of the system can change because of weather, work zones, traffic incidents, or other non- recurring events.

Connectivity: The state or extent of being connected or interconnected for all modes of transportation.



Cottage Housing: Detached bungalow scale houses clustered around a common open space and/or private spaces aggregated together in a commons arrangement.

Development capacity/ Zoned capacity: An estimate of how much new development would be allowed based on current (or proposed) zoning and land available for new development over an unlimited time period in addition to existing development

Erosion Hazard Areas: Lands or areas underlain by soils identified by the U.S. Department of Agriculture Natural Resource Conservation Service (NRCS) as having "severe" or "very severe" erosion hazards and areas subject to impacts from lateral erosion related to moving water such as river channel migration and shoreline retreat.

Fair Housing: Fair Housing is the ability for all people to choose where they live without discrimination based on race, color, national origin, sex, family status, or disability—these are the “protected classes” under state and federal law. (Washington State also protects age, sexual orientation, or having a Section 8 voucher). Cities may not make zoning or land use decisions or implement policies that exclude or otherwise discriminate against protected persons, including individuals with disabilities. Duvall’s fair housing practices are evaluated periodically by King County as part of a countywide report to the federal government.

Floodplain: Floodplain means the total land area adjoining a river, stream, watercourse, or lake subject to inundation by the base flood.

Functional Plans: “Functional plans” are detailed plans for facilities and services and action plans for other governmental activities such as parks, surface water, streets, etc.

Geologically Hazardous Areas: Areas that because of their susceptibility to erosion, sliding, earthquake, or other geological events, pose unacceptable risks to public health and safety and may not be suited to commercial, residential, or industrial development.

Goal: A general statement expressing a desired result consistent with the vision and towards which policies and objectives aim.

Habitat Area: An ecological or environmental area that is inhabited by a particular species of animal or plant. A place where a living thing lives is its habitat. It is a place where it can find food, shelter, protection and mates for reproduction.

Human Scale: Human scale means that the size of the building relates to the approximate dimensions of the human body.

Impervious surfaces: Any nonvertical surface artificially covered or hardened so as to prevent or impede the percolation of water into the soil mantle including, but not limited to, roof tops,



swimming pools, paved or graveled roads and walkways or parking areas and excluding landscaping and surface water retention/detention facilities.

Infill: Urban infill is defined as new development that is sited on vacant or undeveloped land within an existing community, and that is enclosed by other types of development. The term “urban infill” itself implies that existing land is mostly built-out and what is being built is in effect “filling in” the gaps. The term most commonly refers to building residential homes in existing neighborhoods but may also be used to describe new development in commercial, office or mixed-use areas.

Landslide Hazard Areas: Areas that, due to a combination of site conditions like slope inclination and relative soil permeability are susceptible to mass wasting.

Level of Service: Level of Service (LOS) is a qualitative measurement which describes traffic conditions based on service measures such as speed, travel time, freedom to maneuver, traffic interruptions, comfort and convenience. Level of Service is expressed qualitatively using letters A through F, with A representing very good operations and F representing undesirable operations.

Low Impact Development: Design concepts including a variety of strategies and techniques to address the negative impacts associated with stormwater runoff, such as:

- Reduce the street width and road network within a development.
- Replace impervious roadways, driveways and sidewalks with more pervious materials where feasible.
- Reduce lot size and setbacks/frontage requirements through cluster designs. Increase retention of forested open space and better protect critical areas.
- Direct stormwater runoff to vegetated bioretention areas where shallow storage is used to promote infiltration and evaporation.
- Eliminate conventional pipe and catch basins to increase time of concentration by promoting sheet and shallow concentrated flow.
- Enhance soil conditions on site by preservation of existing topsoil structure, soil amendments and protection from compaction during construction.
- Reuse of runoff for non-potable application onsite.

Manufactured Home: A type of prefabricated housing that is largely assembled in factories and then transported to sites of use. Manufactured homes are built as dwelling units of at least 320 square feet in size with a permanent chassis to assure the initial and continued transportability of the home. The requirement to have a wheeled chassis permanently attached differentiates “manufactured housing” from other types of prefabricated homes, such as modular homes.

May: When “may” is used in a policy, such language indicates the City has the option to take steps to accomplish the purpose of the policy.



Mitigation: The effort to reduce environmental impacts by minimizing or reducing the impact through policy or regulatory changes, or implementing construction and operational standards.

Natural Area: Areas characterized as predominantly undeveloped landscapes containing vegetation, slopes, streams, lakes, wildlife habitat and other features that have developed through natural growth rather than planned development or construction.

Objective: A statement establishing a measurable target or specific task to be accomplished for the purpose of achieving a goal's desired result.

Passive Recreation: Outdoor recreational activities, such as nature observation, hiking, canoeing, or kayaking, that require a minimum of facilities or development and that have minimal environmental impact on the recreational site.

Policy: A statement giving guidance to decision makers for the purpose of achieving a goal's desired result.

Priority Species: Wildlife species of concern due to their population status and their sensitivity to habitat alteration, as defined by the Washington Department of Fish and Wildlife.

Salmonid: A fish of the salmon family.

Sensitive Areas: Include the following areas and ecosystems: (a) Wetlands; (b) areas with a critical recharging effect on aquifers used for potable water; (c) fish and wildlife habitat conservation areas (including streams); (d) frequently flooded areas; and (e) geologically hazardous areas.

Shall: When "shall" is used in a policy, such language requires that the City take steps to accomplish the purpose of the policy.

Should: When "should" is used in a policy, such language indicates the City has the option to take steps to accomplish the purpose of the policy.

Single Family Unit: A building containing one residence which is not attached to any other dwelling by any means except fences has a permanent foundation and is surrounded by open space or yards.

Special Needs Housing: Special needs housing in this plan includes homes suitable for and occupied by people with one or more self-help limitations, such as physical or mental disability, long-term illness, or alcohol or drug issues. The housing may or may not incorporate supportive services, and may be permanent or transitional. Examples include adult family homes, assisted living facilities and group homes for people with developmental disabilities.

Sustainable Community: In a sustainable community, resource consumption is balanced by resources assimilated by the ecosystem. The sustainability of a community is determined by the availability of resources and by the ability of natural systems to process its wastes. A community is



unsustainable if it consumes resources faster than they can be renewed, produces more wastes than natural systems can process or relies upon distant sources for its basic needs.

Vision: A description of the community as desired. It serves as the keystone upon which goals, policies and objectives are based.

Wetland or Wetlands: Areas that are inundated or saturated by surface water or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs and similar areas. Wetlands do not include those artificial wetlands intentionally created from nonwetland sites, including, but not limited to, irrigation and drainage ditches, grass-lined swales, canals, detention facilities, wastewater treatment facilities, farm ponds and landscape amenities, or those wetlands created after July 1, 1990, that were unintentionally created as a result of the construction of a road, street, or highway. Wetlands may include those artificial wetlands intentionally created from nonwetland areas created to mitigate conversion of wetlands.

CHAPTER 1. INTRODUCTION

1.1 Purpose and Intent

The purpose of this introduction is to provide the historical context used to develop the existing Duvall Comprehensive Plan, the public process that guided the 2015 Comprehensive Plan Update, and summarize the contents of the plan update, including State of Washington Growth Management Act (GMA) mandated content requirements and other guidelines that govern local comprehensive planning.

1.2 Previous Updates and Studies

1.2.1 CITY WIDE VISIONING PLAN

In 2002, the City of Duvall appointed a citizen task force and retained a consultant team to prepare the City- Wide Visioning Plan. The Plan examined land use, transportation, urban design, parks and recreation, and public facilities, with a focus on the Downtown/Old Town Subarea. A total of nine task force and community workshops were held to gather and incorporate citizen input. The Plan was adopted by the Duvall City Council in March 2003 (City of Duvall, 2003).

1.2.2 DUVALL DOWNTOWN SUB-AREA PLAN

Using the City-Wide Visioning Plan (City of Duvall, 2003) as a basis, the City developed the Downtown Sub-Area Plan. The Sub-Area Plan includes specific design features such as improved cross-walks, lighting, signage, and other pedestrian-related amenities. A total of nine task force and community meetings were held, including walking tours and workshops, to share information and gather community input. The City Council adopted the Sub-Area Plan on February 26, 2004 and implementation continues (City of Duvall, 2004).

1.2.3 2004 COMPREHENSIVE PLAN UPDATE

The City of Duvall Planning Commission, with assistance from the University of Washington Urban Design and Graduate Planning Studio (UW Graduate Planning Studio), worked to amend certain elements of the Comprehensive Plan. The UW Graduate Studio held two workshops to share designs and gather community input. Additionally, the public continued to provide input during regular Planning Commission meetings. The updated elements were adopted in November 2004.

1.2.4 OTHER MINOR COMPREHENSIVE PLAN UPDATES

In 2006, the City amended the Land Use Element to allow for Mixed Use Institutional uses off of Big Rock Road that would allow for technical colleges, flex-tech, and commercial-retail uses. In 2009 the City completed a Transportation Plan and a Parks, Trails, and Open Space Plan. The plans were then incorporated into the Transportation and Parks Elements.



1.2.5 ECONOMIC STRATEGIC PLAN

In December 2005, the City Council adopted the Economic Strategic Action Plan. The Plan reported on Duvall's economic conditions and included a market analysis that forecasted economic trends for 2006 through 2011 (City of Duvall, 2005). The plan was designed to provide direction and prioritization for the City and its partners in economic development.

1.3 2015 Update Process

1.3.1 APPOINTED AND ELECTED OFFICIALS

In order to facilitate the process of public participation and gather input for the 2015 Comprehensive Plan Update, an advisory committee of 25 Duvall citizens was appointed by the Mayor of Duvall. The advisory committee, City staff, and a consultant team that was retained by the City to help guide the update attended monthly meetings from September 2013 through early 2015. The advisory committee also went on field trips to consider Duvall's community character, density issues, and urban design. Members of the City's Planning Commission provided valuable input, and City Council members, representatives from Duvall Chamber of Commerce, and other groups participated in discussions, as well.

1.3.2 COMMUNITY SURVEY

During autumn and winter of 2013 – 2014, the City of Duvall sponsored a non-scientific survey on the City's website in order to obtain demographic and statistical information related to citizens' length of residency, employment, commute trips, shopping patterns, priorities, and other data. More than 480 individuals responded to the survey. Although the survey is not statistically valid, the responses provide insight into the respondents' characteristics and their viewpoints about issues facing the City.

A detailed summary of the public survey is included in the appendices of the Comprehensive Plan. The survey results highlight the following:

- Demographically, 70% of respondents reported being 35 years old or older; over 50% reported living in Duvall 10 years or less; over 79% reported having 4 or fewer people in the household; and 68% of respondents have two or fewer children. "Rural setting" and "family-oriented" are popular terms cited in the survey.
- Fire protection and public safety were ranked first and second amongst public services provided.
- Approximately 55% of respondents assessed Duvall's quality of life to be "above average;" 28% as assessed it as "excellent."
- Decline of rural character was identified as the most important issue facing Duvall in the next five years; the need for economic development and job creation ranked a close third in terms of importance.
- Spending for economic development ranked high among spending priorities of respondents, outranked only by spending for youth programs and other recreation related programs.



- Respondents reported purchasing groceries, gasoline, and other such convenience items in Duvall outside of Old Town, and shopping primarily in Redmond for household items and clothing.
- Respondents predominately commute by automobile to employment sites in Redmond and other communities east of Lake Washington.

1.3.3 OPEN HOUSE AND WORKSHOPS

An informal public open house was held in September 2014. Opportunities to view exhibits and discuss the progress of the Comprehensive Plan update with City staff and the consulting team were provided. The Planning Commission and City Council held regular workshops beginning in 2015 through March of 2016

1.4 Contents of the Comprehensive Plan Update

1.4.1 ELEMENTS MANDATED BY GMA

The following goals guide the development and adoption of comprehensive plans and development regulations of counties and cities that are required, or choose, to plan under RCW 36.70A.040. The goals are not listed in order of priority.

1. **Urban growth.** Encourage development in urban areas where adequate public facilities and services exist or can be provided in an efficient manner.
2. **Reduce sprawl.** Reduce the inappropriate conversion of undeveloped land into sprawling, low-density development.
3. **Transportation.** Encourage efficient multimodal transportation systems based on regional priorities and coordinated with county and city comprehensive plans.
4. **Housing.** Encourage the availability of affordable housing to all economic segments of the population of this state, promote a variety of residential densities and housing types, and encourage preservation of existing housing stock.
5. **Economic development.** Encourage economic development throughout the state that is consistent with adopted comprehensive plans, promote economic opportunity for all citizens of this state, especially for unemployed and for disadvantaged persons, promote the retention and expansion of existing businesses and recruitment of new businesses, recognize regional differences impacting economic development opportunities, and encourage growth in areas experiencing insufficient economic growth, all within the capacities of the state's natural resources, public services, and public facilities.
6. **Property rights.** Private property shall not be taken for public use without just compensation having been made. The property rights of landowners shall be protected from arbitrary and discriminatory actions.
7. **Permitting.** Applications for both state and local government permits should be processed in a timely and fair manner to ensure predictability.



8. **Natural resource industries.** Maintain and enhance natural resource-based industries, including productive timber, agricultural, and fisheries industries. Encourage the conservation of productive forest lands and productive agricultural lands, and discourage incompatible uses.
9. **Open space and recreation.** Retain open space, enhance recreational opportunities, conserve fish and wildlife habitat, increase access to natural resource lands and water, and develop parks and recreation facilities.
10. **Environment.** Protect the environment and enhance the state's high quality of life, including air and water quality, and the availability of water.
11. **Citizen participation and coordination.** Encourage the involvement of citizens in the planning process and ensure coordination between communities and jurisdictions to reconcile conflicts.
12. **Public facilities and services.** Ensure that those public facilities and services necessary to support development shall be adequate to serve the development at the time the development is available for occupancy and use without decreasing current service levels below locally established minimum standards.
13. **Historic preservation.** Identify and encourage the preservation of lands, sites, and structures that have historical or archaeological significance.

1.4.2 CONSISTENCY WITH COUNTY-WIDE POLICES AND PUGET SOUND REGIONAL COUNCIL'S VISION 2040

The 2012 King County Countywide Planning Policies (King County, 2012) were prepared to address changes to the Growth Management Act, take into account the passage of 20 years since their initial adoption, and to specifically reflect the regional direction established in VISION 2040 (PSRC, 2009).

VISION 2040 is the product of the Puget Sound Regional Council (PSRC), an association of cities, towns, counties, ports, tribes, and state agencies that serves as a forum for developing policies and making decisions about regional growth management, environmental, economic, and transportation issues in the four county central Puget Sound region of Washington state (King, Kitsap, Pierce and Snohomish counties). VISION 2040's Regional Growth Strategy outlines how the region should plan for additional population and employment growth.

Consistent with King County's County-Wide Planning Policies and PSRC's VISION 2040, Duvall's Comprehensive Plan reflects its position as a small city within the context of a rapidly-growing county and region. The Comprehensive Plan incorporates residential and employment growth targets through 2031 that adopt PSRC target allocations. While maintaining a small town character, Duvall commits to sustainable growth within the regional context, with goals and policies that protect environmentally sensitive areas and open space, provide economic opportunity, promote adequate and affordable housing, improve mobility, and provide additional opportunities for non-motorized and public transportation. The Comprehensive Plan integrates these elements and plans for low-impact, well-designed, compact growth concentrated within the city and designated urban growth areas while preserving surrounding rural and resource lands.



The overall policy direction, goals, and implementation actions contained in PSRC’s VISION 2040 are represented throughout the Comprehensive Plan in Land Use, Economic Development, Transportation, Parks, Environment and Sustainability, and other elements. Duvall commits to interjurisdictional planning to facilitate a common vision and efficient use of land, infrastructure, and resources for all citizens. The end result is a Plan that addresses development, design, environmental protection, and social concerns holistically, with provisions for evaluation, monitoring, and revising as local conditions and community preferences change.

The Regional Growth Strategy clarifies that all jurisdictions in King County have a role in accommodating growth, using sustainable and environmentally responsible development practices (PSRC, 2009). Countywide Planning Policies support this strategy and provide direction at the county and jurisdiction level with appropriate specificity and detail needed to guide consistent and useable local comprehensive plans and regulations (King County, 2012).

While VISION 2040 is consistent with the overall growth management strategy of the 1992 King County Countywide Planning Policies, the 2012 Countywide Planning Policies were restructured to match the structure of VISION 2040. The 2012 Countywide Planning Policies now include the following six chapters: Environment, Development Patterns, Housing, Economy, Transportation, and Public Facilities and Services.

1.4.3 2035 VISION

During the update process, the community reconsidered the City’s vision statement to ensure it reflects community aspirations for Duvall’s growth and evolution over the next 20 years. As community members described their values, hopes, and image of Duvall for the future, changes in the vision statement emerged. Consequently, the following was incorporated into the update:

Duvall is a family-friendly community with an abundance of trails, parks, and open space. Duvall’s vibrant Old Town overlooks the Snoqualmie River and offers something for everyone. New businesses and the entrepreneurial spirit are encouraged, providing residents unique local services and products. Residents gather year-round to enjoy the arts, music, and community events, celebrating Duvall’s distinctive culture, all while embracing the natural beauty of the Snoqualmie Valley. Duvall is an evolving city that honors its rural and agricultural heritage, while remaining on the cutting edge of technology, innovation, and sustainability.

1.4.4 NEW ENVIRONMENT AND SUSTAINABILITY ELEMENT

A new element was prepared in the same format as other elements of the Comprehensive Plan that addresses shorelines, sensitive areas, and preservation of natural resources. As a result, some goals and policies were relocated from other elements of the Comprehensive Plan and included in the new element.



1.4.5 REVISED GOALS AND POLICIES

The following revisions have been integrated into the Plan update:

- Staff and consultants worked with the citizen advisory committee to review written and oral comments, and revise language where appropriate. Themes the committee worked on included; the vision statement, environment and sustainability, types of housing, and economic development.
- Goals and policies that are more appropriate in another section of the Comprehensive Plan, such as in the new Environment and Sustainability Element, have been relocated to that section.
- Adopted City plans and other documents that contain goals and policies duplicated in the Comprehensive Plan (such as the City-Wide Visioning Plan and Downtown Sub-Area Plan) are now simply referenced, and the duplicated goals and policies have are mostly removed.
- Numerous goals and policies contained in the 2006 Comprehensive Plan have been implemented through code adoption or other forms of implementation. These adopted goals and policies have been removed from the Comprehensive Plan Update.
- Planning tasks related to transportation and capital facilities were conducted separately from the Comprehensive Plan Update. Pertinent information resulting from these tasks has been incorporated into the Update.
- Demographic data has been revised to reflect the most recent information from PSRC and the State of Washington.

1.4.6 STATE ENVIRONMENTAL POLICY ACT (SEPA) REVIEW

In accordance with SEPA, the City evaluated the potential impacts of the Comprehensive Plan Update in an Environmental Impact Statement (EIS). The City included the public early in the EIS process to gather feedback about the range of alternatives available to the City to plan for future growth. Consistent with SEPA, the City held a public scoping meeting to narrow the focus of the EIS to significant environmental issues, and areas of public concern and controversy. The public provided feedback that was used to develop five Comprehensive Plan alternatives: a “no action alternative” that assumes no changes in policy with growth following a similar pattern as has occurred in the last twenty years; and four action alternatives that represent a range of possible growth patterns and annexation scenarios (City of Duvall, 2015).

The City Council identified a preferred alternative based on community feedback, findings of the EIS, and consistency with state and regional policies and regulations. The preferred alternative is reflected in this Comprehensive Plan update and includes revisions to the outdated Comprehensive Plan’s goals, policies, and Future Land Use Map; revisions to the official Zoning Map; and City support of annexation of the Southwest UGA, North UGA, and property adjacent to the Big Rock Ball Fields in the South UGA Reserve. Additionally, the City will work with King County to remove a portion of the UGA Reserve from their boundaries and add an approximately equal area south of Big Rock Road that is currently not part of Duvall’s urban growth area or city limits.



1.5 References

City of Duvall. 2003. *City-Wide Visioning Plan*. March. Available:

<http://www.duvallwa.gov/DocumentCenter/View/113>.

City of Duvall, 2004. *Downtown Sub-Area Plan*. May. Available:

<http://www.duvallwa.gov/DocumentCenter/View/112>.

City of Duvall, 2005. *Economic Development Strategic Action Plan*. Available:

<http://www.duvallwa.gov/DocumentCenter/View/95>.

City of Duvall. 2015. Environmental Impact Statement process and documentation. Available:

<http://www.duvallwa.gov/297/Comprehensive-Planning>. Accessed: February 26, 2016.

King County. 2012. *Countywide Planning Policies*. November. Available:

http://www.kingcounty.gov/~media/property/permits/documents/GMPC/CPPsApproved/2012-0282_striker_attach_A.ashx?la=en. Accessed: January 6, 2016.

PSRC (Puget Sound Regional Council). 2009. *VISION 2040*. December. Seattle, WA.



CHAPTER 2. LAND USE ELEMENT

2.1 Introduction

2.1.1 PURPOSE AND INTENT

The Land Use Element is the cornerstone of the Duvall Comprehensive Plan. Its purpose is to ensure that an adequate supply of land and a desired mix of uses are available to accommodate Duvall's future growth, and to set a foundation for the successful implementation of other Comprehensive Plan elements, including: Housing; Parks and Recreation; Economic Development; Transportation; Capital Facilities; and Environment and Sustainability. The Land Use Element directs Duvall's long-term development by introducing strategies that will capitalize on the City's strengths, and address challenges it could face in realizing its vision.

Through an extensive community participation process and analysis of Duvall's existing conditions, it is clear citizens believe that Duvall's quality of life is greatly enhanced by its small-town character, environmental quality, and economic vitality. Duvall also has great potential for community, economic, and social growth in the coming years. This Element ties together multiple land use and development considerations that acknowledge and celebrate Duvall's past while planning for a bright future.

The following goals reflect Duvall's aspirations for an integrated, well-designed and livable city with a strong sense of history and identity. The policies set a course of action for achieving the goals. The Land Use Element Analysis that follows describes the Element's regulatory context and Duvall's existing conditions, growth targets, and development capacity. It also outlines future land use designations that will accommodate Duvall's growth and development, as well as design standards to ensure that as Duvall grows, its authenticity and small-town feel will remain intact.

2.2 Goals and Policies

GOAL LU1: Duvall's safe, friendly, and family-oriented small-town character is preserved and enhanced.

Policies

- LU 1.1 Establish setbacks, height limits, and massing controls consistent with neighborhood context.
- LU 1.2 Implement outdoor lighting standards that balance the need for public safety and security with the prevention of light pollution.
- LU 1.3 Encourage the implementation of low-impact design principles, including narrow streets widths, treed medians, and traffic calming measures, consistent with public safety and emergency service needs.



- LU 1.4 Develop lighting standards for developments that implement Illuminating Engineering Society (IES) standards for number of streetlights and light poles for use in designated zones.
- LU 1.5 Consider developing a density bonus ordinance to allow increased density in exchange for additional native open space, additional environmental protection, or for the development of senior housing, affordable housing or workforce housing.
- LU 1.6 Promote a safe, attractive, and welcoming family-friendly atmosphere in residential and business neighborhoods.

GOAL LU2: Old Town is a public destination distinguished by its historic character.

Policies

- LU 2.1 Continue to implement and monitor the progress of the Downtown Sub-Area Plan; reflect changes to conditions and community goals through the annual Comprehensive Plan amendment process, as warranted.
- LU 2.2 Consider developing a public plaza in the Old Town area.
- LU 2.3 Work to ensure that small-scale, pedestrian-friendly, retail and restaurant uses locate in Old Town.



Photo LU-1. Old Town Duvall

Source: NW Escapes, King5

GOAL LU3: Building and site design for residential, commercial, industrial, and mixed-use development promote and ensure visual and functional consistency with adopted plans.

Policies

- LU 3.1 Administer building design and site plan review consistent with the Comprehensive Plan, Downtown Sub-area Plan, and Citywide Visioning Plan.
- LU 3.2 Review and update building and site design standards, as needed, to ensure effectiveness and consistency with adopted goals and policies relating to Duvall’s visual quality.
- LU 3.3 Implement parking requirements to ensure that adequate off-street parking is provided for all developments. Encourage shared off-site parking that is within close proximity and well lit.
- LU 3.4 Evaluate and monitor parking polices in Old Town to encourage development and redevelopment.



- LU 3.5 Provide flexibility in the administration of design standards to allow for innovative products and creative, effective solutions to site challenges.
- LU 3.6 Preserve the physical and visual connectivity of neighborhoods by discouraging fences and walls along minor arterials and collector streets. Where allowed, establish height limitations, setbacks, and landscape requirements for fences and walls adjacent to city streets.
- LU 3.7 Provide landscape buffers between non-similar residential development types.
- LU 3.8 Consider developing regulations that require new residential subdivisions to achieve a minimum net density per acre, and consider net density to be the density of residential development excluding such items as; environmentally sensitive areas, right of way, and or stormwater facilities.
- LU 3.9 Update subdivision and site plan standards, as needed, to reflect changes in design methodologies, technology, products, or adopted goals and policies relating to desirable development design.

GOAL LU4: Encourage mixed-use development, where appropriate, to meet the City’s housing needs and to foster a compact and diverse community.

Policies

- LU 4.1 Limit residential density in mixed-use buildings where parking ratios significantly impair the site’s capacity for compact development when, aboveground parking facilities are proposed.
- LU 4.2 Determine residential density and commercial area maximums through a flexible permit process when required parking for the residential portion of a mixed-use development is provided underground.
- LU 4.3 Implement a minimum requirement for new commercial development on each mixed-use parcel, except when existing structures are being renovated for commercial use.
- LU 4.4 Consider allowing residential development on upper floors of buildings in all zones.

GOAL LU5: Duvall contains a variety of housing types, including cottages, duplexes, triplexes, attached and detached single-family houses, townhouses, and apartments to accommodate residents’ diverse preferences and income levels.

Policies

- LU 5.1 Continue to accommodate the development of single-family neighborhoods and accessory uses, consistent with the Growth Management Act (GMA) and City policies and regulations.
- LU 5.2 Encourage multi-family residential development consistent with Duvall’s existing character.



- LU 5.3 New residential development projects should provide common open space for residents and functional, attractive pedestrian access to parks and open space within and surrounding the development site. Encourage the development of affordable housing by private developers and public-private partnerships, including strategies that incorporate cottages, duplexes, triplexes, and attached single-family houses into development proposals.
- LU 5.4 Consider including affordable housing requirements as part of pre-annexation agreements.
- LU 5.5 Encourage cottage, attached, affordable, senior and workforce housing by developing a program that considers density bonuses and economic incentives.

GOAL LU6: Opportunities for the development and redevelopment of retail, office, manufacturing and light industrial uses are available, consistent with land use and circulation patterns of Duvall.

Policies

- LU 6.1 Allow larger-scale retail buildings south of Old Town that are pedestrian-friendly and meet site planning and design principles for reduced bulk and mass.
- LU 6.2 Encourage commercial, small-scale manufacturing, flexible space, and institutional uses in order to create family-wage jobs, provide goods and services attractive to the local population, support entrepreneurship and new business development, and provide opportunities for workforce training.
- LU 6.3 Encourage the development of innovative commercial developments, such as village-style shopping centers, south of Old Town. Provide buffers, incorporating features such as existing vegetation, berms, fences, and landscaping, between commercial and industrial zones and neighboring single- and multi-family zones.
- LU 6.4 Encourage the development of local businesses by allowing flex-space for new and growing companies.
- LU 6.5 Support unique opportunities to site regionally-important facilities that offer substantial public benefit and help diversify Duvall's economy.

GOAL LU7: Connectivity between destination areas is provided through a network of trails, sidewalks, and roadways.

Policies

- LU 7.1 Require all new arterial streets to include sidewalks on both sides, and upgrade the existing arterial streets to include sidewalks on both sides as funding becomes available.
- LU 7.2 Provide safe and attractive pedestrian access between uses on-site and to connecting properties and sidewalks.



- LU 7.3 Promote mixed-use neighborhoods that facilitate walking to community destinations.
- LU 7.4 Encourage the siting of new parks, schools, and other community destinations within walking distance of residential areas.
- LU 7.5 Evaluate, and where feasible install, pedestrian and bicycle connections between new and existing developments.
- LU 7.6 Require new developments to provide bicycle and pedestrian infrastructure that ties into surrounding existing or planned trails or sidewalks using the site plan review process.
- LU 7.7 Create a network of pedestrian and bicycle trails linking parks and other recreational opportunities.
- LU 7.8 Design new networks for the disabled (ADA) and also for people with strollers and walkers.

GOAL LU8: Sense of community is fostered through a lively arts community, community engagement, historic preservation, public art, and public spaces.

Policies

- LU 8.1 Encourage the development of a centrally-located community center.
- LU 8.2 Prepare and implement a City cultural facilities plan.
- LU 8.3 Encourage the development of affordable live/work artist studios to enliven Duvall's artist community.
- LU 8.4 Explore partnership opportunities with nonprofit organizations to develop studio spaces and gallery space in existing buildings or new developments.
- LU 8.5 Support City-sponsored festivals and cultural activities that promote Duvall and its businesses and arts communities.
- LU 8.6 Find opportunities for public art in capital and private development projects where feasible.
- LU 8.7 Provide quality arts related community events to foster a sense of place for residents and visitors.
- LU 8.8 Support the Duvall Historical Society in its efforts to preserve and document Duvall's history.
- LU 8.9 Support the development of facilities and agricultural activities at the historic Dougherty Farmsteads by private and nonprofit organizations.
- LU 8.10 Support the annexation; and encourage the development, operation, and preservation of the Burhen heritage park.



- LU 8.11 Encourage Duvall Foundation for the Arts in their mission of building a Performing Arts Center in the City and their mission to support the arts and arts education.
- LU 8.12 Support the maintenance of public sites or properties that are currently on or eligible for the National Historic Register.
- LU 8.13 Support the placement of buildings on the National Historic Register.
- LU 8.14 Encourage community involvement and volunteerism.
- LU 8.15 Develop and implement a public art program, including identification of funding resources, to increase the presence of public art in Duvall.
- LU 8.16 Create public-private partnerships to support arts and culture in Duvall.

GOAL LU9: Duvall is a tourist destination that welcomes visitors with arts, cultural activities, and festivals that support a vibrant economy.

Policies

- LU 9.1 Encourage the shared use of public spaces for community festivals and activities, and create a supporting policy.
- LU 9.2 Assist in marketing efforts for organizations that conduct art and cultural activities in Duvall.
- LU 9.3 Support the Chamber of Commerce’s efforts to promote tourism, cultural activities, and festivals in Duvall.
- LU 9.4 Encourage the development of lodging facilities that are consistent with Duvall’s character.

GOAL LU10: Future Urban Growth Area (UGA) annexations are consistent with Duvall’s land use and circulation patterns and do not adversely impact the City and its finances.

Policies

- LU 10.1 Develop a mechanism to ensure that levels of service (LOS) within the existing city limits will not be reduced as a result of annexation and development.
- LU 10.2 Require an analysis to ensure potential annexations will sufficiently contribute to the funding of City services prior to their approval, excluding annexations for public purposes.
- LU 10.3 The City should work with King County to revise its urban growth boundaries by removing land from their UGAR and adding an equal amount of land to an area called “South UGA” (as depicted on Figure LU-3). If approved by King County, the South UGA should be predesignated with a mix of Commercial – Retail and Office and Residential 6 Units per Acre.
- LU 10.4 Ensure that the undesignated North and South UGAR areas are not annexed until measures to revise urban growth boundaries are implemented, and specific annexation



plans have been prepared for the areas consistent with the Comprehensive Plan FEIS Preferred Alternative.

- LU 10.5 Ensure that UGA's are designed in a cohesive manner to include park, trail and open space connections, vehicular connectivity, and joint stormwater facilities.
- LU 10.6 Ensure annexations are consistent with King County Countywide Planning Policies and PSRC's Regional Growth Strategy, including coordinating with the County to confirm that the timing and annexed areas' anticipated land uses align with the City's allocated growth targets.
- LU 10.7 Implement Annexation Plan and update on a regular basis.

GOAL LU11: Duvall and its surrounding landscape possess a natural beauty that is preserved and showcased.

Policies

- LU 11.1 Preserve views of the Snoqualmie Valley for all to appreciate.
- LU 11.2 Implement landscaping standards that require native plantings in all landscaped areas, encourage integrated pest management, discourage all aggressive growing exotic plant species, and require street trees for canopy and environmental functions.
- LU 11.3 Provide for a minimum landscaping percentage of commercial and multi-family developments with requirements for survivability and surety measures.
- LU 11.4 Ensure that new development adjacent to the Snoqualmie Valley Trail protects the integrity of the trail by incorporating a "soft edge" of native and informal plantings that complement the shoreline's riparian habitat, creating an authentic environmental experience for pedestrians.
- LU 11.5 Require the identification of significant natural features, such as tree stands or large boulders, and encourage their preservation through site plan review and approval.

2.3 Land Use Element Analysis

This section describes the regulatory setting, existing land use conditions, and future land use patterns and designations based on Duvall's projected population and employment growth. It also outlines site and building design standards that will be used to maintain and promote Duvall's character and natural areas. Additional land use initiatives are presented in the adopted plans and initiatives included in the regulatory setting discussion.

2.3.1 REGULATORY SETTING

2.3.1.1 Growth Management Act (GMA)

Adopted in 1990, GMA requires state and local governments to manage growth by identifying and protecting critical areas and natural resource lands, designating urban growth areas, preparing



comprehensive plans, and implementing them through capital investments and development regulations.

Under the GMA (RCW 36.70A.070), a Land Use Element is required to address the following:

- Distribution, location, and extent of land uses: agriculture, timber production, housing, commerce, industry, recreation, open spaces, public utilities, public facilities, and other land uses;
- Population densities, building intensities, and estimates of future population growth;
- Protection of the quality and quantity of groundwater used for public water supplies;
- Drainage, flooding, and stormwater runoff within and near the jurisdiction as well as guidance for corrective actions to mitigate or clean discharges to waters of the state;
- Wherever possible, the Land Use Element should consider utilizing urban planning approaches that promote physical activity.

2.3.1.2 King County Countywide Planning Policies

Adopted in 2013 by the Growth Management Planning Council, this document outlines a countywide vision and serves as a framework for each jurisdiction to develop its own comprehensive plan. The document establishes population and employment targets for all King County cities, including Duvall. To ensure consistency with King County’s Countywide Planning Policies, Duvall must show that it has the zoning capacity and ability to provide public services to accommodate its growth targets through 2035 (King County, 2012a).

Some of this growth may occur within the UGA, where the City will be responsible for providing urban services, residential densities, and a mix of land uses to accommodate projected growth. As stated in the King County Countywide Planning Policies, the designated UGA of Duvall shall:

- Include all lands within the existing City in the UGA;
- Be sufficiently free of environmental constraints to be able to support rural city growth without major environmental impacts;
- Be contiguous to city limits;
- Have boundaries based on natural boundaries, such as watersheds, topographical features, and the edge of areas already characterized by urban development;
- Be maintained in large lots at densities of one home per five acres or less with mandatory clustering provisions until such time as the City annexes the area;
- Be implemented through interlocal agreements between King County, cities, and special purpose districts, as appropriate, to ensure that annexation is phased, nearby open space is protected, and development within the UGA is compatible with surrounding Rural and Resource Areas;



- Not include designated Forest or Agricultural Production District lands unless the conservation of those lands and a continued resource-based use, or other compatible use, is assured.

2.3.1.3 King County Comprehensive Plan

Adopted in 2012, the King County Comprehensive Plan establishes policies for all land use and development regulations in unincorporated King County, and for regional services throughout the County including transit, sewer, parks, trails and open space. The plan designates a potential annexation area (PAA) for Duvall that would be the initial area that the City could annex outside of the current city limits. The current County- designated PAA for Duvall is consistent within areas currently designated as UGA and UGAR. Upon annexation, the City's plans, policies and regulations would govern new development (King County, 2012b).

2.3.1.4 Duvall Downtown Sub-area Plan (Downtown Plan)

The Downtown Plan (City of Duvall, 2004) was conceived as a critical follow-up to the City-wide Visioning Plan, which identified preservation and enhancement of downtown as the highest priority goal (City of Duvall, 2003). The Downtown Plan provided a more detailed vision for the downtown area, including historic Main Street and Old Town; McCormick Park and the riverfront area; the commercial area south of Old Town (Midtown); and mixed-use and residential areas east and north of Old Town (Uptown and Multi-Family Neighborhood, respectively). The Plan also included a detailed road map for how to achieve the vision. This includes short and long-range actions in addition to goals and policies to guide the City. The strategic concept underlying the Downtown Plan is to strengthen the areas surrounding the Main Street core and integrate them into a more cohesive unit.

The economic report prepared as part of the 2003 City-wide Visioning Plan identifies three sectors where the downtown has significant growth opportunities:

- Personal and retail services serving a growing population;
- Intra-regional tourist activities;
- Business services sustaining a local economy.

The Downtown Plan promotes these sectors by targeting specific opportunities in each district for the various sectors. For example, the Riverside Village provides an excellent opportunity for tourist-based retail because it lies between Main Street and the Snoqualmie River, the town's two biggest visitor attractions. Uptown, on the other hand, is an ideal setting for professional offices and business services once street access is improved and design guidelines are adjusted. Residential growth, which is encouraged in all districts, will support increased local and convenience retail.

The Downtown Plan sets out goals and policies for each downtown area. Those goals and policies are incorporated into this document. It also sets out goals and policies for Main Street, traffic circulation, parking, transit, pedestrian and bicycle access, and parks. Those goals and policies are contained throughout the Comprehensive Plan.



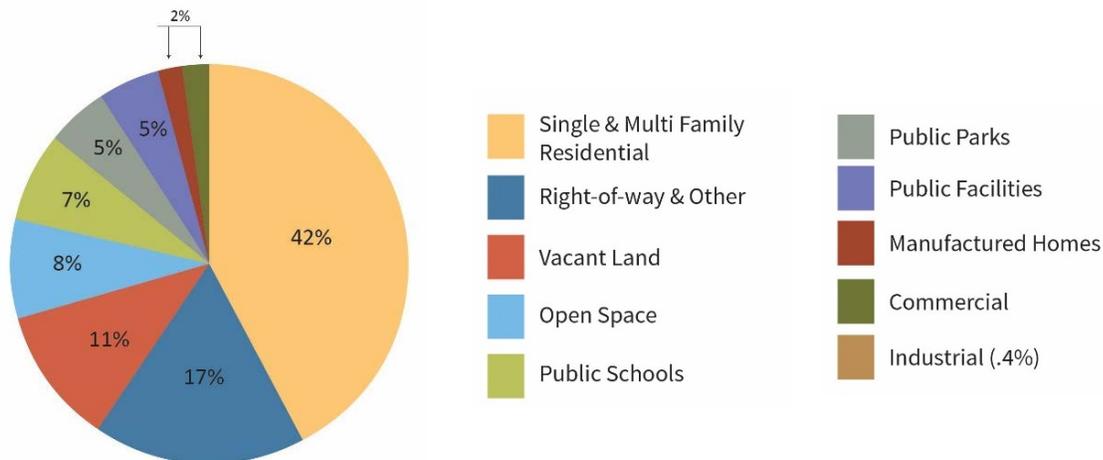
2.3.2 EXISTING CONDITIONS

Many important issues arose during the City-wide Visioning and Downtown Plan processes and other public meetings. Additional issues also arose out of the research and analysis of current conditions in the City of Duvall. The areas discussed below represent key themes that were identified during the planning process.

2.3.2.1 Land Use Patterns

The City of Duvall encompasses approximately 2.5 square miles (about 1,592 acres) of land (City of Duvall, 2015). The most dominant land use pattern within the city limits is single- and multi-family residential (42 percent), followed by right-of-way and other uses (17 percent), vacant lands (11 percent), open space (8 percent), and public schools (7 percent). It also includes a variety of other uses, including public parks, public facilities, and commercial (see Figure LU-1).

Figure LU-1. Major Existing Land Uses in Duvall City Limits

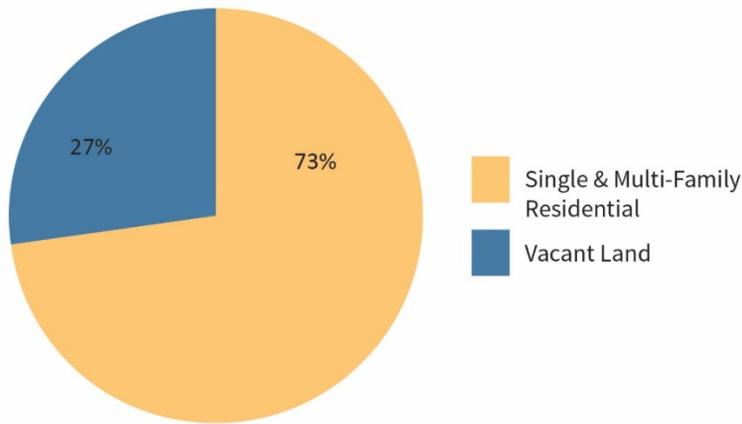


Source: City of Duvall, 2015

The City's existing UGAs encompass approximately 0.2square miles (about 137 acres) (City of Duvall, 2015). The land uses in Duvall's UGAs are predominantly single-family residential (73 percent) and vacant lands (27 percent).



Figure LU-2. Major Existing Land Uses in Duvall Urban Growth Areas



Source: City of Duvall, 2015



Photo LU-2. Downtown Duvall in 2014

2.3.2.2 Duvall’s Unique Small Town Character

Duvall contains many distinct neighborhoods and business districts, each of them contributing to the City’s unique small town character. Following is a description of each of these areas, including a general discussion of existing conditions.

OLD TOWN

Old Town is the heart of the Duvall. It is generally considered to be the area contained within one block north of Bird Street to the north, Stephens Street to the south, the Snoqualmie Valley Trail to the west and 1st Avenue to the east. It is often cited by residents as what they like most about Duvall, and is the area that gives the City a unique presence in the Snoqualmie Valley. Old Town’s character is created by its mix of old and new buildings with historic and interesting facades, buildings that are built to the sidewalk, and parallel parking on Main Street, along with the small local businesses that



call Main Street home. Wide sidewalks that allow outdoor displays, benches, and outdoor seating at restaurants contribute to Old Town's charm.

The Downtown Sub-area Plan has detailed recommendations for the future of this area. The Economic Development Element reflects that Duvall will experience substantial new development over the next 20 years, and Old Town has the capacity to absorb and benefit from some of this growth. The Economic Development Element contains goals and policies that provide guidance for the development of Old Town while allowing it to maintain its unique historic character.

Challenges to Old Town's development exist, including natural topography and man-made barriers. Pockets of auto-oriented and lower-intensity development isolate Old Town from the rest of the community. Furthermore, development west of Main Street has long created a barrier between Old Town and the Riverfront area. Additionally, the areas designated for mixed-use and residential development east of Old Town have re-use and redevelopment potential for new businesses. Lastly, Old Town currently lacks an identifiable pedestrian network that links park areas and other neighborhoods to it. Sidewalks connecting to residential areas are not provided on many east-west streets. Even though there are sidewalks on NE Stephens Street, this and other east-west streets are not Americans with Disabilities Act (ADA) accessible. Pedestrian connections to Taylor's Landing on the northwest edge of Old Town and Taylor Park on the southeast edge are also limited. An expanded trail and sidewalk system has strong support from community residents interested in making downtown more pedestrian friendly. Enhancement of the pedestrian environment is seen as a key strategy to attract additional businesses and pedestrians, and other sites with challenges present promising opportunities to strengthen and enhance Old Town.

MAIN STREET AND THE SNOQUALMIE VALLEY TRAIL

Main Street is the only north-south corridor through Duvall and is an important state highway (SR203) connecting Monroe, Duvall, Carnation and the upper valley. This highway accommodates significant through truck and commuting traffic. Access and safety improvements have been on-going as part of Main Street Reconstruction projects which have included safety, parking, and traffic improvements between Stephens Street and NE Cherry Valley Road from 2004 through 2015. The projects included the installation of a low center median, creation of 12-foot wide travel lanes and 12-foot wide joint bicycle and parking lanes. Improvements included wider sidewalks, tree grates, road and pedestrian lighting, small public spaces, public art, and other public amenities. The Transportation Element describes the current arterial system issues and capacities and provides a blueprint for future improvements. The last phase of the Main Street Safety Improvements and Reconstruction (NE Valley Street to Big Rock Road) is currently in the design and permitting phase. Completion of the improvements is planned for 2016.

The existing Snoqualmie Valley Trail links Duvall with Carnation and other Snoqualmie Valley towns to the south, and is popular with locals and visitors alike. However, connections to the trail within Duvall are very limited and poorly identified. Taylor's Landing, the northern terminus of the trail, is isolated in the northwest corner of downtown due in part to poor pedestrian connections. Two unused rights-of-way provide opportunities for future connections.



MIDTOWN

Midtown, the area south of Old Town, is a mix of commercial buildings, residential houses, and vacant lots. Midtown is located between NE Stephens Street on the north, just south of Valley Street on the South, and between the Snoqualmie Valley Trail to the west and 1st Avenue to the east. Coe-Clemons Creek crosses Main Street in a culvert just south of Valley Street. Existing design characteristics range from single-story, strip-like development to mixed-use developments with office or residential space on upper floors. The newer commercial buildings are set back from Main Street with parking lots in front of, or behind, the buildings. Sidewalks extend south from Old Town to Valley Street (with a missing link on the west side around Valley Street). South of Valley Street there are limited sidewalks in the Midtown area, although the current Main Street Safety Improvements and Reconstruction (NE Valley Street to Big Rock Road) project will provide sidewalks through this area and further to the south. On-street parking is provided on the east side of Main Street north of Valley Street, and on both sides of Main Street north of Stephens Street.



Photo LU-3. View from Big Rock Ball Field

BIG ROCK AREA

The Big Rock Area is bounded by Valley Street to the north, Old Big Rock Road to the south, the Snoqualmie Valley Trail to the west, and approximately 3rd Avenue to the east. Thayer Creek crosses Main Street in a culvert in the Big Area on the north side of NE 143rd Place. This area features retail, office, and industrial uses including Safeway Plaza, Duvall Commons, the City Public Works Department, the wastewater treatment plant, Tech Center, Pentz Design and vacant land.

RESIDENTIAL NEIGHBORHOODS

Duvall is largely a residential community, with a variety of neighborhoods that have been established as land was subdivided. The original portion of Duvall, an area that encompasses Bird Street to the north and Park Street to the south, was platted with 25-foot by 100-foot lots in the 1910s. Most of the area is developed with small houses on properties that combine two to four platted lots. A number of duplexes and small multi-family apartment complexes are present in the area. North of Bird Street, most properties are developed or are developing with single-family residences. The area between Bird Street and Cherry Valley Road on the west side of 2nd Avenue is the exception, where parcels are largely being developed with small-lot, single-family, attached- or detached- houses on lots ranging from 2,500 to 3,500 square feet. Scattered areas of higher-density housing, including small, multi-family apartment buildings, four-plexes, and mobile homes, are also being developed here. Cherry Valley Elementary School and the historic Dougherty Farmstead are north of this area.

Heading east towards the plateau, south of Stephens Street to about 145th Street, parcels average about 10,000 square feet. Most properties in this area are developed with single-family houses. Development within this area largely occurred between the 1980s and early 1990s.



“The plateau” is generally considered to be the area from the west side of 275th Avenue to the eastern city limits. It is largely developed with single-family houses on relatively large lots, averaging about 15,000 square feet. (The exceptions are the properties at the intersection of 278th Avenue and 150th Street, where land is developed at higher densities on lots averaging about 4,500 square feet, and the Duvall Highlands Mobile Home Park.) Almost the entire plateau area has been developed since the early 1990s. Cedarcrest High School and Eagle Rock Multi-Age School are located at the eastern city limits of the residential area. Judd Park, Hix Park, Alva Miller Park, and Big Rock Ball Fields are also located in this area. The City also owns a substantial amount of open space adjacent to the north city limits.

2.3.2.3 Arts and Heritage

Duvall has long been known as a small, historic, arts-oriented community. As the City has grown, a concerted effort has been made by the City and other non-profit organizations to maintain an arts presence and historical references. The results of those efforts are reflected in public art displays, summer music concerts in McCormick Park, indoor music and dance performances, Art Walk, poetry readings, open mic music sessions, family oriented festival that features a parade, and art and music festival centered around sand sculptures, and a historic themed day at the Dougherty Farmstead. There are ongoing efforts to build a performing arts center utilizing materials from the Thayer Barn at the south end of town along with continued efforts to strengthen and enhance the local community band and theater group.

The nonprofit Duvall Historical Society was formed in 1976 to preserve and document the history of the lower Snoqualmie Valley with a special focus on Duvall. It is continually working to preserve local heritage by documenting oral and visual history in Historical Society publications. In conjunction with the City, the Society refurbished the Dougherty Farmstead and converted it into a museum. Currently, the Historical Society is working to place historic markers on many of Duvall’s historic buildings.

The Duvall Historical Society undertook a historic structures inventory in 1998. That inventory lists 51 historical buildings and places in Duvall. The City of Duvall Cultural Resources Survey and Inventory is in Appendix A. The inventory was the first step of a process that could include further evaluation of buildings to determine if they are eligible for listing in the National Register of Historic Places.

The City of Duvall owns a number of historical buildings. The Dougherty House was listed in the Washington Heritage Register in July 2004, is listed in the National Register of Historic Places, and has been converted into a museum. In 2002, the City was given the Depot Building that had served the Chicago, Milwaukee, St. Paul, and Pacific Railroad. The Depot was moved to land adjacent to McCormick Park, and the park was extended to include the Depot facility. The former Duvall Community Center at 26512 NE Stella Street has been remodeled by the City and is currently being leased to a pre-school. The City also owns the building at 15619 Main Street NE that is currently being used a visitor center and public space.

2.3.3 DUVALL’S URBAN GROWTH AREA

2.3.3.1 Designated Urban Growth Areas (UGAs)

As of 2006, the City of Duvall had three designated UGAs where growth, upon annexation, could occur. The designated unincorporated UGA properties are within King County jurisdiction and are zoned



UR (urban reserve; 1 unit per 5 acres). The North UGA, located along 275th Avenue NE north of NE 152nd Street, is approximately 87 acres and has a future land use designation of Residential – 4-4.5 units per acre. A small area northwest of Duvall –Monroe Road NE is also included in the UGA. It contains approximately 5 acres and has a future land use designation of Residential – 4-4.5 units per acre.

The 2015 Comprehensive Plan update includes two newly-designated UGAs (Southwest and Southeast). The southwest UGA contains approximately 30 acres and has a future land use designation of PO, which allows for parks and open space and commercial. The Southeast UGA contains approximately 20 acres, near Big Rock Ball Fields and has a future land use designation of Residential – 4-4.5 units per acre.

2.3.3.2 Urban Growth Area Reserve (UGAR)

The UGAR includes the UGAR North (approximately 202 acres) located to the south of NE 150th Street and to the east of 284th Avenue NE/Batten Road NE, and the UGAR South (approximately 125 acres) located to the south of NE Roney Road and east of NE Big Rock Road, The UGAR was designated “Reserve”. The City’s projected population targets can be accommodated by development of vacant and redevelopable properties within city limits and the UGA. Most properties in the UGA and UGARs are vacant or minimally-developed.

The development opportunities for the area are most likely residential, and under current financial scenarios, residential development does not provide revenue necessary to fund general government services and expansion of public infrastructure to serve the area. Further, evaluation of environmental constraints for UGAR areas completed as part of the City’s Watershed Study revealed that significant portions of the UGAR, and especially the UGAR North area, have limited development potential due to large, forested wetlands and associated streams (ESA, 2015).

The UGARs will retain the existing King County designation of UR (urban reserve; 1 unit per 5 acres) until such time that specific plans have been prepared for the areas. Additionally, the City’s policy is to refrain from annexation until financial measures are in place, to ensure that the development within the area can pay for general government services necessary to serve it.

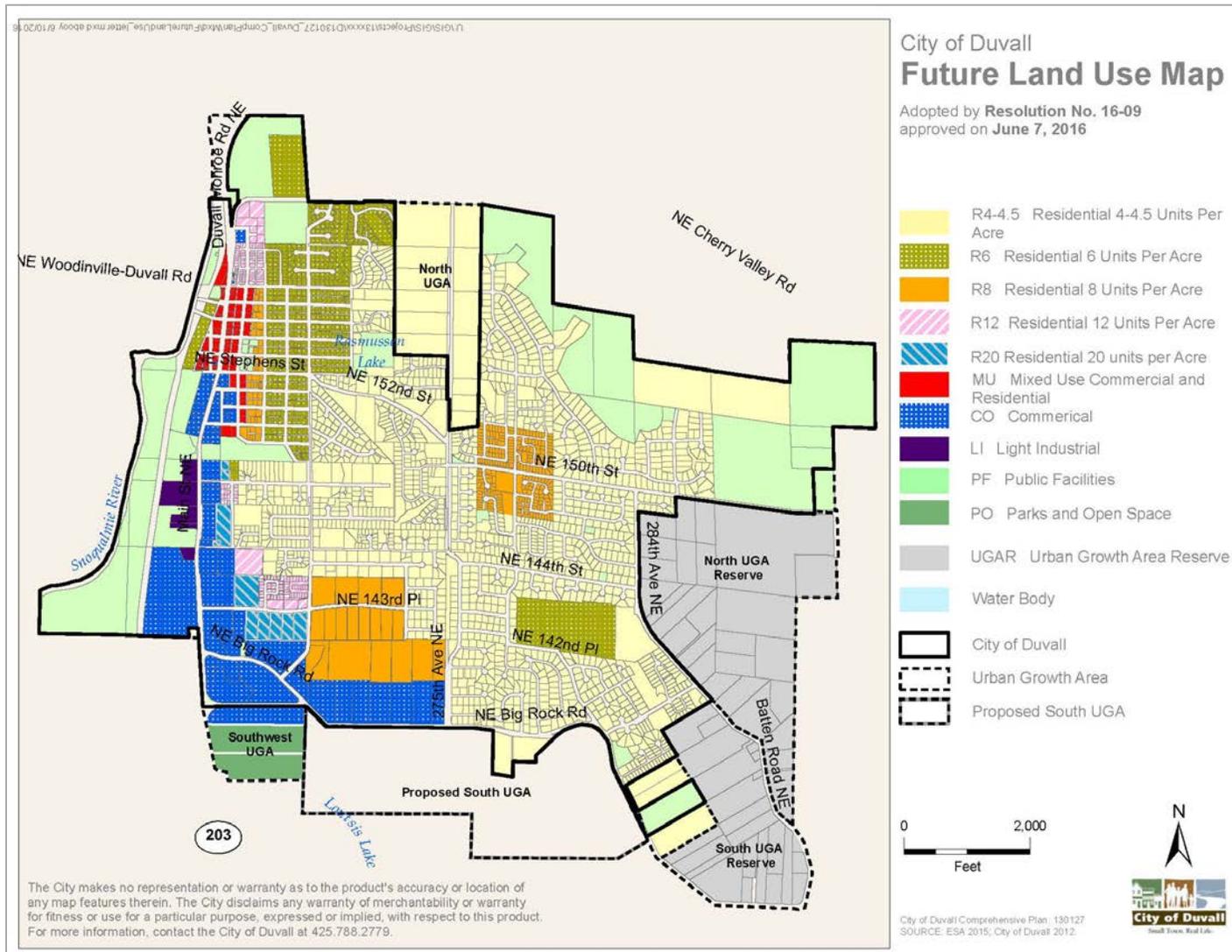
2.3.3.3 Proposed South Urban Growth Area (PSUGA)

During the scoping process for the 2015 Comprehensive Plan Update the City Council included an alternative that considered removing the NUGAR in exchange for a new area south of Big Rock Road. The City’s Watershed Study and environmental analysis (EIS) revealed that it was more conducive to development. The development opportunities for the area are most likely residential and commercial development. Further, evaluation of the area is needed prior to (ESA, 2015). The City will work with King County to determine if this is reasonable and feasible during a future Comprehensive Plan docket process.

Figure LU-3 represents the Future Land Use Map and shows future land use designations in Duvall and within the Urban Growth Areas (UGA) and Urban Growth Area Reserves (UGARs). This figure resulted from an extensive analysis in the Environmental Impact Statement (EIS) process.



Figure LU-3. Future Land Use Map





The DEIS and Final EIS (FEIS) included a background analysis of current conditions and consideration of several alternatives that evaluate potential land use (zoning) changes and the geographic location of UGAs and UGARs (City of Duvall, 2015; City of Duvall, 2016a). All alternatives were formulated to be consistent with the City’s vision and provide sufficient land capacity to accommodate the 20-year growth targets. Following public review of the DEIS, the City Planning Commission and City Council considered the alternatives and resolved to use the Future Land Use Map shown here for the 2035 Comprehensive Plan.

2.3.4 GROWTH TARGETS AND DEVELOPMENT CAPACITY

Household and employment growth targets are set by King County in coordination with the cities. The current targets for 2035 are 1,140 additional housing units and 840 additional jobs, as described in the Housing and Economic Development Elements. Each household in Duvall is projected to include about three people, on average. Based on this, the 2035 population of Duvall (including the UGA) could increase to 10,000 – 12,000 people.

Residential capacity relates to residential growth targets in a number of ways. First, the City is required to plan for at least the residential growth target. Second, capacity relates to the actual physical landscape factoring in the constraints of critical areas, land needs for streets and public facilities, and non-residential uses. Third, capacity is in part driven by requirements for urban levels of development (for example, a minimum density requirement of four units per acre in urban areas). Fourth, capacity is a result of the citizens' vision for the desired level of development in the City.

Duvall's residential housing capacity is based on a number of assumptions. The details of those assumptions are set out in Appendix B and summarized below.

RESIDENTIAL

As in 2008, the 2015 capacity evaluation included revised assumptions that better reflect actual development trends. The 2008 and 2015 capacity evaluations are based on the following:

- Vacant and pipeline residential properties were anticipated to develop at 90 percent of maximum development potential to account for any yield reductions associated with critical areas.
- Redevelopable residential properties were anticipated to redevelop at 45 percent of maximum development potential to account for any yield reductions because of site constraints and the associated costs of redevelopment.
- The North UGA was estimated R-4 density consistent with the land use designation.

COMMERCIAL AND MIXED USE PROPERTY

The 2008 and 2015 commercial, light industrial and mixed-use capacity evaluations are based on existing commercial floor area data, and the following:

- Pipeline commercial, light industrial, and mixed-use properties were anticipated to develop at 90 percent of maximum development potential.



- Vacant commercial, light industrial, and mixed-use properties were anticipated to develop at 75 percent of maximum development potential to account for any yield reductions associated with development costs or critical areas.
- Redevelopable commercial, light industrial, and mixed-use properties were anticipated to develop at 45 percent of maximum development potential to account for any yield reductions associated with existing structures, development costs, or critical areas.

Since 2004, the City has experienced moderate increases in both multifamily and single-family residential units (Table LU-1). In 2004, mobile homes were included in the count for multifamily units, and after this point were included as single-family units (this explains the reduction in multifamily units between 2004 and 2008). Within the City’s UGAs there are very few existing housing units, with substantial increases possible under future land use designation densities when annexation occurs (Table LU-2).

Based on existing residential counts and future housing capacity (consistent with future land use designations), there is capacity to accommodate Duvall’s 2035 growth target (Table LU-4; Appendix B). The City will periodically review actual development compared to these assumptions and adjust assumptions and capacity accordingly.

Table LU-1. 2015 Existing Residential Counts

Date	Multifamily Units	Single –family Units
June 2004	256 ^{1,2}	1,765 ¹
July 2008	186 ³	2,154 ^{2,3}
January 2015	213 ³	2,373 ^{2,3}

¹2004 numbers corrected to remove residences counted in the planning process but not completed at that time.

²Includes Mobile Homes

³Does not include UGAR area (2008 value recalculated to remove UGAR residences)

Table LU-2. Housing Units and Population Projections for Urban Growth Areas

Area	2015 Housing Units ¹	2035 Housing Units	2035 Population ¹
North UGA	9	139	420
Southeast UGA	1	78	236
Southwest UGA	1	-1	0
UGAR (North and South)	47	559	1688
Total	58	777	2,350

¹Table was created with the assumption that each single-family household contains 3.02 persons residing in one unit.

Source: 2015 Capacity and Transportation Analysis Study/EIS Alternatives. Duvall, WA (2016b).



Table LU-3. Total Number of Housing Units in 2035

City/UGA	Total Housing Units in 2035
City Limits	3703
North UGA	139
Southeast UGA	80
Southwest UGA	-1
Total	3,921

Table LU-4. Residential Housing Units 2035 Growth Target and Capacity

2035 Growth Target	2035 Capacity
1,140	1,335

Source: City of Duvall 2015 Capacity and Transportation Analysis Study/EIS Alternatives (2016b)

As a result of increasing population and higher-than-average housing prices, Duvall seeks to incorporate a greater diversity of housing types and densities into new residential development. Additionally, residential units will be allowed on upper floors of all commercial and industrial buildings. The community visioning process also articulated a desire for more specific design goals and guidelines to preserve the small-town community character of Duvall. A more in-depth discussion regarding housing-related issues and statistics can be found in the Housing Element.

2.3.4.1 Employment Capacity

The majority of Duvall’s residents travel to employment and shopping centers outside of the City, and only a small portion of the population is employed within the city limits. There is approximately one job for every five residents – significantly lower than the regional average of one job for every two people. The Economic Development Element contains analysis of current and projected employment.

The majority of employees in Duvall work in retail, education and finance, insurance, real estate, and services (FIRES), of which the largest percentage is employed by retail services. The King County Countywide Planning Policies include the 2031 employment target for Duvall at an additional 840 jobs. This equates to about 0.75 new jobs per household. While this number is average among other rural cities, it is far lower than nearby cities such as Redmond and Bellevue. This is due not to Duvall’s small population size, but to the diversity and number of employment opportunities that can be found in neighboring communities. Duvall’s residential growth rate currently surpasses economic growth, and will continue to do so until the employment base within the city is expanded. Additionally, as housing costs within Duvall continue to outpace higher paying jobs, a greater need for an adequate supply of affordable housing is created.



Table LU-5. Jobs to Household Targets and Jobs/Housing Ratio

	Job Target	Household Target	Jobs/Housing Ratio
Duvall	840	1,140	0.74

Source: 2012 King County Countywide Planning Policies

Table LU-6. Employment Development Capacity

Commercial Type	2015 Square Footage	2035 Square Footage
Commercial	370,021	964,790
Light Industrial	56,200	89,685
Total	426,211	1,054,475

Source: City of Duvall 2015 Capacity and Transportation Analysis Study/EIS Alternatives (2016b)

2.3.5 MIXED-USE, COMMERCIAL, AND INDUSTRIAL DEVELOPMENT

The guiding principle for economic development is to focus on making Duvall a great place to live, work, and visit. Providing amenities for citizens and the local business community is the best way to attract other businesses. Marketing and advertising campaigns may be successful in luring growing businesses from one community to another, but those efforts typically attract mobile businesses that will not remain long in Duvall. Fostering entrepreneurial activity is the best long-run strategy for business development, and Duvall should strive to attract these businesses and others that will locate in Duvall for the long term.

The City must provide opportunities for light industrial uses, service and incubator businesses, and retail activities. Due to competitive disadvantages, such as location and access, neighboring cities may be better positioned to attract office, industrial, and distribution employers. On the other hand, Duvall has strengths including its relative housing affordability, skilled labor force, and pleasant small town character.

The City-wide Visioning Plan (City of Duvall, 2003) calls for mixed-use developments in the Old Town area as well as south of Old Town featuring retail uses fronting on Main Street with pedestrian-friendly façades and screened parking. It also incorporates outdoor public plaza spaces with human-scale design elements in the design of new buildings and providing safe and attractive pedestrian access between on-site uses and to connecting properties, including to the Snoqualmie Valley Trail. South of Old Town, mixed-use developments could incorporate a variety of housing types, including free-standing residential uses, in areas not adjacent to an arterial.

Main Street south of Old Town could also be developed with an informal commercial village that could include a collection of small-scale structures with traditional design elements organized around an integrated system of pedestrian pathways and outdoor public spaces.



Opportunities for flex-space and light industrial uses should also be provided. Incubator flex-space will allow for home-grown business expansion and creation. Allowing flexible space in mixed-use zoning districts could accommodate small-scale manufacturing, indoor storage, and office uses, resulting in job creation and expansion.

When developed, the Big Rock Road Area should include an internal street system that provides access to residential properties internally and that connects to 3rd Avenue NE from NE 143rd Place to NE Big Rock Road. In addition to supporting an interconnected street system, the connectivity would welcome residents into the business areas.

All developments should use sustainable design principles; incorporate sensitive natural features as amenities; ensure there are pedestrian paths across the development and that they connect to the sidewalk, adjacent uses and other pedestrian and bicycle paths; minimize light pollution; and incorporate functional stormwater runoff features into landscape and site plans.

2.4 Land Use Designations

The following are used for designating land use categories in the Comprehensive Plan and also for zoning regulations.

2.4.1 MIXED-USE (MU)

The MU designation allows for a variety of pedestrian-oriented commercial uses of limited scale with residential uses allowed outright on upper floors and conditionally on ground floors in some zones. Residential density shall be limited by site plan and building design requirements. Old Town design review criteria will apply to this designation. The MU land use designation encompasses the Old Town – Mixed-Use, Riverside Village – Mixed-Use, and Uptown – 1st Avenue, designations set out in the Downtown Plan.

2.4.2 RESIDENTIAL – 4 - 4.5 UNITS PER ACRES (R4-4.5)

The R4-4.5 designation allows for single-family detached residential development of 4 to 4.5 units per net acre. Properties designated 4 units per acre were previously low-density residential and/or zoned at 3 units per acre. Properties designated at 4.5 units per acre were previously zoned at 4.5 units per acre. Single-family design review criteria will apply to this designation.

2.4.3 RESIDENTIAL – 6 UNITS PER ACRE (R-6)

The R-6 designation allows for attached or detached single-family residential development at 6 units per acre. Attached units are limited to two-unit structures. Single-family design review criteria will apply to this designation.

2.4.4 RESIDENTIAL – 8 UNITS PER ACRE (R-8)

The R-8 designation allows for attached or detached single-family residential development or cottage-style developments at 8 units per acre. Attached units are limited to two-unit structures. Single-family design review criteria will apply to this designation. The R-8 land use designation encompasses the Uptown – 2nd Avenue corridor set out in the Downtown Plan.



2.4.5 RESIDENTIAL – 12 UNITS PER ACRE (R-12)

The R-12 designation allows for attached or detached, single-family residential development; cottage-style developments; or multi-family development at 12 units per acre. Multi-family design review criteria will apply to this designation.

2.4.6 RESIDENTIAL – 20 UNITS PER ACRE (R-20)

The R-20 designation allows for attached or detached, single-family residential development; cottage-style developments; or multi-family development at 20 units per acre. Multi-family design review criteria will apply to this designation.

2.4.7 PARKS AND OPEN SPACE (PO)

The PO designation allows for public and private open, natural, and improved areas for passive and active recreation.

2.4.8 COMMERCIAL (CO)

The CO zone allows for a wide range of retail, wholesale, mixed-use, and office uses. Outside of Old Town, this land use designation includes commercial, mixed-use and mixed-use/institutional zoning with a residential density of a maximum of 12 units per acre. Residential density in the mixed-use and mixed-use/institutional districts shall be a maximum of 12 units per acre and policies applying to the R-12 land use designation shall also apply. On Main Street and arterials, pedestrian-oriented design will be required. Residential development will be permitted on upper floors in all areas, with residential density limited by site plan and building design requirements. Commercial design review criteria will apply to this designation.

2.4.9 LIGHT INDUSTRIAL (LI)

The LI zone allows for light industrial, wholesale, and outdoor retail and wholesale uses. Residential development will be permitted on upper floors, with residential density limited by site plan and building design requirements. Industrial design review criteria will apply to this designation.

2.4.10 PUBLIC FACILITIES (PF)

The PF zone includes areas designated for parks, open space, and public facilities located permanently in a specific location.

2.4.11 URBAN GROWTH AREA RESERVE (UGAR)

Annexation of the UGAR is not necessary to accommodate Duvall's growth forecasts. Annexation of this area will not occur until such time that specific plans have been prepared for the area and a financial analysis demonstrates that government service provision to the area can be funded by revenues associated with the area's development.



2.5 Design Standards

Design review has been implemented in Duvall in order to ensure that new development is consistent with community character. For single-family houses, design standards include architectural details to ensure homes reflect the City's historic character, including recessed garages, porches, trimmed windows, roof pitch and overhang, and similar features. For multi-family units, mass and scale are limited and features such as decks, window, and roof treatments are incorporated to ensure development complements the overall neighborhood context.

Similarly, policy and regulatory measures that protect significant trees and increase tree canopy are integral to retaining Duvall's rural character and protecting environmental quality. It is the community's intent to ensure that a substantial number of significant trees are retained on development sites. Single- and multi-family residential development should incorporate street trees and landscaping adjacent to public roads to provide visual appeal and functional buffers adjacent to the road and traveling public. Parking lot and perimeter landscaping in multi-family and commercial developments buffer varying use intensities, attenuate noise, and soften development impacts. Integrated with stormwater management functions, tree retention, replacement, and general landscaping can also provide important environmental functions.

It is also the community's intent to create open space and park space within residential developments, and to ensure that pedestrian paths and connections are adequate to promote non-motorized transportation and healthy communities.

2.6 References

City of Duvall. 2003. *City-Wide Visioning Plan*. March.

Available: <http://www.duvallwa.gov/DocumentCenter/View/113>. Accessed in May, 2015.

City of Duvall. 2004. *Downtown Sub-Area Plan*. Available:

<http://www.duvallwa.gov/DocumentCenter/View/112>. Accessed in May, 2015.

City of Duvall. 2006. *City of Duvall Comprehensive Plan*. December. Duvall, WA.

City of Duvall. 2015. *Draft Environmental Impact Statement*. August. Prepared by Environmental Science Associates. Seattle, WA.

City of Duvall. 2016a. *Final Environmental Impact Statement (in progress)*. November. Prepared by Environmental Science Associates. Seattle, WA.

City of Duvall. 2016b. *Memorandum titled City of Duvall 2015 Capacity and Transportation Analysis Study/EIS Alternatives*. Updated January 15, 2016.

<http://www.duvallwa.gov/DocumentCenter/Home/View/2687>

ESA. 2015. *City of Duvall Watershed Plan*. Prepared for the City of Duvall.

<http://www.duvallwa.gov/350/Watershed-Plan>



King County. 2012a. *2012 King County Countywide Planning Policies*. November. Available: http://www.kingcounty.gov/~media/property/permits/documents/GMPC/CPPsApproved/2012-0282_striker_attach_A.ashx?la=en.

King County. 2012b. *2012 King County Comprehensive Plan*. December. Available: <http://www.kingcounty.gov/depts/permitting-environmental-review/codes/growth/CompPlan/2012Adopted.aspx>.

PSRC (Puget Sound Regional Council). 2014. *Housing Units Growth Forecasts*. April. Available:

Washington State OFM (Office of Financial Management). 2012. *Washington State Growth Management Population Projections for Counties: 2010-2040, 2012 Medium Series Projections*: <http://www.ofm.wa.gov/pop/gma/projections12/projections12.asp>.



CHAPTER 3. HOUSING ELEMENT

3.1 Introduction

3.1.1 PURPOSE AND INTENT

The Housing Element has a defining role in ensuring the provision of adequate and quality housing for existing and future residents of all economic segments of the community. It must provide an inventory and analysis of existing and projected housing needs, identify sufficient land for a variety of housing types, and make adequate affordable housing provisions for existing and projected populations, per Growth Management Act (GMA) requirements (Washington State Legislature, 1995). As Duvall's population and home prices continue to rise, balancing the need for preserving the City's character while meeting other community preferences and GMA requirements becomes a greater challenge.

Duvall's existing housing stock is comprised of a variety of styles and densities. Within the Old Town area, older, small-lot, single-family homes predominate, with some small, older, multifamily buildings also present. The upper plateau, or eastern, neighborhoods contain relatively large-lot, single-family, suburban-style homes, with some higher density neighborhoods located along NE 150th Street and the NE 143rd Place and NE 145th Street corridor. As new housing is developed, design elements should harmonize with existing housing and neighborhoods to ensure that the housing enhances the overall character of the community.

The Goals and Policies provide a framework for meeting short- and long-term housing needs, community preferences, and GMA requirements. The Housing Element Analysis that follows describes Duvall's historic demographics and related housing characteristics, future trends, and strategies for providing affordable housing.

3.2 Goals and Policies

GOAL H1: Preserve, maintain, and enhance existing housing and residential neighborhoods.

Policies

- H 1.1 Implement site, building, and landscaping design standards for new development within existing neighborhoods to preserve the established neighborhood character.
- H 1.2 Manage the density and visual transition between new residential subdivisions and existing neighborhoods by encouraging compatible landscaping, building, and site designs.
- H 1.3 Ensure that new mixed-use, commercial, and industrial development adjacent to existing residential neighborhoods complements and enhances existing neighborhood character.



- H 1.4 Identify and promote programs that provide financial, labor, and technical resources to assist low income citizens in maintaining or repairing their homes.
- H 1.5 Fund improvements to streets, sidewalks, and other infrastructure to revitalize older neighborhoods within the city.
- H 1.6 Encourage infill development within existing residential neighborhoods that is compatible with surrounding structures and uses and is consistent with neighborhood character.

GOAL H2: Site and building design standards promote high-quality design and neighborhood character in new residential subdivisions and new multifamily structures.

Policies

- H2.1 Evaluate and implement subdivision and building standards in a manner that provides variety and quality design, avoids mundane repetition, and is consistent with existing character.
- H2.2 Balance usability, public safety, and access in larger residential developments where active and passive parks and open space are required, through the site plan review process.

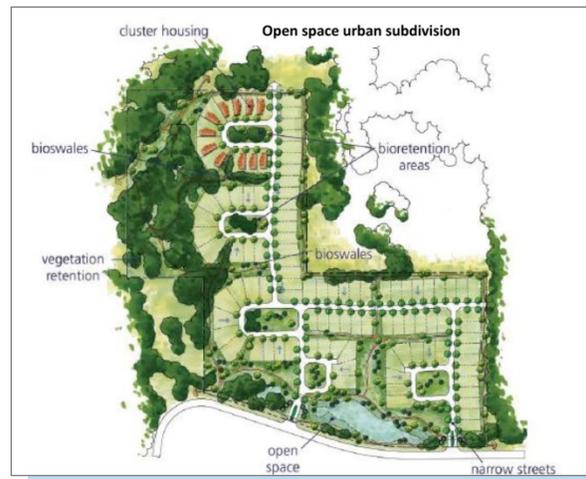


Photo H-1. Open Space Urban Subdivision
Source: PSAT, 2005

GOAL H3: Innovative and creative uses of land enable a variety of housing types that accommodate changing design technologies, demands, and preferences, while maintaining Duvall's character and accommodating the 20-year growth targets.

Policies

- H3.1 Allow for a variety of housing types and lot sizes consistent with land use designations including corner-attached housing, mixed-use, townhouses, cottage-style housing, duplexes, multiplexes and mobile homes.
- H3.2 Consider regulations that would allow cottage housing in residential areas, and revise the Duvall



Photo H-2. Corner Attached Housing
Source: City of Portland Bureau of Planning, 2008



Municipal Code to allow and create standards for a wider variety of housing styles.

- H3.3 Allow creative site planning techniques and clustering of new development that are compatible with surrounding community character, allow for a variety of housing products, and create and conserve open spaces.
- H3.4 Develop and implement, where compatible with underlying zoning and adjacent developed properties, a density bonus program and other incentives to increase open space and park areas and provide affordable housing for seniors, low income families, or other special-needs residents.
- H3.5 Implement minimum lot sizes and/or minimum units per acre to achieve allocated future growth and density targets.
- H3.6 Evaluate alternatives to gross density when calculating the allowed residential density for each zoning district. Alternatives should consider approaches that ensure compatibility in housing type and scale with existing neighboring developments.
- H3.7 Encourage the development of senior housing and assisted-living units through the application of H 3.1 and H 3.2, and other available means.
- H3.8 Allow for accessory dwelling units on single-family lots with minimal procedural requirements while addressing neighborhood compatibility through specific development, design, occupancy, and neighborhood character standards.
- H3.9 Allow for compatible multifamily infill above, and adjacent to, commercial and mixed uses on Main Street.
- H3.10 Periodically review and amend, as needed, subdivision, land use standards, and design guidelines to accommodate changing demands and trends.
- H3.11 Zone sufficient buildable land, create adequate usable development capacity and allow for an appropriate mix of housing types to accommodate Duvall's projected share of King County population growth over the next 20 years.

GOAL H4: Affordable housing needs are met for low- and moderate-income residents.

Policies

- H4.1 Develop and implement strategies, in collaboration with King County, to provide low- and moderate-income housing consistent with the countywide affordable housing needs expressed in the Countywide Planning Policies.
- H4.2 Develop partnerships with federal, state, and regional housing agencies, such as A Regional Coalition for Housing (ARCH), to provide opportunities for affordable housing in Duvall.
- H4.3 Promote the preservation and rehabilitation of existing affordable housing stock, such as multifamily housing, manufactured housing, and mobile home units.



- H4.4 Encourage the development of affordable housing by creating regulatory incentives such as density bonuses, expedited permit processing, fee waivers, and development transfers.
- H4.5 Create meaningful incentives to facilitate development of affordable housing in both residential and commercial zones, including allowing height increases, density increases, and larger floor-area ratios.
- H4.6 Identify and promote financial housing assistance for low- and moderate-income individuals and families.
- H4.7 Develop a multifamily property tax exemption program to encourage for-profit developers to include affordable units as part of new housing developments.
- H4.8 Consider requiring a percentage of affordable housing units as part of pre-annexation agreements.
- H4.9 Recruit and support the development of workforce housing, defined as housing affordable to workers in agricultural, clerical, and service occupations including, but not limited to, farmworkers, teachers, law enforcement officers, firefighters, some health care professionals, and retail salespeople.
- H4.10 Identify and promote use of surplus public owned land for housing affordable to low- and moderate-income households.
- H4.11 As part of any rezone that increases residential capacity, consider requiring a portion of units to be affordable to low- and moderate-income households.
- H4.12 Allow manufactured homes in all zones where residential development is permitted in the city.
- H4.13 Promote fair and equal access to housing for all persons and discourage any activity that results in discrimination in housing.

GOAL H5: Permanent and temporary housing is provided for residents with disabilities, health care needs, or other special needs.

Policies

- H5.1 Support the preservation and development of special-needs housing that serves both city residents and those in surrounding communities.
- H5.2 Encourage and promote partnerships with public and private agencies, as well as developers, which provide funding for special-needs housing.
- H5.3 Support the integration of special-needs housing throughout Duvall’s residential neighborhoods while taking into account proximity to relevant services.



- H5.4 Evaluate potential regulatory obstacles and ensure that codes or ordinances do not restrict development of special-needs housing.
- H5.5 Support opportunities for older adults and people with disabilities to remain in the community as their housing needs change, by encouraging universal design and home retrofitting for lifetime use.

GOAL H6: Pedestrian-scaled mixed-use development fills a unique and attractive niche in Duvall’s overall housing mix

Policies

- H6.1 Support mixed-use development close to employment and retail opportunities, with connections to parks and trails, transit services, and other amenities.
- H6.2 Promote mixed-use development to achieve housing targets consistent with demographic and housing forecasts.
- H6.3 Support design measures in mixed-use areas that promote compact, inviting, diverse, cohesive, and appropriately-scaled development in line with community character.
- H6.4 Adopt strategies to further encourage efficient use of land and infrastructure as part of mixed-use developments.
- H6.5 Allow for housing on upper floors of commercial buildings or on the same property as commercial buildings in commercial and mixed-use zones. Allow housing on ground floors in mixed-use developments in specific areas as designated by an adopted plan.
- H6.6 Ensure that housing and commercial components of mixed-use developments are integrated in a way that is advantageous to both uses.



Photo H-3. Mixed-use housing
Source: Strong Towns, 2015

3.3 Housing Element Analysis

The following section describes Duvall’s existing population demographics and household trends, Duvall’s population and housing targets based on local plans, policies and inter-jurisdictional coordination efforts, and strategies providing adequate affordable housing during the planning horizon. The information contained in this section provides a basis for the goals and policies contained in this Element.

3.3.1 OVERVIEW

Duvall is obligated to comply with population and employment targets adopted in the King County Countywide Planning Policies. The targets are for a 20-year planning horizon and are based on



countywide allocations. The relationship between demographic conditions in Duvall and the county as a whole establishes the basis for the amount of growth Duvall is required to absorb.

In 2015, Duvall's population was 7,345, which represented 0.4 percent of the County's total population (Washington State OFM, 2015). Duvall's demographic characteristics differ from the County's as a whole in the following ways:

- Larger average household size of 2.99 people;
- Lower median age, with a higher percentage of total households having members less than 18 years of age;
- Greater percentage of housing units is owner-occupied rather than rented.

Table ED-1, in the Economic Development Element, provides a detailed comparison of demographic characteristics.

3.3.2 POPULATION AND HOUSEHOLD ALLOCATIONS

Future housing needs for King County, its cities, and towns for the planning period are derived from an overall population forecast provided by the state Office of Financial Management (OFM). The forecasted population is allocated to King County jurisdictions based on their lands capacity (land available for development after accounting for critical areas, rights-of-way, and other considerations), as well as other factors such as infrastructure capacity and current and anticipated land use densities and intensities. This results in population, household, and employment targets adopted in the Countywide Planning Policies that the jurisdictions are expected to meet in 20 years. Further, the Puget Sound Regional Council (PSRC) prepares forecasts for jurisdictions' growth that provide analytical tools for evaluating growth in the context of Vision 2040, the regional growth plan.

The King County growth targets were adopted in 2012 for the period 2006 to 2031. The targets were developed through a process that starts with totals from the OFM and PSRC. Population and employment forecasts are allocated to regional geographies based closely on PSRC VISION 2040 baseline forecasts but also account for factors such as recent growth trends and anticipated annexations.

The County housing target for Duvall for the period 2006 to 2031 is 1,140 additional households. The employment target is 840 jobs.

3.3.3 PUGET SOUND REGIONAL COUNCIL FORECASTS

PSRC provides employment and population forecasts at the regional and local level for use in regional transportation and land use planning. While these forecasts are not specific targets, they are considered in King County's allocation process. The most recent forecasts were published in July 2013. In addition to baseline forecasts, PSRC provides a second set of target forecasts that reflect household and population growth (see **Table H-1**). PSRC employment forecasts are discussed in the Economic Development Element, and presented in **Table ED-2**.



Table H-1. Comparison of PSRC Household and Population Growth Target Forecasts King County and Duvall¹

	2010 ¹	2025	2030	2031	2035	2010-2035 % Growth
King County						
Households	789,238	947,143	993,467	1,002,739	1,039,796	31.7%
Household Population	1,931,277	2,196,287	2,290,110	2,308,882	2,383,978	23.4%
Group Quarters ¹	37,139	42,299	44,136	44,505	45,980	23.8%
Duvall						
Households	2,280	2,916	3,137	3,181	3,358	47.3%
Household Population	6,829	8,198	8,838	8,967	9,479	38.8%
Group Quarters ¹	39	48	52	52	55	41.0%

Source: Puget Sound Regional Council, 2013 Forecasts, Land Use Target.

¹Group Quarters: A group living arrangement, which is owned or managed by an entity or organization providing housing and/or services for the residents.

As shown, population for Duvall is forecasted at higher growth rate for the period 2010 to 2035 than for the county as a whole.

3.3.4 DEMOGRAPHICS

3.3.4.1 Population Growth

Duvall experienced steady growth in the 2000's, as illustrated in **Table H-2**. Duvall grew from 4,616 residents in 2000 to 7,325 residents in 2014 – an average annual growth rate of 3.3 percent.

¹ 2010 population base data is derived using PSRC Land Use Target (LUT) methodology and is therefore not identical to 2010 US Census demographic data. Year 2010 US Census demographic data is otherwise used throughout the Comprehensive Plan.



Table H-2. Population Growth 2000 – 2014

Year	Population April 1	Increase	Annual % Increase	% Increase Since 2000
2000	4,616	-	-	-
2001	4,911	295	6.4	5.3
2002	5,311	400	8.1	15.1
2003	5,667	356	6.7	22.8
2004	5,855	188	3.3	26.8
2005	5,958	103	1.8	29.1
2006	6,134	176	3.0	32.9
2007	6,311	177	2.9	36.7
2008	6,486	175	2.8	40.5
2009	6,613	127	2.0	43.3
2010	6,695	82	1.2	45.0
2011	6,715	20	0.3	45.5
2012	6,900	185	2.8	49.5
2013	7,120	220	3.2	54.2
2014	7,325	205	2.9	58.7

Source: WA State OFM Intercensal Estimates 2000 to 2014

3.3.4.2 Household Trends

As noted in **Table H-3**, Duvall saw a significant population increase over the last decade. Household size has also shifted, as noted below. The total number of households in Duvall increased from 1,596 to 2,224 between 2000 and 2010, a change of almost 40 percent. Average population per household rose slightly from 2.88 in 2000 to 2.99 per household in 2010.

Table H-3. Household Composition

	2000	2010	% change
Population	4,616	6,695	45
Total Households	1,596	2,224	39.3
Avg. Household Size	2.88	2.99	3.8

Source: 2000 and 2010 U.S. Census Bureau



Another indicator of a shift in household trends is household composition (marital status of heads of household; households with individuals under 18 years; households with individuals over 65 years; and so forth). Although Duvall experienced an increase in all categories of household types, there remained little change in household composition between 2000 and 2010 (U.S. Census Bureau, 2000; U.S. Census Bureau, 2010).

A final indicator of the shift in household trends is age composition. **Table H-4** shows an increase between 2000 and 2010 in 45-64 year olds and 65 years old and over. During the same period, the number of individuals aged 20-34 rose very slightly, but declined as a percentage of the overall population.

Table H-4. Age Composition

	2000 (percent of total)	2010 (percent of total)	% change
Total population	4,616	6,695	45
65 and over	147 (3%)	300 (5%)	104
45-64 years	763 (17%)	1,585 (24%)	105
35-44 years	1,153 (25%)	1,381 (21%)	20
20-34 years	971 (21%)	1,028 (15%)	5.9
5-19 years	1,123 (24%)	1,751 (26%)	56
< 5 years	459 (10%)	650 (10%)	42

Source: 2000 and 2010 U.S. Census Bureau

3.3.4.3 Inventory of Existing Housing

Duvall had 2,587 total housing units as of 2015, as indicated in **Table H-5**. The housing stock consists of 92 percent single-family units (includes manufactured housing) and 8 percent multifamily units.



Table H-5. Housing by Type

Type of Housing Unit	2000 ¹	% of total	2010 ²	% of total	2015 ³	% of total
Single-family*	1,415	88.7	2,161	93	2,374	92
Multifamily	181	11.3	154	7	213	8
Total Units	1,596	-	2,315	-	2,587	-

* Including mobile/manufactured homes

¹ 2000 U.S. Census Bureau

² OFM Forecasting Division, Postcensal Estimates of Housing Units, April 1, 2010 to April 1, 2013.

³ City of Duvall, 2016.

The majority of Duvall’s housing units (approximately 58 percent, per 2012 Census data) were built after 1989 (U.S. Census, American Community Survey 5-Year Estimates, Table DP04). This indicates that most of the city’s housing stock is relatively new and in good condition. It is not anticipated that the average housing condition will decline significantly due to the increase in development of new housing since 2010.

3.3.5 PROJECTION OF FUTURE HOUSING DEMAND

3.3.5.1 Housing Growth Targets

Duvall’s housing growth targets are assigned by King County (King County, see Population and Household Allocation section above). The King County housing growth target for the period from 2006-2031 is 1,140 new housing units.

3.3.5.2 Residential Capacity

Residential capacity is generally defined as the amount of existing housing units plus new housing a city can accommodate based on city rules (e.g., residential density requirements in the zoning code) and land available for new development. Residential capacity relates to residential growth targets in a number of ways. First, the city is required to plan for at least the residential growth target when determining residential capacity. Second, capacity relates to the actual physical landscape while a target is a minimum number of housing units allocated to Duvall by King County, irrespective of actual capacity. Third, capacity is in part driven by requirements for urban levels of development. For example, a minimum net density of 4 units per acre is required in urban areas (Washington State Legislature, 1995). Fourth, capacity is a result of the citizens' vision for what level of development they want in their city.

Evaluation of residential growth capacity is necessary to determine whether the King County housing growth target (new housing units) can be accommodated within city limits and/or the UGA. Sufficient capacity is available if residential growth capacity is equal to or greater than the King County target. If sufficient capacity is not available, the shortfall must be addressed by revising allowable density or UGA annexation to provide additional area for residential growth capacity.

Based on calculations completed by the City of Duvall in 2005 and 2006, Duvall’s total residential growth capacity was estimated to be 2,650 new housing units within city limits and UGA/UGAR areas.



The total residential growth capacity was used as the basis by King County for establishing a target of 1,140 new housing units by 2031 (King County, 2007). King County maintained this target for their 2014 Buildable Lands Report (King County GMPC, 2014) and Countywide Planning Policies (King County GMPC, 2012) for Duvall.

Throughout the course of the 2015 Comprehensive Plan update, Duvall completed an updated buildable lands and capacity analysis based on the 2016 Future Land Use Map and 2016 Zoning Map, and future land use designations for urban growth areas (see the Land Use Element for more detail) (City of Duvall, 2016). The updated buildable lands and capacity analysis is consistent with this adopted Comprehensive Plan. Results from the 2015 updated capacity analysis show sufficient residential growth capacity for the King County target as summarized in Table H-6.

Table H-6. Duvall Residential Housing Unit Target and Capacity

King County Growth Target (2006-2031)	Housing Units Built in Duvall (2006-2014)	Remaining King County Growth Target (2015-2031)	Capacity for New Housing Units (2015-2031)	Growth Target Surplus	Total Residential Capacity
1,140 ¹	352	788	1,293 ²	505	3,880 ³

¹King County developed this target in 2006 based on the assumption that Duvall had the capacity for 2,650 net new residential units within city limits and adjacent Urban Growth Areas (King County, 2007).

²This value identifies the anticipated number of new housing units that could be accommodated within city limits consistent with the City's Future Land Use Map (see Land Use Element) and Zoning Map along with the North UGA, two parcels in the UGA-Reserve South, and the Southwest UGA should they be annexed (City of Duvall, 2016).

³This value identifies the number of new housing units anticipated within areas described in Footnote 2 plus 2,587 existing housing units as of 2015 (City of Duvall, 2016).

3.3.5.3 Employment vs. Housing Growth

Duvall was traditionally a rural service center for the Snoqualmie River Valley and surrounding area. However, with a significant increase in housing and slow economic growth, including limited job growth, the city has become a bedroom community. Most residents commute to nearby cities including Seattle, Redmond, Woodinville, and Bellevue for employment. The Economic Development Element provides further information describing employment characteristics.

3.3.6 INCOME AND HOUSING COSTS

3.3.6.1 Income

According to the 2010 U.S. Census Bureau, median household income in Duvall was \$111,300, and the median family income was \$124,400, a dramatic increase over 2000 figures, when the median household income was \$37,537 and the median family income was \$38,773. The income surge has had a significant impact on housing affordability within Duvall and surrounding UGA. **Table H-7** shows the range of household incomes within the city, as compared to King County income levels. Household income refers to the income of all persons who occupy a housing unit, the related family members and all unrelated people who share the housing unit. Family income refers to the income of all related persons residing together.



Table H-7. Comparative Income Categories in 2010

Income Category	Duvall			King County		
	\$	Total Households	%	\$	Total Households	%
Median Household Income	111,300	2,157	-	53,157	711,235	-
Median Family Income	124,400	1,688	-	65,035	423,511	-
Income \$35,000 or less	-	108	6.0	-	257,932	36.3
Income \$40,000 - \$74,999	-	252	15.0	-	223,254	31.4
Income above \$75,000	-	1,328	79.0	-	230,049	32.3

Source: 2010 U.S. Census Bureau

3.3.6.2 Housing Costs

RENTAL UNITS:

As of 2012 there were 318 occupied rental units (15 percent of all occupied units) including single-family and multifamily units. Although this number is up from the 2000 Census (181 units, 13 percent), it is still far below the total number of units in comparable cities near Duvall. As the population steadily increases and market demand for housing continues to increase, the need for more rental units (both market-rate and affordable) in Duvall will increase.

SINGLE-FAMILY HOUSES:

The 2010 Census reported 1,839 owner-occupied single-family homes in Duvall (85 percent). The median home value of a single-family house was an estimated \$385,300. Values in Duvall are higher than Monroe and lower than Redmond. Duvall is becoming an expensive location for many families that traditionally could afford to live here.

3.3.6.3 Housing Affordability

Historically, Duvall offered housing that was affordable for moderate-income and low-income families. (Moderate income in King County is defined as 50 percent to 80 percent of the County median income; low-income is defined as up to 50 percent of County median income). Prices for single-family homes, which were lower than homes in most Eastside communities, have become more expensive, making them out of reach for many first-time home buyers.

Seven percent of the City's housing stock is comprised of mobile/manufactured homes and eight percent is multifamily housing. These units provide housing for many low- and moderate-income households, and are essential to maintaining an inventory of affordable housing in the community. The challenge facing Duvall is to continue providing opportunities for housing for families in the full range of income groups. The City's primary strategy for ensuring the provision of affordable housing is



to accommodate a range of new housing types and densities in its Comprehensive Plan Future Land Use Map.

Housing affordability, regardless of income, relates to the balance between a family’s income level and their desire for housing and other amenities. Housing costs are considered “affordable” when 30 percent or less of a household’s income is spent on housing. **Table H-8** shows the various income levels in Duvall compared to the percentage of median.

Table H-8. Household Income

Household Income	Percent of Median*
Less than \$10,000	1.9
\$10,000 -14,999	0
\$15,000 – 24,999	4.6
\$25,000 – 34,999	3.6
\$35,000 – 49,999	3.8
\$50,000 – 74,999	13.4
\$75,000 – 99,999	13.5
\$100,000 – 149,999	34.4
150,000 – 199,999	13.4
\$200,000 or more	11.5

* Median household income is \$111,356

Source: U.S. Census Bureau, 2008-2012 American Community Survey, Selected Economic Characteristics.

Table H-9. Monthly Housing Costs

Owner Costs*	Number of Units (%)
Less than 20 percent	484 (29.5)
20.0 – 24.9 percent	285 (17.4)
25.0 – 29.9 percent	318 (11.6)
30.0 – 34.9 percent	185 (11.3)
35 percent or more	366 (22.3)
Less than 15 percent	52 (16.4)



Table H-9 Continued

Rental Costs*	Number of Units (%)
15.0 – 19.9 percent	59 (18.6)
20.0 – 24.9 percent	68 (21.4)
25.0 – 29.0 percent	41 (12.9)
30.0 – 34.9 percent	11 (3.5)
35 percent or more	87 (27.4)

* Percent of Median Income

Source: U.S. Census Bureau, 2008-2012 American Community Survey, Selected Housing Characteristics.

3.3.6.4 Housing Affordability Index

The Housing Affordability Index (HAI) provides a way to track over time whether home ownership is becoming more or less affordable for the typical household. The index measures median-household income relative to the income needed to purchase a median-priced home. The HAI has a value of 100 when the median-income household has sufficient income to purchase a home, with a higher HAI indicating increased affordability.

The HAI is derived by dividing the affordable home price for a median-income household by the median sale price of homes in the area and multiplying the figure by 100. The HAI assumes borrowers make a 20 percent down payment, with a 30-year fixed mortgage, and that the maximum mortgage payment is 25 percent of the household’s gross monthly income. The following table compares Duvall’s HAI over the past real estate cycle.

Table H-10. Duvall Housing Affordability Index

	June 2007	Sept 2010	March 2014
Affordable Home Price			
Estimated Annual Income*	\$111,531	\$111,356	\$119,841
30 Fixed Mortgage Rate	6.15%	4.46%	4.30%
Affordable Monthly Principal & Int. (@25%)	\$2,324	\$2,320	\$2,497
Affordable Mortgage	\$381,396	\$460,017	\$504,512
Affordable Home Price (80% Mortgage)	\$476,745	\$575,021	\$630,640
Median Sale Price	\$474,000	\$361,000	\$417,000
Housing Affordability Index*	100.6	159.3	151.2

* Extrapolated from 2010 ACS figure based on OFM King County estimates.



As shown, the affordable sales price for a home at the peak of the market in 2007 was \$476,745, approximately equal to the median sale price of \$474,000, and the HAI was 101.6. In 2014, the HAI was up to 151.2, indicating increased affordability. Housing was most affordable in 2010 when home prices and mortgage rates were at their lowest levels.

On average, homes in Duvall are very affordable relative to Duvall’s median household income. The HAI indicates that home-ownership has become more affordable since 2007, but slightly less affordable since 2010. While the HAI indicates consistent affordability for the typical Duvall household, affordability is low compared to the average (lower) King County income and there are undoubtedly instances where prospective first time homebuyers are unable to find homes that they can afford to purchase.

3.3.6.5 Countywide Affordability Goals

The King County Countywide Planning Policies provide a four step process that cities, in collaboration with the City, should follow for meeting countywide affordable housing goals. The process includes: 1) conducting an inventory and analysis of housing needs and conditions, 2) implementing policies and strategies to address unmet needs, 3) measuring results, and 4) responding to these measurements with reassessment and adjustment of strategies. The countywide need for housing by percentage of area median income (AMI) is reflected in **Table H-11**.

Table H-11. Countywide Affordable Housing Needs 2006-2031

	King County Growth Target (2006-2031)	Very-Low Income Need (Up to 30% of median income)	Low Income Need (30-50% of median income) ¹	Moderate Income Need (50-80% of median income) ¹
Percentage of Total Units	1,140	12% (137)	12% (137)	16% (182)

Source: King County GPMC, 2014

Duvall will continue to measure household income, housing cost, and housing affordability, and will continue to adjust housing policies and provisions to ensure that adequate low and middle income housing is provided during future Comprehensive Aplan updates.

3.3.6.6 Strategies to Encourage Affordable Housing

As previously noted, 7% of the housing stock within the city is mobile homes and 8% are multifamily units. The need for these types of units will continue to rise in the city because of the increase in lower- to middle-wage jobs, an aging population that depends on more affordable housing, and people with special housing needs. In order to meet current and future affordable housing needs, the Housing Element encourages the following measures:

1. Development of Innovative Housing Techniques – Allow new housing techniques and styles, such as cottages, compact single-family homes on smaller lots, and duplexes and triplexes designed to look like single-family homes.



2. Accessory Dwelling Units (ADUs) – Given proper guidelines, these accessory units can provide affordable housing with minimum disruption of neighborhoods and can also allow families to stay in their homes despite changing economic circumstances such as divorce or loss of job. Many ADUs are affordable to low- and moderate-income families. ADUs are either conditionally permitted or allowed outright in all residential zones.



Photo H-4. Example of a green street
Source: Puget Sound Action Team (PSAT), 2005

3. Manufactured Homes – These units are typically much less expensive than a traditional single-family home. The City allows these types of homes in all single-family neighborhoods.

4. Flexible Subdivision Standards/New Street Design Standards – The City may wish to allow more flexibility in the development of land with regard to subdivision standards.

5. Infill Development – Infill development allows parcels of land that are vacant but are within areas that are mostly built out to be developed. Although such sites are often smaller and may be more difficult to develop than raw land, there may be cost savings due to the existence of utilities that already serve the site. Opportunities may exist for this type of development in Old Town.

6. Mixed-use Development – Mixed-use development allows residential development in the same building as commercial development. Usually the residential development is above or behind the commercial development. Mixed-use development may provide affordable urban density housing with good access to services and employment. The advantage for the commercial development is a built-in customer base. Duvall allows residential development on the upper floors of commercial and industrial structures. The Comprehensive Plan Future Land Use Map designates areas in the SR-203 corridor for commercial and residential mix of uses. There may also be areas that have potential for commercial development along Main Street, with residential uses behind other structures or above commercial uses.

7. Development Incentives – Incentives such as density bonuses, subsidies, and streamlining the permitting process can help reduce development costs and encourage developers to include affordable units within their housing projects. Reduction or waiving of impact fees could also be considered with the understanding that impact fee funds not collected must be paid back to the City from other funding sources.

8. Participation in a Regional Housing Agency – The City should consider joining a regional housing agency such as ARCH, a King County consortium that supports and encourages the preservation and expansion of affordable and special-needs housing. As a member, Duvall could actively participate in regional solutions that seek opportunities to provide for additional affordable-housing options.



3.3.7 HOUSING FOR SPECIAL NEEDS

Federal and state law mandates cities to provide residential opportunities for individuals with special needs, defined as those people requiring some assistance in their day-to-day living, such as the physically or mentally disabled, victims of domestic violence, substance abusers, people living with AIDS, youth at risk, and seniors. Family living situations, institutional settings, social service programs, and assisted housing all serve those with special needs. The Federal Fair Housing Act includes all individuals with special needs and states that no individual shall be denied the opportunity for safe and independent living (U.S. HUD, 2015). In addition, the Washington Housing Policy Act states that a “decent home in a healthy, safe environment for every resident of the State” shall be provided (Washington State Legislature, 2005). The Housing Element supports goals and policies that provide equal and fair housing access for all residents of Duvall, including special-needs residents.

In order to provide housing opportunities for residents of special needs, the City should collaborate with other agencies to provide opportunities and services that would not be otherwise available to special-needs residents. In addition, the City should continue to support codes and ordinances which allow for a variety of housing opportunities, as well as encourage the increase of social support services within Duvall and the surrounding area. Adding flexibility to Duvall’s land use code to allow group homes and home-based care is also a significant opportunity for meeting the demand for special-needs housing.

3.4 References

- City of Portland, Bureau of Planning. 2008. *The Infill Design Toolkit: Medium Density-Residential Development. A Guide to Integrating Infill Development into Portland’s Neighborhoods*. December. Available at: <http://www.portlandoregon.gov/bps/49254>
- City of Duvall. 2016. Memorandum titled *City of Duvall 2015 Capacity and Transportation Analysis Study/EIS Alternatives*. Updated January 15, 2016. <http://www.duvallwa.gov/DocumentCenter/Home/View/2687>
- King County Office of Regional Policy and Planning. 1999. *1999 King County Annual Growth Report: Land Development and Demographic Information for King County, its Cities and Unincorporated Areas*. Seattle, WA.
- King County Office of Regional Policy and Planning. 2001. *The 2001 King County Annual Growth Report: Land Development and Demographic Information for King County, its Cities and Unincorporated Area*. Seattle, WA.
- King County Budget Office. 2002. *King County Buildable Lands Evaluation Report 2002: Recent Growth and Land Capacity in King County and its Cities*. Seattle, WA.
- King County Budget Office. 2007. *King County Buildable Lands Report*. September 2007. Seattle, WA.
- King County Office of Management and Budget. 2003. *The 2003 King County Annual Growth Report: 20 Years of Growth Reporting Land Development and Demographic Information for King County, its Cities and Unincorporated Areas*. Seattle, WA.



- King County Budget Office. 2004. *King County Benchmarks, Affordable Housing 2003*. Available: http://your.kingcounty.gov/budget/benchmrk/bench03/aff_housing.pdf.
- King County Growth Targets Committee, Growth Management Planning Council. 2009. *King County Growth Targets, 2006-2031*. August. Adjusted June, 2011.
- King County GMPC (Growth Management Planning Council). 2012. *2012 King County Countywide Planning Policies*. Seattle, WA. <http://www.kingcounty.gov/property/permits/codes/growth/GMPC/CPs.aspx>
- King County GMPC (Growth Management Planning Council). 2014. *The King County Buildable Lands Report 2014*. Seattle, WA.
- King County Office of Performance, Strategy and Budget. 2014. *The King County Buildable Lands Report 2014*. Seattle, WA.
- Puget Sound Action Team (PSAT). 2005. *Low Impact Development Technical Guidance Manual for Puget Sound*. Olympia, WA.
- Sanphillippo, Johnny. "Middle of the Road Kentucky." *Strong Towns*, 04 Sept. 2015.
- U.S. Census Bureau. 2000. *Census 2000 General Demographic Characteristics (Population, Age, Sex, Race, Households, and Housing Information) from American Fact Finder*. Available: http://factfinder.census.gov/faces/nav/jsf/pages/community_facts.xhtml.
- U.S. Census Bureau. 2010. *Census 2010 General Demographic Characteristics (Population, Age, Sex, Race, Households, and Housing Information) from American Fact Finder*. Available: http://factfinder.census.gov/faces/nav/jsf/pages/community_facts.xhtml.
- U.S. Census. 2012. *2008-2012 American Community Survey 5 Year Estimates*.
- U.S. HUD (Housing and Urban Development). 2015. *Fair housing laws and presidential executive orders*. Available: http://portal.hud.gov/hudportal/HUD?src=/program_offices/fair_housing_equal_opp/FHLaws
- Washington State OFM (Office of Financial Management). 2012. *Washington State Growth Management Population Projections for Counties: 2010-2040, 2012 Medium Series Projections*: <http://www.ofm.wa.gov/pop/gma/projections12/projections12.asp>.
- Washington State OFM (Office of Financial Management). 2015. *April 1 Population of Cities, Towns and Counties Used for Allocation of Selected State Revenues*. Available: www.ofm.wa.gov/pop/april1/ofm_april1_population_final.pdf.
- Washington State Legislature. 1995. *Mandatory elements of the Comprehensive Plan*. May. Available: <http://apps.leg.wa.gov/RCW/default.aspx?cite=36.70A.070>.
- Washington State Legislature. 2005. *Objectives of the Washington Housing Policy Act*. Available: <http://apps.leg.wa.gov/rcw/default.aspx?cite=43.185B.009>.



CHAPTER 4. PARKS AND RECREATION ELEMENT

4.1 Introduction

4.1.1 PURPOSE AND INTENT

The Parks and Recreation Element directs the next 20 years of parks, trails, and open space acquisition and development. The element reflects public input received from a community-wide survey, community comments, and a level-of-service analysis for the park and recreation needs of Duvall residents. This element builds upon the Park, Trails and Open Space (PTOS) Plan (City of Duvall, 2008) and presents updated information.

The following Goals and Policies reflect the community’s belief that parks, trails, and open spaces are places to improve public health, protect environmental and cultural resources, and encourage community gathering and learning -- fundamental components of what makes Duvall a great place to live, work, and visit. The Goals and Policies provide long-term guidance for maintaining, enhancing, and providing additional high-quality park and recreation opportunities to improve the quality of life for Duvall’s residents and visitors. The Park and Recreation Element Analysis following the Goals and Policies describes the applicable regulatory framework, inventories Duvall’s existing park and open space resources, analyzes park and open space demands and needs, and provides a funding framework for parks maintenance and acquisition.

4.2 Goals and Policies

GOAL PR1: Recreation opportunities are available for all ages and interest groups.

Policies

- PR 1.1 Encourage the development and extension of active and passive recreation opportunities.
- PR 1.2 Pursue additional land acquisition to expand existing recreation facilities, particularly those that are heavily used and highly regarded.
- PR 1.3 Provide adequate support facilities, including restrooms, parking, paths, lighting, and security measures for safe, accessible, and comfortable use of the system.
- PR 1.4 Support the development of shared- and multi-use facilities that host athletic events, performing



Photo PR-1. Elementary school students at a nature trail dedication ceremony

Source: Project Learning Tree, 2012



arts, community meetings, and other community events on a year-round basis.

- PR 1.5 Encourage the development of recreation programs and facilities for all demographic sectors including citizens with physical and developmental disabilities.
- PR 1.6 Encourage creation of public spaces or commons associated with the development of public education and institutional uses.
- PR 1.7 Review and update the McCormick Park Plan to determine long-range site potential. The plan should be based on an updated inventory of the park and determine the extent of potential active and passive park use.
- PR 1.8 Require all new residential subdivisions to provide open space, including appropriately-scaled active- and passive-recreation features to serve the project-based need.
- PR 1.9 Identify and acquire additional undeveloped lands for parks, trails and open space within the city and UGA.

GOAL PR2: Park, recreation, trail, and open space resources are effectively and efficiently preserved, maintained, developed, and managed to meet the needs of existing and future users.

Policies

- PR 2.1 Supplement paid parks, trail, and open space maintenance with volunteer efforts.
- PR 2.2 Encourage sustainable, low-impact, high-quality design and development techniques.
- PR 2.3 Consider and address ongoing maintenance costs prior to the development of new park facilities or expansion of existing facilities.
- PR 2.4 Encourage shared development and maintenance costs for joint-use facilities.
- PR 2.5 Develop and implement an “Adopt-a-Park” program to provide opportunities for community members to engage in park maintenance and improvements.
- PR 2.6 Design and develop recreation opportunities on vacant and underutilized park properties the City currently owns.
- PR 2.7 Support development of park, trail, and open space projects identified in the Capital Improvement Plan (CIP).
- PR 2.8 Pursue the acquisition and development of an urban park in the Old Town area.
- PR 2.9 Complete the acquisition of McCormick Park property adjacent to Duvall Village and the construction of trail network from Duvall Village to the Snoqualmie Valley Trail.
- PR 2.10 Consider the creation of a Metropolitan Park District that evaluates the long term financial needs and sustainability of existing and future parks, trails, and open space.



- PR 2.11 Create Master Park Plans for new and existing parks that identify a vision, long term needs, cost, maintenance, and replacement.

GOAL PR3: Significant natural resource areas and features are protected and preserved for the enjoyment of current and future generations.

Policies

- PR 3.1 Preserve and protect sensitive areas, including wetlands, open space, woodlands, streams and their corridors, steep slopes, shorelines, and other unique natural features.
- PR 3.2 Ensure that park development adjacent to the Snoqualmie River and areastreams protects and/or enhances critical salmon habitat.
- PR 3.3 Ensure that activities in parks within the shoreline jurisdiction of Snoqualmie River and area streams are in compliance with the adopted shoreline and sensitive areas regulations.
- PR 3.4 Evaluate stream erosion at McCormick Park and consider the implementation of an erosion protection strategy.
- PR 3.5 Encourage the implementation of appropriate natural resource projects within the park, trail and open space system such as those detailed in Habitat Assessment Existing Conditions Report (Herrera, 2002), Fish Habitat Restoration Plans (Herrera, 2002), and future studies.
- PR 3.6 Pursue the acquisition of additional undeveloped open space located adjacent to the Snoqualmie River. Encourage the preservation and restoration of native vegetation in natural areas and open spaces throughout the city, and control the spread of noxious weeds.
- PR 3.7 Foster and promote environmental awareness and stewardship within the city.

GOAL PR4: Significant cultural and historical resources are preserved and enhanced to enrich Duvall's heritage and provide learning opportunities.

Policies

- PR 4.1 Work with historical and cultural resource groups to incorporate community activities into the park and recreation system.
- PR 4.2 Incorporate historic and cultural lands, sites, artifacts, and facilities into the park system.
- PR 4.3 Support the inclusion of public art in parks throughout the city.
- PR 4.4 Support the development of a heritage park on the Burhen property south of Big Rock Road, with a vision for a museum, open space, trails, and preservation of the historic farmstead site.



- PR 4.5 Integrate the future use of Big Rock Park into the Burhen property heritage park, and create a trail connection between the parks.

GOAL PR5: Environmental features, public facilities, schools, neighborhoods, and business districts are interconnected via a comprehensive system of multi-purpose trails.

Policies

- PR 5.1 Connect residential neighborhoods to each other as well as to nearby schools, parks, regional trails, and community facilities via a trail network.
- PR 5.2 Link new trails to existing and proposed trails where appropriate using natural areas (e.g., stream buffers, wetland buffers) to create these linkages wherever possible.
- PR 5.3 Coordinate park planning with infrastructure and transportation planning for new trails, bike routes, walkways, and safe street crossings.
- PR 5.4 Integrate Duvall parks, facilities, trails and open spaces with other local, state, federal and private park and recreational lands and facilities to best serve recreation users.

GOAL PR6: Parks and recreation use is encouraged and promotes public health and quality of life.

Policies

- PR 6.1 Implement a public outreach and way-finding program to help citizens better locate and use City parks, trails, and open space.
- PR 6.2 Encourage physical activity by all City residents, including walking to parks, schools and community facilities.
- PR 6.3 Coordinate planning for park, trail, and open space programs and facilities with Healthy Communities policies found in the Transportation Element.
- PR 6.4 Provide educational materials for the cultural, historical and natural resource elements in the park, trails and open space system.
- PR 6.5 Develop better access to information about parks through online materials and an easily recognizable signage system.
- PR 6.6 Develop a system of informational and display kiosks.



Photo PR-2. Big Rock Ball Fields

Source: City of Duvall



- PR 6.7 Develop park, trail, and open space programs that encourage and cultivate cultural and recreational opportunities for area tourists.

GOAL PR7: Goals and policies contained in the Comprehensive Plan and PTOS Plan are implemented using balanced and consistent funding sources.

Policies

- PR 7.1 Use the PTOS Plan to guide acquisition of park land, recreational facilities, and open space.
- PR 7.2 Acquire and develop parks to meet the City’s park, recreation, trails and open space LOS standards.
- PR 7.3 Periodically update the PTOS Plan to reflect changes in demographics, recreation trends, and local conditions.
- PR 7.4 Consider funding parks and recreation facilities through a variety of funding sources described in this Element, including grants, tax levies, and a GMA-based park impact fee.
- PR 7.5 Update the CIP on a regular (annual or bi-annual) basis in order to identify and budget for park, trail, and open space projects.
- PR 7.6 Create a dedicated fund or restrict existing funds to pay for the existing community’s proportionate share of future parks, trail, and open space system improvements.



Photo PR-3. Informational sign at McCormick Park
Source: Willhite Web

GOAL PR8: Coordination between public, private, and non-profit entities maximizes parks and recreation opportunities and the public’s investment in these community resources.

Policies

- PR 8.1 Cooperate with federal, State, County, and City agencies and with private landowners in the region to expand and implement trail projects of local and regional significance.
- PR 8.2 Work with Puget Sound Energy (PSE) to acquire appropriate rights to existing utility corridors for trail linkages to be developed for both wildlife and public use.
- PR 8.3 Work with King and Snohomish Counties to encourage the continuation of the Snoqualmie Valley Trail to the north of Duvall.
- PR 8.4 Work with King County Department of Parks and Recreation to support local connections to the Tolt Pipeline Trail.



- PR 8.5 Support collaborative use agreements between the school district, recreational organizations, park users, and the City of Duvall.
- PR 8.6 Support private and non-profit recreation providers and work with private recreation providers to explore the feasibility of private facilities in the long-term.
- PR 8.7 Cooperate with other public and private agencies and landowners to acquire and preserve additional waterfront access for recreational activities.
- PR 8.8 Improve, enhance, maintain, and develop parks, trails, trailheads, access, and additional facilities through cooperation with other agencies.

4.3 Parks and Recreation Element Analysis

This section describes the regulatory setting, existing inventory, demands and needs, and funding sources for Duvall's parks, trails, open spaces, historic, and cultural areas. Additional detail about Duvall's parks and recreation resources is provided in the PTOS Plan (City of Duvall, 2008).

4.3.1 REGULATORY SETTING

4.3.1.1 Washington's Growth Management Act (GMA)

According to the GMA (RCW 36.70A.070(8)), local jurisdictions are required to include a parks and recreation element in their comprehensive plan. As stated in the statute, the element must implement and be consistent with the parks and recreation facilities identified in the Capital Facilities Element. The element must also include three components:

- Estimates of park and recreation demand for at least a 10-year period;
- An evaluation of facilities and service needs;
- An evaluation of intergovernmental coordination opportunities to provide regional approaches for meeting park and recreational demand.

The PTOS Plan is intended to meet these directives. It estimates park, trails, and open space demand through 2028, identifies park facility service levels and needs to meet anticipated demand, and identifies opportunities for intergovernmental coordination. The PTOS Plan was adopted as part of the 2008 Comprehensive Plan update and serves as the foundation for the analysis and policy guidance found in this Element. The City intends to update the PTOS Plan regularly to address evolving community needs and resources.

4.3.1.2 Washington Recreation and Conservation Office

A significant source of grant funding for parks and recreation in the State of Washington is the Recreation and Conservation Office (RCO). RCO oversees parks and recreation planning throughout the state. Through its grant program and ongoing planning activities, RCO seeks to enhance and maintain statewide opportunities for recreation, protect the best of the state's wild lands, and contribute to the State's efforts to recover threatened and endangered salmon species.



The RCO program provides leadership, funding, and technical assistance to help communities plan for, and implement, parks and recreation projects. These projects may include trails, playfields, and other park facilities. In addition, the program helps to protect and restore the State's important habitats and biological heritage through open space protection and conservation.

4.3.1.3 Countywide Planning Policies

The King County Countywide Planning Policies require the identification and protection of local open space in comprehensive plans. The Community Character and Open Space chapter of the King County Comprehensive Plan includes a requirement that all jurisdictions shall identify, establish, and protect recreational, open space and environmentally sensitive areas (King County, 2012). This requirement encourages policies that establish programs that contribute to the protection and stewardship of open space lands and corridors.

4.3.2 PARK PLANNING PROCESS

Building on past parks and recreation planning efforts by the City, the 2008 PTOS Plan provides a long-term vision for Duvall's park, trail and open space resources. It analyzed the current system of parks, trails, and open space; identified park and recreation needs in the community; and recommended a future system of parks, trails, and open space for 20 years. It is intended to be updated regularly to address evolving community needs and resources.

As part of the Park Element update the city re-committed to a long standing agreement between the City of Duvall and the property owner of the Thayer Barn site. The City has reincorporated the 1995 Amended Pre-Annexation Agreement commitments into the Parks and Recreation Element. The City agreed to purchase approximately 7 acres of open space to complete a portion of McCormick Park west of the Snoqualmie Valley Trail and to provide park impact fee credits for the construction of a shared parking lot with trail head parking and landscaping, and trail construction to the Snoqualmie Valley Trail.

4.3.3 PARKS INVENTORY

The City of Duvall owns and maintains several parks and open space areas, including pocket parks, neighborhood parks, community parks, trails, open space, and special use areas such as historic or cultural facilities. These areas provide a variety of recreational opportunities for Duvall citizens and are defined in detail in the PTOS Plan (City of Duvall, 2008). Table PR-1 presents a summary of existing park and open space resources in Duvall. Figure PR-1 depicts the location of parks and open space areas owned by both the City of Duvall and other entities. Figure PR-2 shows the location of trails and sidewalks in Duvall.

The PTOS Plan identifies several types of park and recreation facilities in Duvall. They are described as follows:

4.3.3.1 Pocket Parks

Pocket parks are typically small areas used to provide specific recreation opportunities (e.g., a playground, benches, etc.) for a local population with limited or no convenient access to larger parks (neighborhood, community, etc.). Pocket parks are generally accessed by foot (or other non-



motorized means of travel) and do not have designated parking. Pocket parks are generally up to one acre in size.

4.3.3.2 Neighborhood Parks

Neighborhood parks are generally considered the basic unit of a park system. These parks provide a variety of recreation opportunities for people living within a ¼ - ½ mile radius of the park that is uninterrupted by a barrier, such as a major road or topographic feature. Neighborhood parks may include landscaped and/or open space areas, but tend to provide developed recreation facilities (e.g. single ball field, single court, in-park trails, picnic areas, etc.). Neighborhood parks include designated parking. These parks tend to be 1 to 10 acres in size.

4.3.3.3 Community Parks

Community parks serve a broader purpose and population base compared to neighborhood parks. These parks may meet both developed (i.e., constructed) recreation, as well as open space needs. Community parks are meant to provide recreation opportunities to people living within a 1 ½ mile radius and typically have designated parking for users, although non-motorized access and connections are encouraged. The level of development in a community park may range from light use (e.g., single-use soft surface trails, picnic sites, and non-delineated play fields, etc.) to high (e.g., multiple delineated ball fields, multiple sports courts, paved trails, group picnic shelters, etc.). Community parks may include special recreation facility features, such as a boat launch, ice rink, or swimming pool. These parks tend to be 10 to 50 acres in size, but can be smaller if the park supplies a community recreation need.

4.3.3.4 Trails

In general, a trail is a land or water corridor that provides recreational, aesthetic, transportation, or educational opportunities to motorized or non-motorized users of all ages and abilities. Types of trails include local trails and regional trails. Local trails are in-park trails (single or multi-purpose hard surface trails) that emphasize safe travel between parks or other community features. Regional trails are single or multi-purpose hard or soft surface trails that cross community boundaries and connect significant regional destinations.

4.3.3.5 Open Space

Open space areas tend to be set aside for the preservation of natural/significant resources, remnant landscapes, or as visual buffers. These areas may also serve important ecological functions that would be lost in more highly developed park environments. While recreation use is not necessarily precluded in open space areas, appropriate uses tend to be limited to those activities that do not require highly developed facilities (e.g. bird watching, nature appreciation, walking/hiking, etc.). Open space lands can be managed for their natural or visual resource values.

4.3.3.6 Special Use

Special uses are those facilities or areas with historic or cultural significance to the community. They can serve the local population or provide a regional draw. A prime example found in Duvall is the Dougherty Farmstead.



4.3.4 INVENTORY OF PARKS, TRAILS, AND OPEN SPACE

An inventory of existing City-owned and non-City operated parks, trails and open spaces is in Chapter 5 of the PTOS Plan (City of Duvall, 2008 and as updated). Figure PR-1 illustrates the City of Duvall Park System and Figure PR-2 illustrates Existing Trails and Sidewalks.

4.3.5 INVENTORY OF EXISTING CITY-OWNED PARKS AND OPEN SPACE

In addition to the City-owned properties listed in Table PR-1, other public recreation providers and the Riverview School District No. 407 operate parks, recreation facilities, and trails in and around Duvall. These facilities are listed below in Table PR-2. In combination, these facilities provide residents with a variety of park, recreation, and open space opportunities.



Figure PR-1. City of Duvall Park System

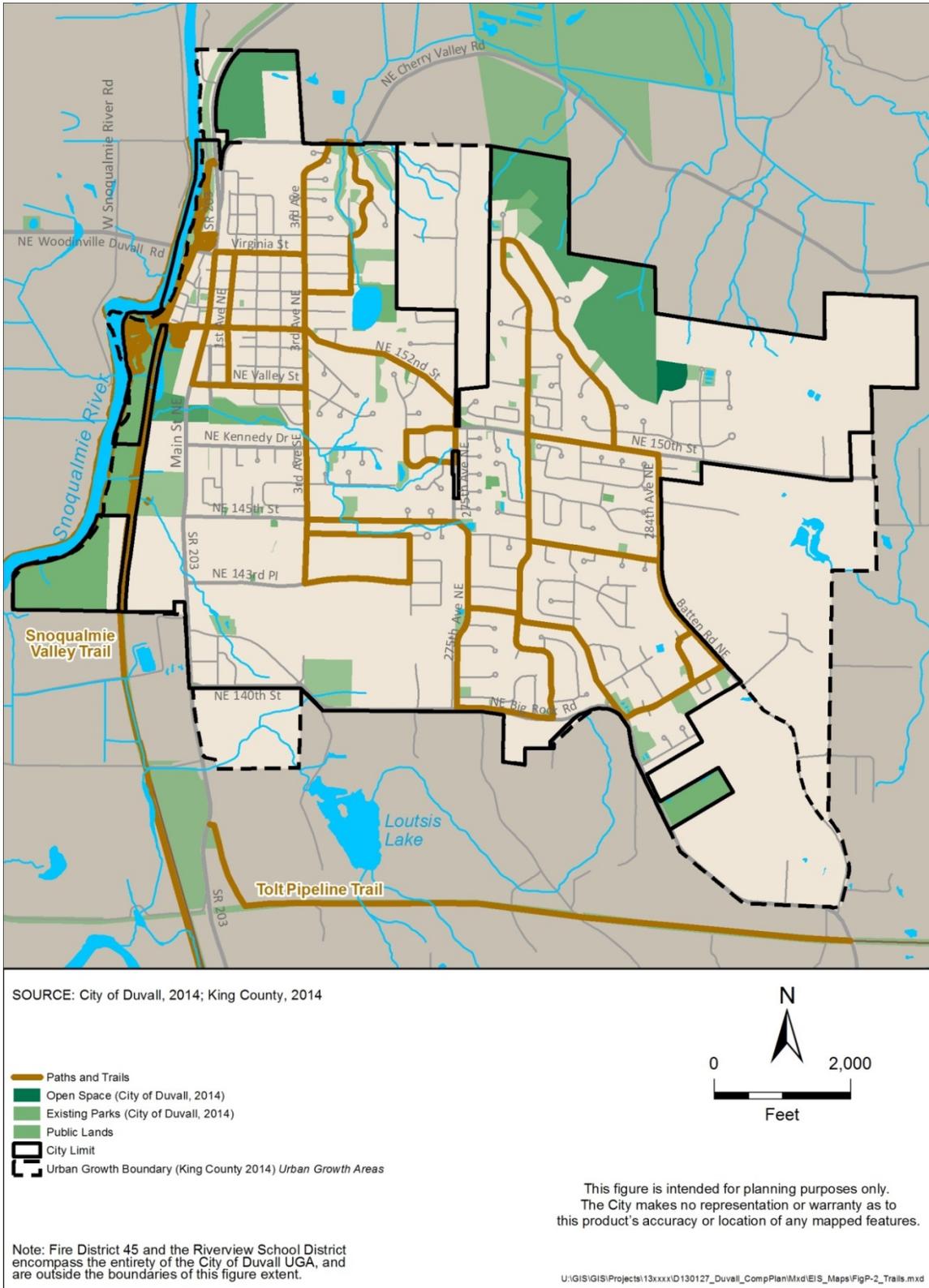
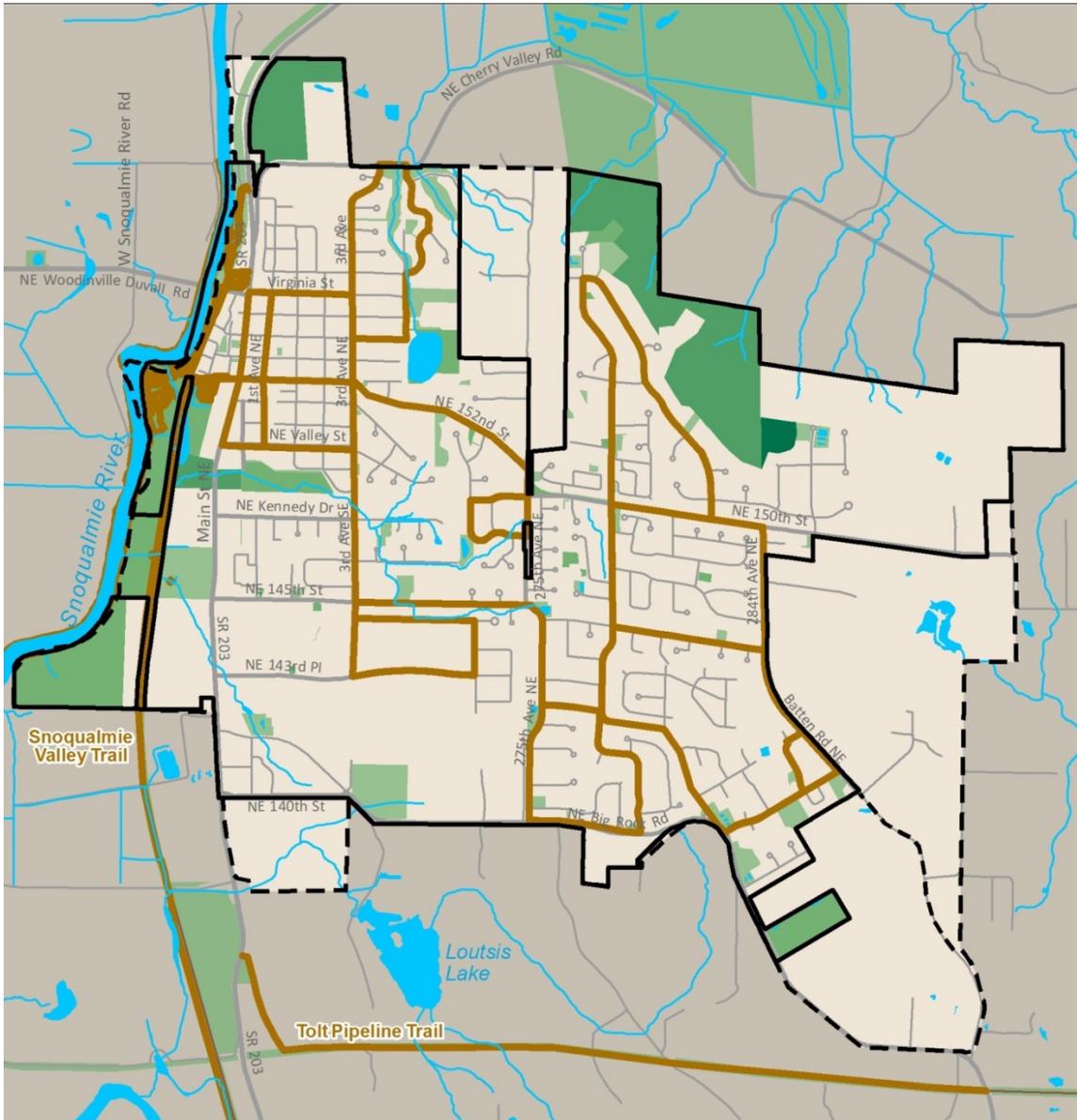
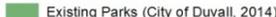


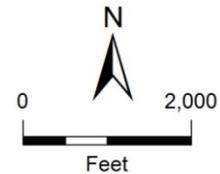


Figure PR-2. Existing Trails and Sidewalks



SOURCE: City of Duwall, 2014; King County, 2014

-  Paths and Trails
-  Open Space (City of Duwall, 2014)
-  Existing Parks (City of Duwall, 2014)
-  Public Lands
-  City Limit
-  Urban Growth Boundary (King County 2014) *Urban Growth Areas*



This figure is intended for planning purposes only.
The City makes no representation or warranty as to
this product's accuracy or location of any mapped features.

Note: Fire District 45 and the Riverview School District encompass the entirety of the City of Duwall UGA, and are outside the boundaries of this figure extent.

U:\GIS\GIS\Projects\13xxx\130127_Duwall_CompPlan\Mxd\EIS_Maps\FigP-2_Trails.mxd



4.3.6 DEMAND AND NEED ANALYSIS

Demand and needs were estimated based on three sources: (1) level-of-service (LOS) standards commonly used to measure the amount and quality of a public service or facility that should be provided to meet a community’s adopted goals or standards; (2) existing sources of statewide and regional population/demographic trends and recreation participation estimates and demand; and (3) a resident household survey that was completed during the development of the PTOS Plan (City of Duvall, 2008). State and regional participation data indicates a general need for park, trail, and recreation facilities and provides justification for building certain facilities to meet this demand.

4.3.6.1 Level of Service (LOS) Standards

In park, recreation, trail, and open space planning, local jurisdictions establish the number and type of park facilities, trails, and open space resources that are necessary to adequately serve the needs of their citizens. LOS standards allow jurisdictions to measure progress toward meeting established targets over time. By periodically comparing current levels of performance with established LOS standards, Duvall can determine if it is progressing toward their goals.

Table PR-1. City of Duvall Parks and Recreation LOS Standards.

Park Type	LOS Standard
Pocket	1/4 mile (5-minute walk) to a pocket park
Neighborhood	1/3 mile (10-minute walk) to a neighborhood park
Community	3/4 miles (5-minute bike ride) to a community park
Regional	No recommended LOS radii (City is not expected to provide regional parks)
Non-Motorized Trails	Continuous network of sidewalks and trails throughout the city

Source: RCO, 2007; City of Duvall, 2008.

The City of Duvall adopts the level of service standards set forth in Tables PR-1 and PR-2. A more detailed analysis of LOS standards is located in the PTOS Plan (City of Duvall, 2008).

4.3.6.2 10-Year Demand Summary for Parks, Trails, and Open Space

The park and recreation element of a comprehensive plan should provide estimates of park and recreation demand for at least a ten-year period. The City of Duvall’s PTOS Plan provides a detailed assessment of recreation demand through 2028 based on demographic trends, regional and statewide recreation participation trends, and a household survey that was completed as a component of the development of the PTOS Plan. While some information from the PTOS Plan is repeated here, the summary below specifically identifies demand that can be attributed to the first 10-year timeframe (through 2025) of the Comprehensive Plan’s 20-year planning horizon.



In April 2015, the estimated population of Duvall was approximately 7,345 (OFM, 2015). The population is expected to grow at an annual average rate of 1.4% per year. State and regional participation data indicate the general need for parks, trails, and recreation facilities and provide justification for building certain facilities to meet this demand. In 2007, RCO completed a statewide survey of recreation participation which indicates participation rates for specific regions, as well as the state overall (RCO, 2007). The top activities (based on participation rates) in King County included walking, picnicking, and sightseeing. The complete list is in Chapter 6 of the PTOS Plan (City of Duvall, 2008).

Duvall’s resident households survey included households within the City and the Urban Growth Area (UGA). It was conducted to understand residents’ use of, and preferences for, parks, trails, and open space. The survey examined recreation activity participation rates and identified park, trail, and open space demand in Duvall. The survey did not delineate a 10-year planning timeframe for recreation needs and demand (City of Duvall, 2008). According to the household survey, Duvall’s top recreation activities include walking, bicycling, and using playground equipment. The complete list is in Chapter 6 of the PTOS Plan (City of Duvall, 2008).

Table PR-1 identifies the ten-year demand for parks based on the City’s level of service by recreation facility type. The table includes the current and new Level of Service (LOS).

Table PR-2. Ten-year demand for parks based on the City of Duvall’s level of service.

Recreation Facility Type	City of Duvall New Parks LOS Standards	10 year demand for parks/facilities	Current LOS Provided by Existing Facilities
Neighborhood (acres)	2 acres per 1,000 people	16.8 acres	1.5 acres per 1,000 people
Community (acres)	8 acres per 1,000 people	67.2 acres	12.7 acres per 1,000 people
Trails (miles)	0.5 miles per 1,000 people	4.2 miles	0.3 miles per 1,000 people
Baseball/Softball	1 per 5,000 people	2	1.8 per 5,000 people
Football/Soccer	1 per 10,000 people	1	1.8 per 10,000 people
Tennis Courts	1 per 2,000 people	4.2	0.4 per 2,000 people
Basketball Courts	1 per 5,000 people	2	1.8 per 5,000 people
Playgrounds	1 per 3,000 people	2.8	2.1 per 3,000 people

Note: The ten year demand analysis assumes a population of 8,400 residents by the year 2025 based on the 2014 PSRC and Use Targets (PSRC, 2014).



4.3.6.3 Parks and Recreation Facility Service Area

Park and recreation facilities within the Duvall planning area serve residents within Duvall; residents within the unincorporated UGA surrounding Duvall; a regional and tourist service area comprised of residents of the eastern portion of King County; and a tourist service area comprised of residents and visitors who travel to Duvall to gain access to the Snoqualmie Valley and Tolt Pipeline Trails. Park and recreation facilities within Duvall serve both the residents of Duvall and the immediate unincorporated area surrounding Duvall including the Duvall UGA.

4.3.6.4 Capital Improvement Plan (CIP)

The Parks CIP within the PTOS includes long-term park and trail development and improvement projects for the next 20 years. These projects are the result of the overall PTOS Plan study effort that included a LOS analysis and input from the public (PTOS, 2008).

4.3.7 PAYING FOR PARKS

Implementation of the 20-year PTOS Plan requires the City to enact a number of implementation strategies and actions. Major funding sources for park and recreation facilities can include property taxes, general obligation bonds, real estate excise taxes, grants, and pass-through monies. The City also collects a park impact fee of a specified dollar amount from developers for each residential unit constructed.

4.3.7.1 Potential Revenue Sources

Some of the potential revenue sources for new parks and recreation development in Duvall may include the following: park impact fees; user/concession fees; special use agreements; public-private partnerships, service contracts, concessions, and joint development ventures; land leases; grants; donations; general obligation bonds; special improvement districts (SID); sales tax; and real estate excise tax (REET). A more detailed discussion about administration of revenue sources is in Chapter 7 and Appendix F of the PTOS Plan (City of Duvall, 2008).

4.3.7.2 Funding Strategies

In considering various park and recreation revenue sources as described above, funding sources should generally be matched to specific needs in order to avoid duplication and to take advantage of each fund's specific possibilities. Specific funding strategies may include: park and recreation program services user fees; general fund resources for facility operation, maintenance and minor construction; and facility development. Capital improvements can be funded through the general fund, real estate excise taxes, park impact fees, or other funding sources as discussed above (City of Duvall, 2008)

4.4 References

Adopt-A-Park. Digital image. *Parks, Recreation & Community Services*. City of Reno, n.d. Web. 05 Jan. 2016.

Big Rock Ballfields. Digital image. *City of Duvall*. City of Duvall, n.d. Web. 05 Jan. 2016.



Children Walking on Nature Trail. Digital image. *A New York School Completes a Nature Trail to Create a Pathway to Learning*. Project Learning Tree, 25 June 2012. Web. 05 Jan. 2016.

City of Duvall. 2008 (and as amended). *City of Duvall Park, Trails, and Open Space (PTOS) Plan*. November. Prepared by EDAW, Inc.

Herrera Environmental Consultants, Inc. and Interfluve Consultants. 2002. *Fish Restoration Plan for the City of Duvall*. Prepared for the City of Duvall, Washington.

Herrera Environmental Consultants, Inc. 2006. *Stream Habitat Assessment for the City of Duvall*. Prepared for the City of Duvall, Washington.

King County. 2012. *King County Comprehensive Plan*. December.

Puget Sound Regional Council (PSRC). 2014. *Land Use Targets Workbook*. April. Seattle, WA.

Washington State OFM (Office of Financial Management). 2015. *April 1 Population of Cities, Towns and Counties Used for Allocation of Selected State Revenues*. Available: www.ofm.wa.gov/pop/april1/ofm_april1_population_final.pdf.

Washington State RCO (Recreation and Conservation Office). 2007. *2006 Outdoor Recreation Survey: Final Report*. August. Olympia, WA.



CHAPTER 5. ECONOMIC DEVELOPMENT ELEMENT

5.1 Introduction

5.1.1 PURPOSE AND INTENT

The Economic Development Element provides a roadmap for Duvall's economic growth and vitality that will enhance the city's financial future and quality of life. Duvall has evolved from a rural, natural resource, and timber-based community into a growing residential community with diverse economic potential. The Element encourages the growth of new commercial and industrial businesses; provides guidance for balancing and diversifying light industrial, commercial, and residential activities; and promotes the revitalization and sustainability of existing businesses in Duvall. As Duvall continues to grow, an economic development plan must be in place to ensure a healthy business climate and develop a strong and competitive local and regional marketplace.

Duvall is an attractive, vibrant community with potential for a stronger local economy. Although many economic trends are beyond the City's control, it can work to attract and retain residents and businesses through goals and policies that promote economic development and a high quality of life. To ensure a strong and vibrant economic future, the Element includes goals and policies that aim to make Duvall a great place to live, work, recreate, and visit; promote a thriving and diverse local economy that provides opportunities in a variety of business sectors; encourage citywide economic growth while enhancing the Old Town business district; maintain Duvall's unique small-town atmosphere and build on local historic and natural assets within the community; encourage high-quality, mixed use, commercial and industrial development; create a balanced economic environment that attracts business growth while strengthening existing local businesses; and foster the development of private-public partnerships.

The following Goals and Policies are statements that reflect the community's vision, principals, and proposed course of action for Duvall's economic development. The Economic Development Element Analysis that follows contextualizes Duvall's regional economic position and provides employment and population forecasts and targets. In accordance with Growth Management Act (GMA) requirements and King County Countywide Planning Policies (CWPPs) (King County, 2012), it also summarizes Duvall's economic characteristics; its economic strengths and weaknesses; and identifies policies, programs, and projects to foster economic growth and development.



5.2 Goals and Policies

Goal ED1: Business creation, expansion, retention, and diversification; attractive employment opportunities; and a reliable and consistent tax base contribute to a healthy economic climate.

Policies

- ED 1.1 Establish and support incentives to encourage economic development, such as expedited permitting, public investment, and local partnerships, in return for public benefits.
- ED 1.2 Strengthen existing commercial areas and encourage new mixed-use and light-industrial development to promote jobs and business activity.
- ED 1.3 Promote the development of a mixed-use neighborhood consisting of larger-scale commercial, residential, light industrial, office, and institutional uses.
- ED 1.4 Allow flex space as a mechanism for promoting light manufacturing, research and development, office, and similar uses, consistent with surrounding character.
- ED 1.5 Support home-based businesses that do not impact the residential character of the neighborhood. Limit signs, parking and truck deliveries, and other potential adverse impacts.
- ED 1.6 Use flexible regulatory standards that enable businesses to expand, grow, or redevelop at existing locations.
- ED 1.7 Sustain and leverage the City's natural, cultural, artistic, and agricultural assets to attract businesses and consumers throughout the region.
- ED 1.8 Proactively recruit and promote the growth of target businesses and industries, including information technology, light industrial, manufacturing, and tourism that provide, at a minimum, cost-of-living wages and economic diversity.
- ED 1.9 Encourage private reinvestment in local shopping centers, and industrial and manufacturing establishments, to support revitalization and growth.
- ED 1.10 Review regulatory design standards for industrial facilities and provide further economic incentives, as needed, to promote private investment in start-up and relocating businesses to Duvall.
- ED 1.11 Support local, small business start-ups through the development of incubator spaces.
- ED 1.12 Increase local spending by residents by attracting drug and health services, food services, personal services, retailers, and specialty shop businesses.
- ED 1.13 Utilize tax and fee systems that are fair, equitable, and stable and that provide sufficiently predictable funds to provide for local services to protect and enhance the community.



Goal ED2: Collaboration with private and public agencies, community groups, and economic development groups maximizes the City’s economic development potential.

Policies

- ED 2.1 Work with economic development groups, such as the Chamber of Commerce or Rotary, to coordinate business recruitment, marketing, and tourism in Duvall.
- ED 2.2 Collaborate with neighboring cities and agencies to develop economic strategies that promote diversification of business and industry throughout the region and emphasize Valley collaboration.
- ED 2.3 Coordinate with other jurisdictions to identify infrastructure deficiencies and plan for needed improvements to allow for regional economic growth.
- ED 2.4 Collaborate with other Snoqualmie River Valley cities to boost the Valley’s tourism draw through unified marketing.
- ED 2.5 Cooperate with public and private agencies to improve infrastructure, utility systems, and facilities that support economic vitality.

Goal ED3: Diverse employment and training opportunities promote business development and economic success.

Policies

- ED 3.1 Support educational and training opportunities for residents to maintain a skilled workforce.
- ED 3.2 Cooperate with local schools, the Chamber of Commerce, and other organizations to provide educational opportunities for citizens of all ages within the community.
- ED 3.3 Support workforce training efforts of local colleges and public schools.
- ED 3.4 Support development of a regional education facility in the city, such as a satellite college, through collaborative public-private agreements.
- ED 3.5 Support a community mentoring program that provides training, resources, networking opportunities, and expertise to employees and small business owners.

Goal ED4: Old Town’s distinctive identity holds economic value and contributes to its success as Duvall’s cultural, historical, and retail center.

Policies

- ED 4.1 Support Old Town merchants, property owners, the Chamber of Commerce, and other groups in the continued revitalization of the downtown corridor through public and private investments and amenities.
- ED 4.2 Coordinate with Old Town business and property owners to evaluate the desirability of creating a Main Street business association.



- ED 4.3 Leverage natural amenities, such as McCormick Park and the Snoqualmie Valley Trail, to attract people and economic investment to the downtown corridor.
- ED 4.4 Continue to support and market community events that bring together residents, tourists, and retailers in Old Town.
- ED 4.5 Ensure that community banking services are available in Old Town.

Goal ED5: Duvall’s surrounding rural landscape, character, and quality of life are among its most important assets in sustaining economic vitality.

Policies

- ED 5.1 Develop an economic strategy that focuses on leveraging the Snoqualmie Valley’s attractions.
- ED 5.2 Partner with King County to plan for a regional center with recreational opportunities to support the tourism industry.
- ED 5.3 Provide linkages between Duvall’s business districts and the natural areas, such as McCormick Park and the Snoqualmie Valley Trail.
- ED 5.4 Continue to encourage building and aesthetically-pleasing site design that complement the natural environment and do not detract from the surrounding rural setting.
- ED 5.5 Maintain a unique and cohesive community identity while recognizing and enhancing neighborhood and subarea identities.
- ED 5.6 Actively promote the city’s natural, cultural, artistic, and agricultural assets.

Goal ED6: Duvall is a regional destination for visitors.

Policies

- ED 6.1 Enhance the visitor experience with maps, directories, and signage to identify city trails and other points of interest.
- ED 6.2 Market opportunities for bed-and-breakfasts to locate in Duvall.

Goal ED7: Duvall invests in economic development planning, implementation, and monitoring.

Policies

- ED 7.1 Dedicate city resources to economic development planning and implementation by creating and maintaining a strategic economic development program for the city, creating and implementing a proactive marketing strategy identifying key audiences and messages, and designating a point-of-contact for economic development programs and to serve as a liaison to the business community.
- ED 7.2 Monitor and assess new commercial development’s cumulative effect on the economy using performance measures such as job and business creation, retention, and attrition, and changes in tax revenues.



- ED 7.3 Explore the creation of an economic development grant program for local businesses, including a façade grant program.
- ED 7.4 Monitor the financial impact of new programs, policies, and regulatory requirements on development feasibility.
- ED 7.5 Evaluate and refine employment growth and capacity projections, as necessary, to ensure alignment with the regional target allocations and available transportation infrastructure.

5.3 Economic Development Analysis

This section uses Census and statistical data to create an economic profile for the City, and summarizes its economic characteristics, trends, and potential within the context of local and regional conditions. The summary provides a foundation for understanding the forces that influence Duvall’s economic future, including local actions, economic relationships with nearby sub-regions, and connections to the region as a whole.

The analysis is presented in three sections:

- Economic Conditions, Forecasts, and Trends
- Economic Opportunities
- Competitive Position

This analysis supplements several previous economic studies conducted for the City, in particular, the adopted the Economic Development Strategic Action Plan (EDSAP): 2006-2011 (Berk and Associates, 2005). The strategy for moving forward is built upon the understanding that the City’s economy is intrinsically tied to its livability and quality of life, as well as the identity it presents to potential tourists, residents, and employers.

5.3.1 ECONOMIC CONDITIONS, FORECASTS, AND TRENDS

Economic conditions, forecasts, and trends provide insight into the potential opportunities available to the community.

5.3.1.1 Economic and Demographic Comparison

As a supplement to information provided in the Housing Element, **Table ED-1** provides a comparison of notable economic and demographic conditions between King County and Duvall. Compared to King County, families comprise a greater proportion of Duvall’s total population, median household income is greater, and the proportion of home ownership is greater.



Table ED-1. Comparison of Demographic Conditions, Duvall vs. King County 2010

	Duvall	King County
Population		
Total Population	6,695	1,931,249
Population in Households	6,656	1,894,118
Population in Families	6,049	1,409,526
% of Population in Households	99.4%	98.1%
% of Population in Families	90.4%	73.0%
Households		
Total Households	2,224	789,232
Average Household Size	2.99	2.40
% of Households with < 18 yrs.	52.3%	29.2%
Age		
Median Age	34.4	37.1
% of Population 65+	4.5%	10.9%
% of Population < 18	33.8%	21.4%
Income		
Median Household Income	\$111,356	\$71,175
Housing Units		
Total Housing Units	2,315	851,261
% Occupied	96.1%	92.7%
% Owner-occupied	84.6%	54.8%
% Renter-occupied	11.4%	37.9%
Population by Race		
White	6,005	1,325,845
Black or African American	30	119,801
American Indian	33	16,147



Table ED-2 Continued

	Duvall	King County
Asian	178	282,075
Pacific Islander	3	14,486
Other	194	76,096
Two or More Races	252	96,799
Total	6,695	1,931,249
Population by Race % of Total		
White	89.7	68.7
Black or African American	0.4	6.2
American Indian	0.5	0.8
Asian	2.7	14.6
Pacific Islander	0.0	0.8
Other	2.9	3.9
Two or More Races	3.8	5.0
Total	100.0	100.0

Source: US Census, 2010; Summary File 1. 2008-2012 American Community Survey.

5.3.1.2 Employment Forecasts and Targets

Puget Sound Regional Council (PSRC) provides employment and population forecasts at the regional and local level for use in regional transportation and land use planning. While these forecasts are not specific targets, they are considered in each county’s growth target process. The most recent forecasts were published in April 2014. In addition to its baseline forecasts, PSRC provides a second set of forecasts that reflect target forecasts as summarized in **Table ED-2**.



Table ED-3. Comparison of Population and Employment Target Forecasts, King County and Duvall

King County	2010	2025	2030	2031	2035	2010-2035 % Growth
Residential						
Population	1,931,253	2,201,010	2,290,922	2,308,917	2,380,851	23.3
Employment						
Manufacturing	202,443	263,291	286,341	290,950	309,393	52.8
Retail Food Service	187,391	255,896	277,957	282,366	300,015	60.1
FIRE Services ¹	559,446	762,714	827,953	840,988	893,176	59.7
Government; Higher Education	129,634	141,753	145,883	146,710	150,009	15.7
K-12 Education	44,680	49,527	51,204	51,536	52,880	18.4
Construction Resource	57,943	121,584	142,279	146,420	162,972	181.3
Total Employment	1,181,537	1,595,345	1,732,197	1,759,550	1,869,025	58.2
Duvall	2010	2025	2030	2031	2035	2010-2035 % Growth
Residential						
Population	6,868	8,404	8,919	9,022	9,434	37.4
Employment						
Manufacturing	88	159	176	179	192	118.2
Retail Food Service	283	378	417	425	456	61.1
FIRE Services ¹	563	820	904	921	989	75.7
Government; Higher Education	88	95	100	101	105	19.3
K-12 Education	212	240	250	252	260	22.6
Construction Resource	126	239	279	287	319	153.2
Total Employment	1,360	1,931	2,126	2,165	2,321	70.7

Source: Puget Sound Regional Council, April 2014 Forecasts. Land Use Targets.

¹ FIRE Services: Finance, Insurance, and Real Estate Services.



As shown, population and employment for Duvall are forecasted to grow at higher rates for the period 2010 to 2035 than for the county as a whole.

The PSRC forecasts are based on a regional growth strategy outlined in VISION 2040. The strategy calls for broad shifts in the way growth is allocated within the region. Areas are organized by regional geography: metropolitan cities, core suburban cities, larger suburban cities, small cities, urban unincorporated King County, and rural unincorporated King County. As described in the County’s “Housing and Employment Growth Targets” document (King County Growth Management Planning Council, 2009), the strategy calls for:

- Increasing the amount of growth targeted to metropolitan cities and core cities;
- Increasing the amount of growth targeted to larger cities;
- Decreasing the amount of growth targeted to unincorporated areas and some small cities;
- Achieving a greater jobs-to-housing balance within the region by shifting projected population growth into King County and shifting forecasted employment growth out of King County.

Duvall is classified as a small city, as defined by PSRC’s VISION 2040 Regional Growth Strategy (PSRC, 2009). Small cities generally have populations less than 10,000 and are not targeted for the same level of growth as the more populated areas.

The King County growth targets were proposed in 2012 for the period 2006 to 2031. The targets were developed through a process that starts with regional totals from the State Office of Financial Management (OFM) (OFM, 2012) and PSRC (PSRC, 2014). Employment forecasts are allocated to King County jurisdictions based on VISION 2040 baseline forecasts (PSRC, 2009), accounting for factors such as recent growth trends and anticipated annexations. Duvall’s employment target is 840 additional jobs.

5.3.1.3 Employment Capacity

The 2014 King County Buildable Lands Report estimated Duvall’s employment capacity to be 1,600 jobs (King County Office of Performance, Strategy and Budget, 2014). During the 2015 Comprehensive Plan update, Duvall completed a revised capacity analysis which accounted for proposed changes to the UGA and future land use designations (Duvall, 2016). Duvall's resulting employment capacity is estimated at 3,153 jobs. Duvall continues to have sufficient capacity to meet its employment target.

Table ED-4. Duvall Employment Target and Capacity

	King County Target	Capacity	Surplus/(Deficit)
Duvall	840	3,153 ¹	1,144

¹1,169 existing jobs plus employment capacity.

Sources: King County Buildable Lands Report, 2014; City of Duvall, 2016.



The information presented for 2035 growth is based on possible development of all commercial properties within City limits. This estimate is conservative (high) and does not consider site constraints such as critical areas or likely buildout of properties. The city currently has approximately 426,221 square feet of commercial floor area and 186,000 square feet of commercial floor area in the foreseeable pipeline (2015). The pipeline growth would result in a total employment of approximately 1,680 similar to the King County jobs target. There is a potential for additional employment growth of non-pipeline properties depending on zoning and parcel specific site constraints. The city will evaluate and refine employment growth and capacity projections, as necessary, to ensure alignment with the regional target allocations and available transportation infrastructure.

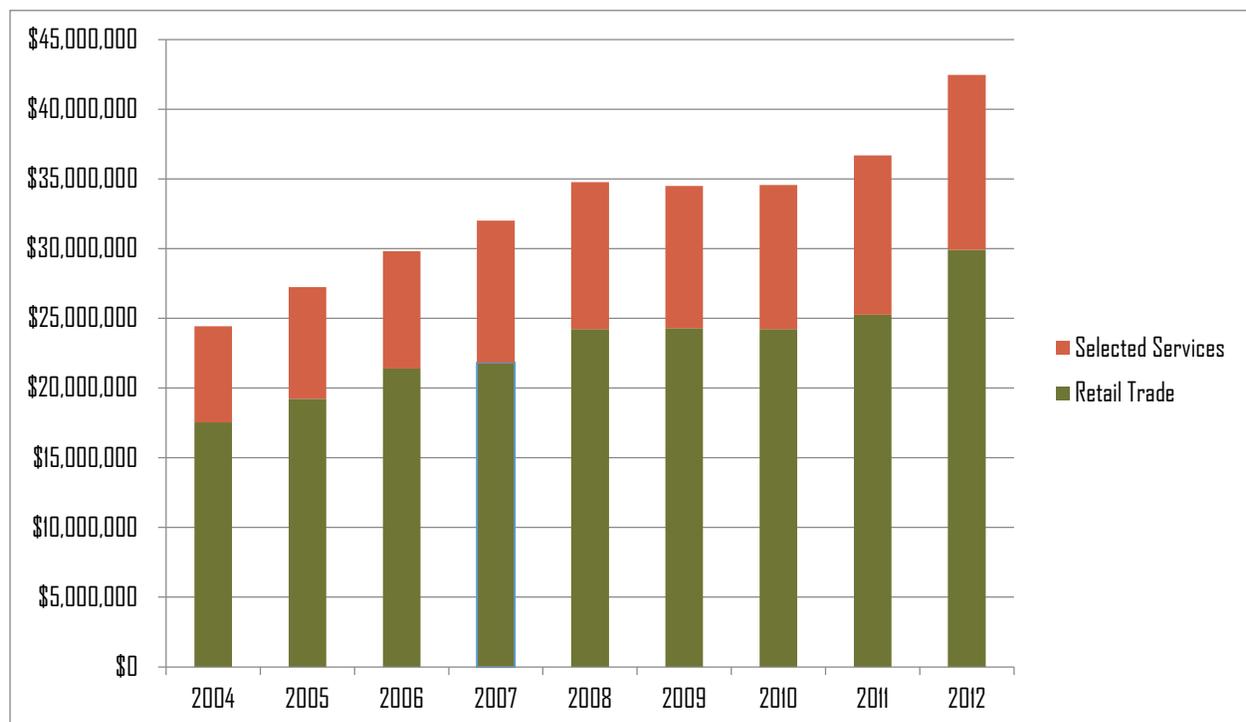
5.3.2 ECONOMIC OPPORTUNITIES

This section identifies realistic and attainable opportunities for growth in local jobs and tax base, including the economic potential of several uses. Duvall’s competitive position, potential to absorb new market segments, and the appropriate scale of new uses are also identified.

5.3.2.1 Retail Opportunities

Duvall has stable retail tax that has shown steady growth over the past decade. As shown in **Figure ED-1**, taxable sales for retail and selected services (food services, personal services, and repairs) fell slightly with the recent recession, but recovered quickly and have shown strong growth in 2012. The largest sectors are food services (restaurants), food sales, building materials, miscellaneous retailers, furniture, repair and maintenance, and car sales and parts.

Figure ED-1. Growth in Duvall Taxable Retail Sales

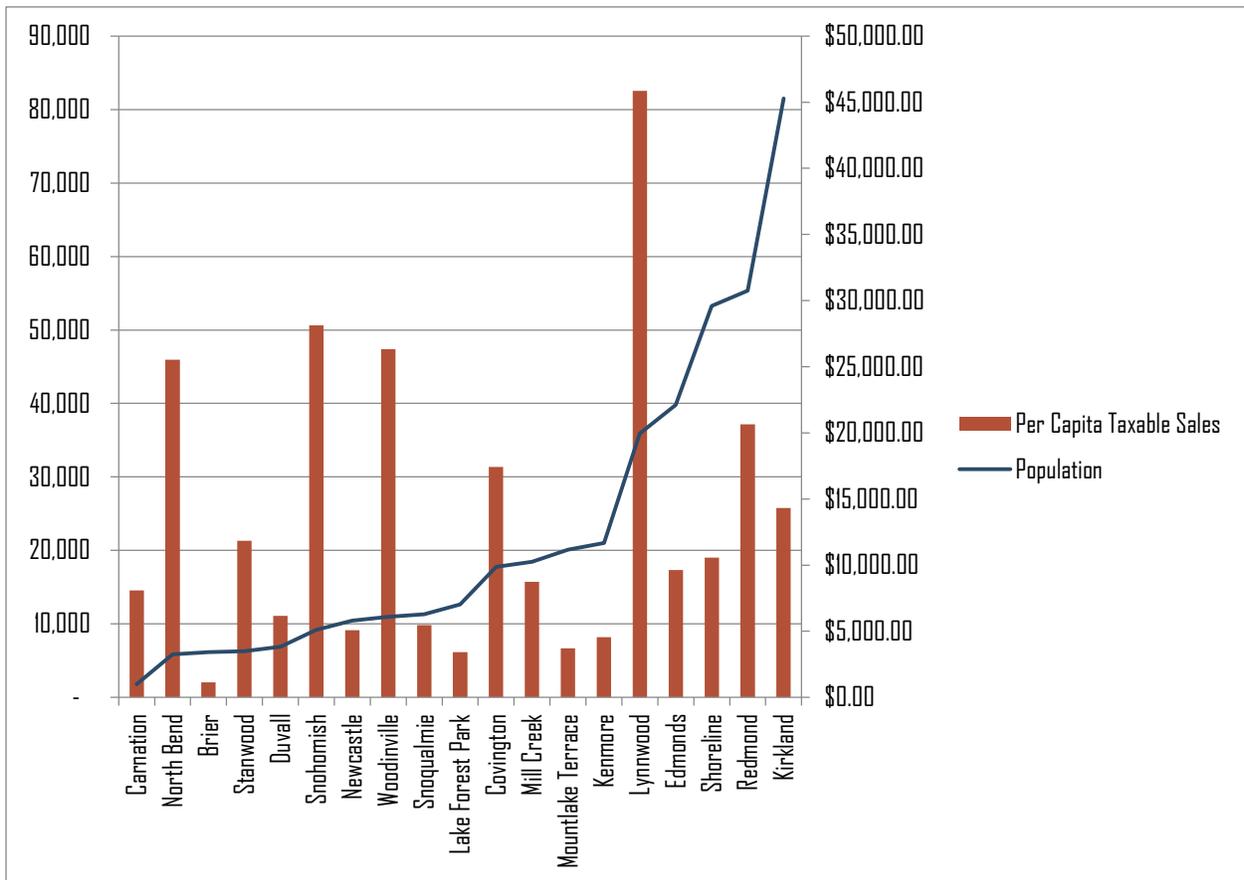


Source: Washington Department of Revenue, *Quarterly Business Review*, Property Counselors, 2014.



The amount of sales can be compared to other communities on a per-capita basis. Duvall’s sales per capita are similar to several smaller cities, but fall well short of cities such as North Bend, Stanwood, Snohomish, Woodinville and Covington. The differences can be attributed to a larger trade area (such as North Bend with a factory outlet on I-90, or Stanwood with nearby Camano Island) or a large visitor industry (like Snohomish and Woodinville), or both.

Figure ED-2. Comparison of Per Capita Taxable Retail Sales



Source: Washington Department of Revenue, *Quarterly Business Review*, Property Counselors, 2014.

The relationship between size of trade area and retail scale and tenant mix is summarized in **Table ED-4** below.



Table ED-5. Comparison of Shopping Center Characteristics

U.S. Shopping Center Classification and Characteristics						
Type of Shopping Center	Concept	% Share of Industry (Gross Leasable Area)	Acres	# of Anchors	Typical Type of Anchors	Trade Area Size
General-Purpose Centers						
Super-Regional Mall	Similar in concept to regional malls, but offering more variety and assortment.	10.3	60-120	3+	Full-line or junior department store, mass merchant, discount department store and/or fashion apparel store.	5-25 miles
Regional Mall	General merchandise or fashion-oriented offerings.	4.7	40-100	2+	Full-line or junior department store, mass merchant, discount department store and/or fashion apparel store.	5-15 miles
Community Center ("Large Neighborhood Center")	General merchandise or convenience-oriented offerings. Wider range of apparel and other soft goods offerings than neighborhood centers.	25.4	10-40	2+	Discount store, supermarket, drug, large-specialty discount (toys, books, electronics, home improvement/ furnishings or sporting goods, etc.)	3-6 miles
Neighborhood Center	Convenience oriented	30.9	3-5	1+	Supermarket	3 miles
Strip/ Convenience	Attached row of stores or service outlets managed as a coherent retail entity. A convenience center is among the smallest of the centers, whose tenants provide a narrow mix of goods and personal services to a very limited trade area.	12.0	<3	Anchor-less or a small convenience store anchor.	Convenience store, such as a minimart.	<1 mile



Table ED-6 Continued

U.S. Shopping Center Classification and Characteristics						
Type of Shopping Center	Concept	% Share of Industry (Gross Leasable Area)	Acres	# of Anchors	Typical Type of Anchors	Trade Area Size
Specialized-Purpose Centers						
Power Center	Category-dominant anchors, including discount department stores, off-price stores, wholesale clubs, with only a few small tenants.	13.1	25-80	3+	N/A	5-10 miles
Lifestyle	Upscale national chain specialty stores with dining and entertainment in an outdoor setting.	2.0	10-40	0-2	Large format upscale specialty	8-12 miles
Factory Outlet	Manufacturers' and retailers' outlet stores selling brand-name goods at a discount.	1.1	10-50	N/A	Manufacturers' and retailers' outlets	25-75 miles
Theme/Festival	Leisure, tourist, retail and service-oriented offerings with entertainment as a unifying theme. Often located in urban areas, they may be adapted from older--sometimes historic--buildings and can be part of a mixed-use project	0.3	5-20	Unspecified	Restaurants, entertainment	25-75 miles
Limited-Purpose Property						
Airport Retail	Consolidation of retail stores located within a commercial airport	0.1	N/A	N/A	No anchors; retail includes specialty retail and restaurants	N/A
Total Industry						
Total Industry	Traditional + Specialty + Special Purpose					

Source: International Council of Shopping Centers, U.S. Shopping Center Classification and Characteristics. December 2015.



As a relatively isolated community, Duvall has a limited natural trade area, and its retail position is limited to the profile of retailers that you would find in a neighborhood scale shopping center. To the extent that Duvall can increase its effective trade area by attracting more tourist visitors, it can support a broader mix of businesses.

As with other small communities, Duvall loses a portion of the spending by local residents to other communities with higher level retail centers, such as Woodinville, Redmond, and Bellevue. The amount of this leakage is estimated in **Table ED-5**. Leakage is defined as the difference between retail spending by local residents and gross sales captured by local businesses. Gross sales are derived from taxable sales data reported by the Washington Department of Revenue with an adjustment using the average ratio of taxable to gross sales statewide. Resident spending is estimated on a per capita basis using gross sales for the state as a whole, with an adjustment for the higher income in Duvall. According to data from the Bureau of Labor Statistics Consumer Expenditure Survey (Bureau of Labor Statistics, 2012), households with incomes at the level of Duvall spend approximately 60 percent more per household than households with incomes at the level of the State of Washington (with differences by retail sector). As shown in **Table ED-5**, Duvall businesses capture \$83 million of the estimated total resident spending of \$176 million for retail goods and selected services. The associated leakage is \$93 million, or 53 percent of resident spending.

Table ED-7. Duvall Retail Leakage 2012

	Duvall Sales		Est. Duvall Resident Spending		Est. 2012
	Taxable	Gross	Per Capita	Total	Leakage
Retail Trade					
Motor Vehicles & Parts	\$2,230,600	\$2,869,251	\$3,408	\$23,513,046	\$20,643,795
Furniture & Home Furnishing	2,660,968	2,944,732	474	3,268,406	323,674
Electronics & Appliances	1,380,191	1,716,236	915	6,313,408	4,597,173
Building Materials, Garden Equip & Supplies	5,418,396	5,789,226	1,123	7,751,864	1,962,638
Food & Beverage Stores	8,468,006	34,435,399	2,778	19,166,140	(15,269,259)
Drug/health Stores	395,372	1,345,267	1,102	7,600,864	6,255,597
Gas Stations & Convenience Stores W/pumps	1,077,681	7,373,640	2,404	16,586,752	9,213,113
Apparel & Accessories	898,126	1,109,512	1,136	7,836,712	6,727,200



Table ED-8 Continued

	Duvall Sales		Est. Duvall Resident Spending		Est. 2012
	Taxable	Gross	Per Capita	Total	Leakage
Sporting Goods, Toys, Book & Music Stores	484,118	561,387	577	3,978,021	3,416,633
General Merchandise Stores	458,437	947,832	5,034	34,735,094	33,787,262
E-commerce & Mail Order	2,893,932	5,977,369	685	4,727,630	(1,249,739)
Miscellaneous Retailers	3,542,702	4,795,513	1,894	13,065,616	8,270,103
Total Retail Trade	\$29,908,529	\$69,865,363	\$21,528	\$148,543,553	\$78,678,190
Selected Services					
Arts, Entertainment & Recreation	\$696,378	\$743,520	\$287	\$1,981,712	\$1,238,192
Accommodations	0	-	-	-	-
Food Services	8,847,229	9,200,994	2,581	17,811,307	8,610,313
Repair & Maintenance	2,531,873	3,120,187	832	5,741,551	2,621,364
Personal Services	483,620	533,243	270	1,862,420	1,329,177
Total Selected Services	\$12,559,100	\$13,597,944	\$4,572	\$27,396,991	\$13,799,047
Total Retail Trade and Selected Services	\$42,467,629	\$83,463,307	\$26,100	\$175,940,544	\$92,477,237

Source: Property Counselors, Duvall Economic Profile. April 2014.

The obvious retail opportunity is to recapture a portion of that leakage, while attracting residents and visitors from outside the city. However, it is not possible to recapture all retail leakage, particularly for a small town -- residents will always spend a portion of their income on goods and services available only in the higher level retail centers. For example, Duvall cannot recapture spending in sectors such as general merchandise, electronics and appliances, or motor vehicles; however, it can recapture spending in drug/ health services, food services, personal services, miscellaneous retailers, and selected specialty shops.



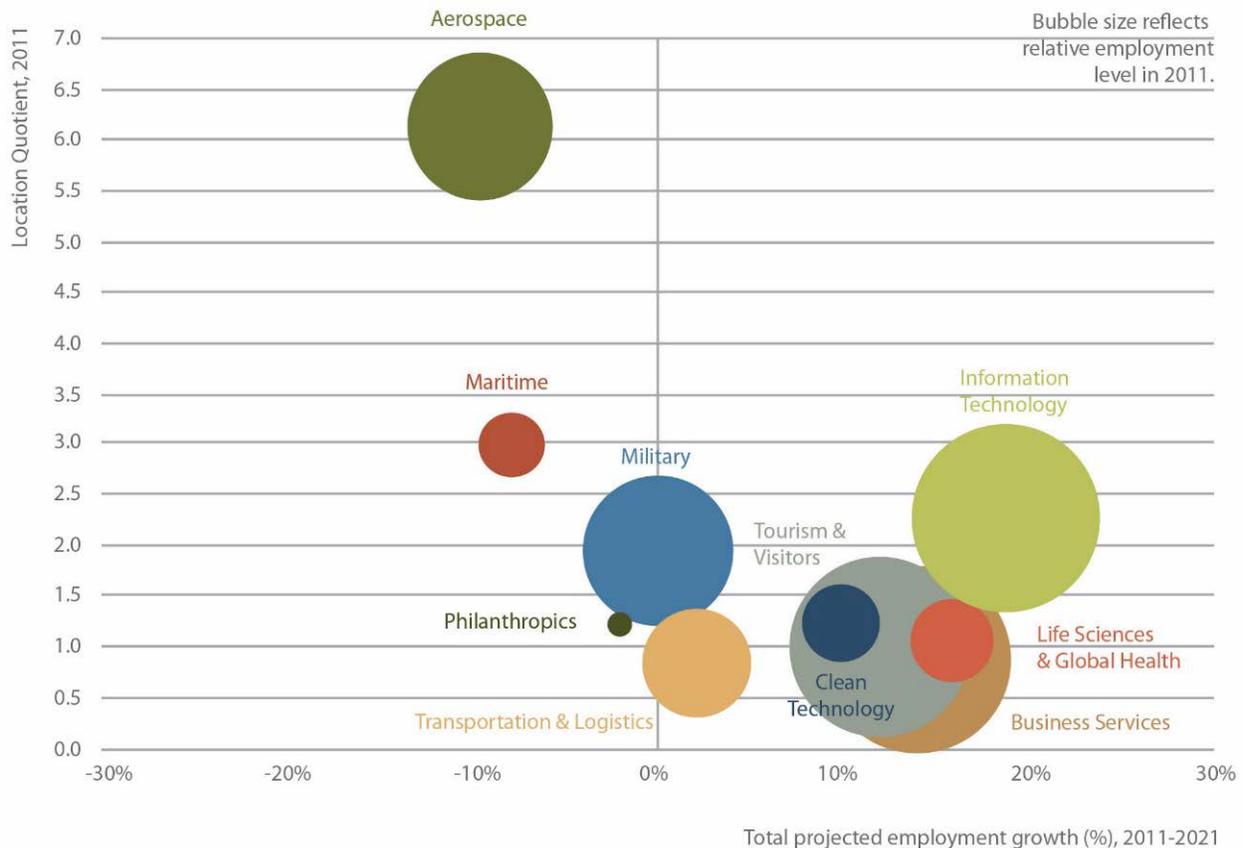
5.3.2.2 Manufacturing and Industrial Opportunities

The Land Use Target Forecasts in **Table ED-2** show a high growth rate for manufacturing jobs in Duvall starting from a small base. Manufacturing and industrial jobs are sought after because they generally pay high wages. The average annual wage for King County employment in 2012 varied by sector as follows:

- Manufacturing \$79,048
- Retail \$41,123
- Information \$154,005
- Health Care \$52,479
- Accommodations and Food Service \$21,990

The underlying objective of any economic development program is to target sectors that are both high wage and high growth, and for which the community has a competitive advantage, often reflected in a high location quotient (a high concentration of such jobs). The 2012 Regional Economic Strategy for the Central Puget Sound Region identified ten economic clusters as the centerpiece for an economic development program. **Figure ED-3** summarizes the relationship between the overall size of each cluster, its location quotient, and its growth rate.

Figure ED-3. Central Puget Sound Cluster Employment Dynamics



Source: Prosperity Partnership, Regional Economic Strategies for Central Puget Sound Region. July 2012.



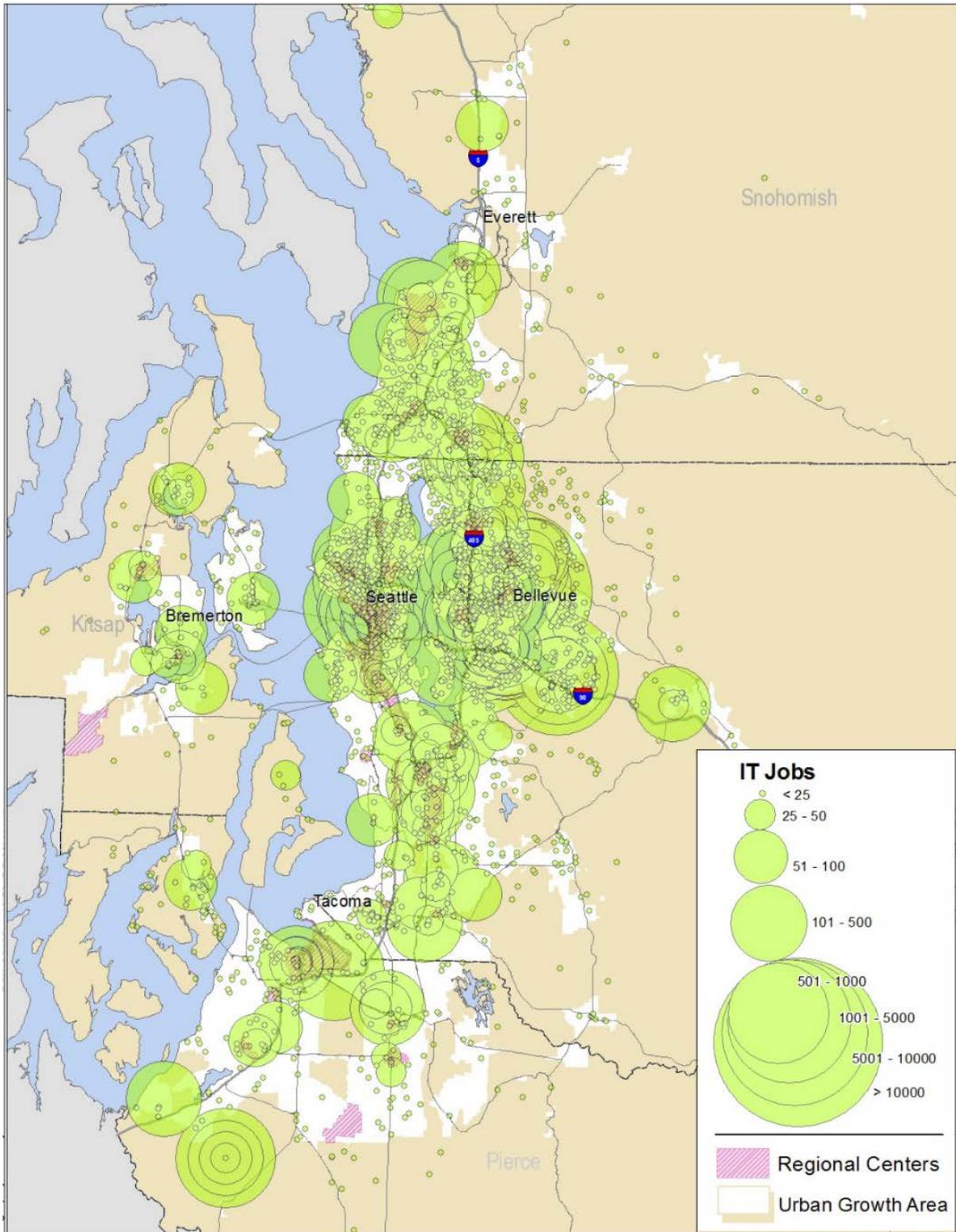
These clusters can also be evaluated for their potential in Duvall. Generally, manufacturing and industrial uses have similar locational requirements:

- Proximity to sources of inputs;
- Proximity to markets or users;
- Proximity to qualified labor force;
- Proximity to transportation facilities and services.

These requirements are reflected in the current distribution of jobs in the central Puget Sound area. While the distribution patterns differ somewhat for each cluster, the information technology (IT) cluster provides some evidence of location suitability. **Figure ED-4** summarizes the job distribution as identified in the regional strategy.



Figure ED-4. Information Technology Jobs by Location Central Puget Region



Source: Data, Employment Security Department/PSRC, 2010; Map, Prosperity Partnership, Regional Economic Strategies for Central Puget Sound Region. July 2012.



Employment is concentrated in the regional centers; however, smaller businesses (fewer than 25 employees) outside of regional centers in communities like Duvall exist. Information technology is somewhat special in that it involves high value products or services that do not require a large labor force or transportation advantages. Furthermore, IT and other technology businesses historically locate according to the founder's personal requirements. The strongest opportunity for Duvall is to nurture emerging businesses by entrepreneurs who may currently commute to other cities in the region. The ongoing challenge will be to retain those businesses as their staffing requirements and logistical needs increase over time.

5.3.2.3 Tourism Opportunities

Duvall has a variety of amenities that attract new residents as well as visitors. The Duvall Visitor Guide identifies some of the attractions as follows:

OUTDOOR ACTIVITIES

- Hiking Trails
- Wildlife Viewing
- Duvall Parks
- Farm Tours

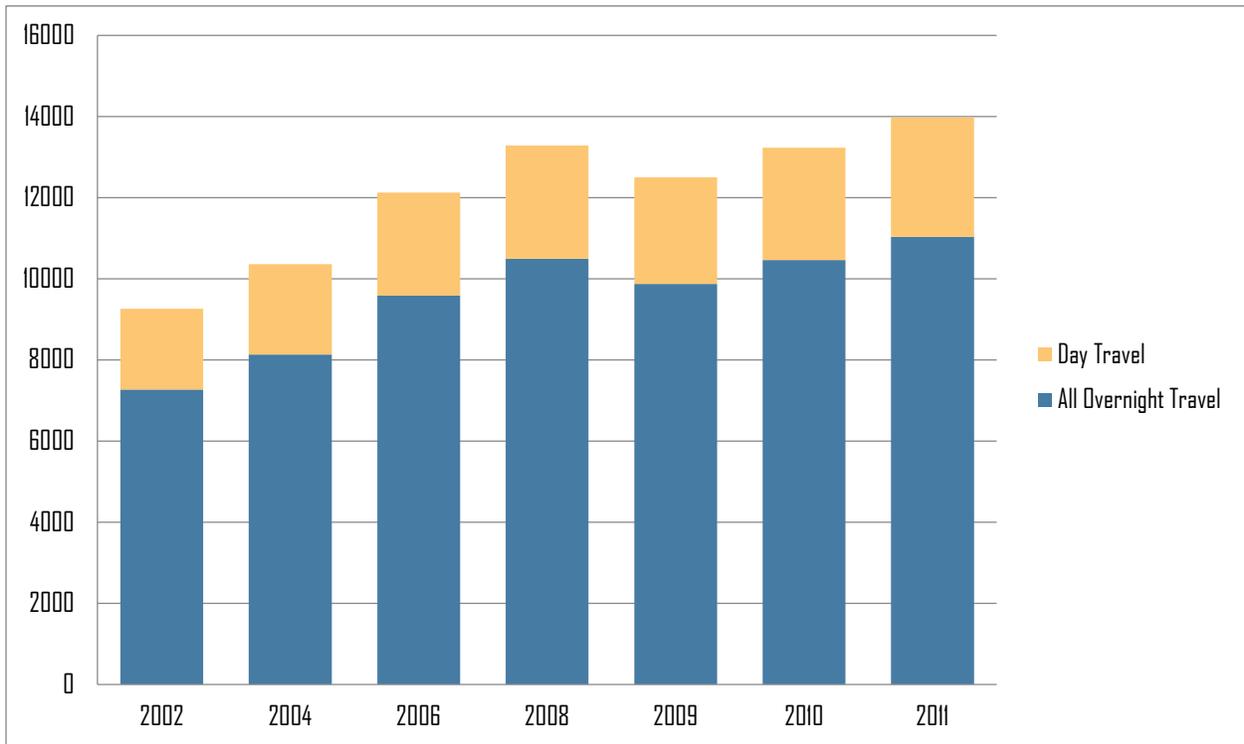
ARTS AND CULTURE & COMMUNITY EVENTS

- Duvall Days
- Summer Music in the Park
- Art in Bloom
- Sandblast Festival for the Arts
- Cascade Community Theater
- Duvall Art and Wine Walk
- Public Art
- Northwest Art Center

These attractions match the interests of many potential visitors. The Washington Tourism Alliance and its predecessor, the Washington State Tourism Office, provide a variety of information on visitor activity in the State. **Figure ED-5** summarizes trends in visitor spending in the State over the past decade. As shown, visitor spending showed strong growth through 2008 but declined with the national recession. After a brief decline, spending began to grow again and has exceeded previous levels. Overnight travel represents almost 80 percent of total visitor spending.



Figure ED-5. Washington State Visitor Spending 2002-2011 (\$1000)



Source: Dean Runyon Associates, Travel Impacts and Visitor Volumes, 1991-2011.

Visitor spending can be estimated from survey results related to spending factors and trip characteristics, which are summarized in **Table ED-6**. Spending factors include the volume of visitors (i.e.: “travel party” consisting of all visitors or persons traveling together; “person” consisting of an individual traveler; and “party size,” or the number of individuals that are traveling together and sharing costs). Overnight visits are broken down by type of accommodation. Additional information is provided for party size and trip length.



Table ED-9. Washington State Visitor Spending Factors and Overnight Visitor Volumes

	Hotel/Motel	Private Home	Other Overnight	All Overnight
Spending Factors				
Travel Party				
Average expenditure per day	\$451	\$121	\$156	\$230
Average expenditure per trip	\$1,135	\$426	\$522	\$715
Person				
Average expenditure per day	\$200	\$55	\$57	\$101
Average expenditure per trip	\$494	\$187	\$190	\$307
Party Size	2.3	2.2	2.7	2.3
Washington Visitor Volume (000s)				
Length of Stay	2.5	3.5	3.3	3.1
Person Nights	34,562	61,451	13,387	109,400
Party Nights	15,312	27,798	4,864	47,974
Person Trips	13,981	17,939	4,000	35,920
Party Trips	6,090	7,887	1,454	15,431

Source: Dean Runyon Associates, Travel Impacts and Visitor Volumes 1991-2011p, 2012.

As shown, visitors staying in hotels spend considerably more money per day than visitors staying in other accommodations. Similarly, studies have shown that day visitors spend approximately the same amount as overnight visitors staying in private homes. Therefore, providing visitor experience that justifies an overnight stay is an economic development opportunity for Duvall.

Previous studies surveyed visitors' activities and interests. No visitor profiles have been prepared in recent years; however, a 1997 study identified the types of activities that visitors participated in during their visits in Washington (see **Table ED-7**). The results are fairly consistent by type of visitor. Relaxing/sightseeing and visiting friends/relatives are the two most popular general activities. Popular specific activities, like shopping in a small community, visiting restaurants, attending a fair or carnival, visiting a museum or historic site, visiting a microbrewery, hiking, viewing wildlife, and attending a concert, match experiences that Duvall offers. Packaging and promoting these activities to attract visitors for a full day or an extended stay provides economic opportunities for the city. The City should cooperate with neighboring communities in this effort, as the combined resources can provide a more complete visitor experience.



A challenge to attracting overnight visitors is the provision of overnight lodging. Sustaining a small commercial lodging operation (50 rooms) would require year round business with commercial travelers and groups, as well as tourists. This level of customer use is not likely to exist in the foreseeable future. However, bed and breakfast establishments can operate on a smaller seasonal scale and should be encouraged.

Table ED-10. Trip Activities by Type of Visitor

Activity	Washington Resident		Non-Resident
	Day Trip	Overnight	
Just relax, sightsee	45%	63%	52%
Visit friends or relatives	40%	57%	46%
Go to restaurant or clubs	34%	43%	37%
Visit a state park	31%	48%	38%
Shop in a small community	32%	45%	37%
Visit a national park	28%	36%	31%
Shop in a metropolitan area	24%	30%	26%
Attend fair, carnival	26%	26%	26%
Visit a zoo, aquarium	30%	19%	25%
Visit museum or historic site	18%	29%	22%
Visit a winery/micro-brewery	19%	21%	20%
Hiking	13%	30%	19%
Camping	9%	35%	18%
Wildlife Viewing	11%	23%	15%
Attend concert, artistic event	12%	17%	14%

Source: Washington State Tourism Office, Washington State Visitor Profile. March 1997.

5.3.2.4 Mixed Use Development Opportunities

Mixed use development is a form of development that combines uses within a project to take advantage of mutual benefits of construction efficiencies and/or mutual market support. Residential over commercial development is a common mixed use form, as is office over retail. But mixed use development can be horizontal (side by side) as well as vertical (stacked). Mixed use development has



been identified in the Comprehensive Plan as desirable for accommodating new economic development. Market and feasibility issues affect whether it is realistic for all uses and locations.

Duvall offers several examples of mixed use development. The Riverview Plaza is a two story complex with offices over retail. Another example is Copper Hill Square, a two story commercial building with 23,423 square feet of retail space and 7,341 square feet of office space, organized as a commercial condominium. Eighty-five residential condominium units are provided adjacent to the commercial units, located in 18 two story buildings with carport parking. This configuration is an example of horizontal mixed use. The Copper Hill Square condominiums were completed in 2002 and marketed during the housing boom of the mid 2000's. With the market softening after 2006, values dropped, and several of the units were foreclosed.

Economic indicators suggest that demand for multifamily residential development exists. The market response has favored two story buildings with carports, and apartment demand is currently stronger than condominium demand. The type of mixed use development that is evident in many of the more urban cities of the region is apartments over retail with underground parking, but this form of mixed use is more expensive to build and requires a higher rent or sales price.

Table ED-8 summarizes apartment market conditions in fall 2013 for King County as a whole and the Woodinville/Totem Lake submarket as defined by Dupre+Scott Apartment Advisors. The latter market is immediately west of Duvall and may be somewhat indicative of the potential apartment market in the city. As shown in the table, average rents in Woodinville/Totem Lake apartments were \$1.49 per square foot per month for all units and \$1.62 per square foot for buildings 2008 and newer. Vacancy rates were higher in the newer buildings. In comparison, rates for King County as a whole were roughly the same for all units at \$1.50 per square foot per month, but much higher at \$2.16 per square foot for buildings 2008 and newer.

Apartments in mixed use buildings with three or more floors of residential above a floor of commercial space and one or more levels of underground parking cost from \$175,000 to \$200,000 to develop and require monthly rents of \$1.70 to \$1.90 per square foot per month. This range is higher than the current average rate for new buildings in Woodinville/Totem Lake. It is also higher than potential levels of rents in Duvall for a similar product.

Based on these results, it is likely that mixed use apartments above commercial and underground parking are not feasible at this time. It would be unrealistic to require or even expect such a form of development. However, it is realistic to expect that horizontal mixed use development, such as at Copper Hill, would be feasible and is a suitable form for expanded multifamily development in Duvall.



Table ED-11. Comparative Apartment Market Conditions-Fall 2013

	All	Studio	1 Bed	2 Bd/1 Bath	2 Bd/2 Bath	3 Bd/2 Bath
Woodinville/Totem Lake						
All Years Built						
Market Vacancy	5.3%	8.3%	5.4%	3.8%	5.5%	5.0%
Actual Rent	\$1,235	\$932	\$1,084	\$1,240	\$1,473	\$1,604
Actual Rent/NRSF	\$1.49	\$1.89	\$1.58	\$1.41	\$1.45	\$1.31
Avg. NRSF	829	493	686	879	1,016	1,224
Buildings 2008 & Newer						
Market Vacancy	7.6%	n/a	7.5%	7.0%	8.1%	8.3%
Actual Rent	\$1,466	n/a	\$1,273	\$1,527	\$1,805	\$1,814
Actual Rent/NRSF	\$1.62	n/a	\$1.70	\$1.62	\$1.58	\$1.39
Avg. NRSF	905	n/a	749	943	1,142	1,305
King County						
All Years Built						
Market Vacancy	3.8%	3.6%	3.4%	3.7%	4.2%	5.3%
Actual Rent	\$1,227	\$1,013	\$1,129	\$1,160	\$1,446	\$1,536
Actual Rent/NRSF	\$1.50	\$2.13	\$1.66	\$1.33	\$1.39	\$1.23
Avg. NRSF	818	476	680	872	1,040	1,249
Buildings 2008 & Newer						
Market Vacancy	4.3%	4.1%	4.0%	4.5%	5.1%	5.5%
Actual Rent	\$1,733	\$1,264	\$1,619	\$1,895	\$2,269	\$2,316
Actual Rent/NRSF	\$2.16	\$2.45	\$2.24	\$2.18	\$1.98	\$1.62
Avg. NRSF	802	516	723	869	1,146	1,430

Source: Dupre+Scott, Apartment Vacancy Survey. 2013.



5.3.3 COMPETITIVE POSITION

Given the characteristics of the city described in the preceding profile, the city's competitive position can be summarized in terms of strengths, weaknesses, opportunities, and threats.

5.3.3.1 Strengths, Weaknesses, Opportunities, and Threats (SWOT) Analysis

STRENGTHS

- Desirable residential community;
- Strong population growth;
- Attractive physical setting;
- Strong local-serving retail developments;
- Capacity for residential and commercial growth.

WEAKNESSES

- Isolated from population centers and major regional transportation routes;
- Shortage of high paying professional jobs;
- Shortage of affordable workforce housing;
- Lack of regional healthcare and cultural facilities;
- Lack of high profile tourist destinations;
- Lack of facilities that support visitors, especially lodging;
- Lower revenues to fund local public services than comparable cities, as designated by Association of Washington Cities (AWC).

OPPORTUNITIES

- Commercial support needed for residential growth;
- Commercial and residential uses can co-locate in mixed use developments with attractive pedestrian oriented settings;
- Information based primary employment can locate in somewhat remote sites;
- Rural towns are popular destinations for visitors from urban areas.

THREATS

- Other communities compete for the same employers and visitors;
- Commuters face increasing challenges related to regional travel, given congestion and cost;
- Increasingly scarce funding challenges necessary infrastructure improvements.

Goals and policies in the Economic Development Element build on the strengths, address weaknesses and threats, and pursue opportunities.



5.3.3.2 Fiscal Conditions

Fiscal conditions are the revenue and cost relationships for the provision of public services. A strong economy will provide a strong tax base, funding new public facilities and improvements. Quality public facilities and services will make the community attractive to residents, employees, and visitors. The fiscal conditions are presented in terms of fiscal trends, comparison to similar communities, and factors affecting future revenues and expenses.

5.3.3.3 Trends

Trends in revenues and expenses can be derived from data compiled for local governments by the Washington State Auditor’s Local Government Financial Reporting System (LGFRS). The LGFRS data is provided in a standard format with any duplication removed. Operating revenues and expenses are identified for operating funds, defined as the general fund and special revenue funds. Special revenue funds cover regular public services but are funded by targeted revenue sources. **Table ED-9** presents operating revenue and expense data for the period 2007 to 2012. This period includes the years before the recent recession, the recession, and the subsequent recovery.

Table ED-12. City of Duvall Revenue and Expense Trends , General Fund and Special Revenue Funds

Resources	2007	2008	2009	2010	2011	2012
Taxes						
General Property Taxes	\$1,109,154	\$1,180,218	\$1,272,254	\$1,292,031	\$1,322,536	\$1,227,367
Retail Sales & Use Taxes	811,836	747,009	676,763	692,681	750,155	817,110
Interfund Taxes	186,974	207,779	202,424	200,373	224,796	260,479
Business Taxes	673,272	699,418	664,699	648,573	595,848	627,684
Excise Taxes	22,616	13,295	13,707	18,539	18,392	19,403
Subtotal	2,803,852	2,847,719	2,829,847	2,852,197	2,911,727	2,952,043
Licenses & Permits	239,808	246,611	190,221	246,033	462,561	452,328
Intergovernmental Revenues	859,229	845,820	875,757	919,651	875,475	846,239
Charges for Goods and Services	292,896	277,090	218,852	265,972	240,622	251,571
Fines & Penalties	12,170	3,576	1,657	606	389	55,105
Miscellaneous Revenues	214,401	188,442	117,668	117,205	86,365	108,562



Table ED-13 Continued

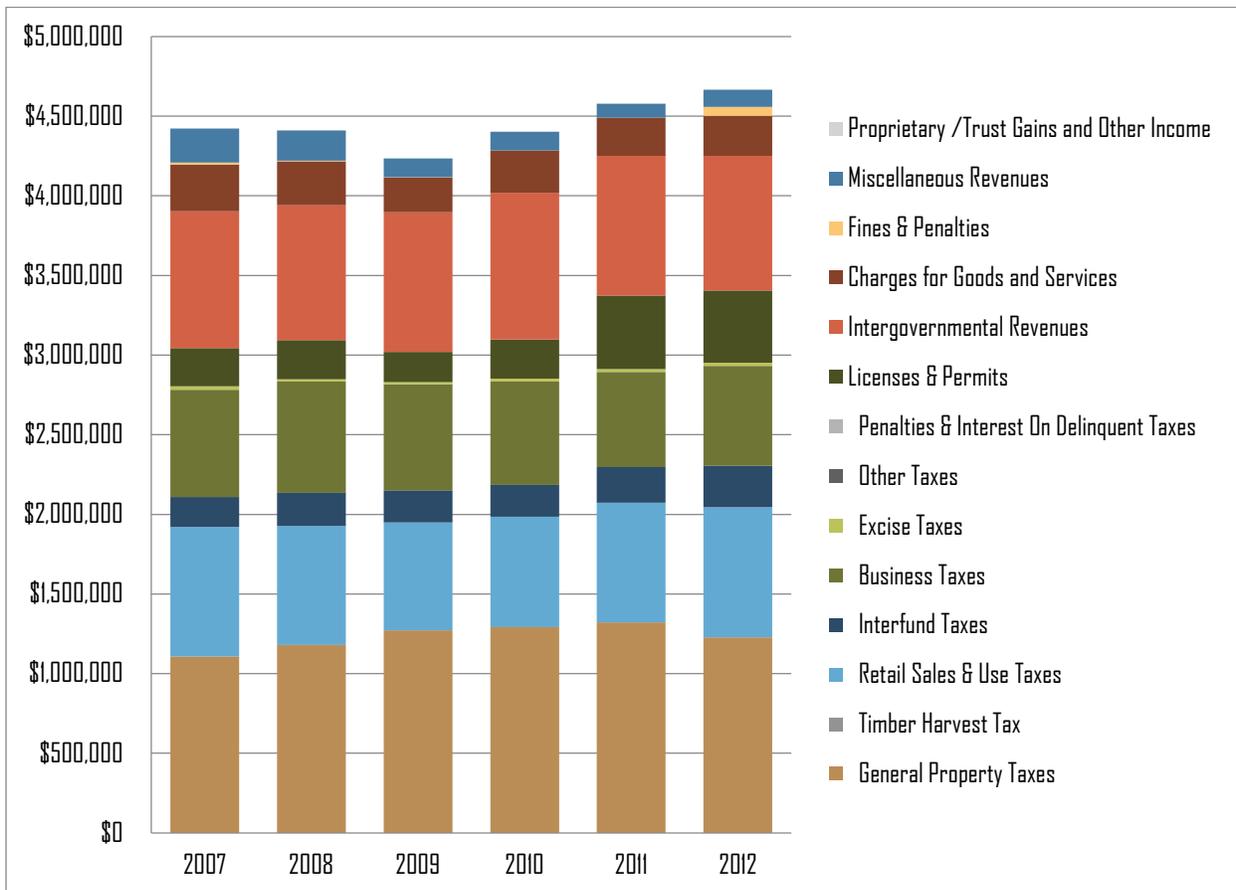
Resources	2007	2008	2009	2010	2011	2012
Other Financing Sources	-	19,940	14,850	1,552	1,078	641
Total	\$4,422,356	\$4,429,198	\$4,248,852	\$4,403,216	\$4,578,217	\$4,666,489
Expenditures	2007	2008	2009	2010	2011	2012
General Government	\$724,534	\$723,621	\$659,437	\$609,362	\$617,994	\$776,033
Public Safety						
Law Enforcement	2,012,130	2,244,937	2,264,759	2,243,954	2,204,797	2,250,017
Fire Control	-	-	-	-	533	-
Detention And Correction	97,763	93,642	103,311	113,078	104,222	55,249
Emergency Services	54,912	4,618	22,296	4,096	4,181	4,727
Subtotal	2,164,805	2,343,197	2,390,366	2,361,128	2,313,733	2,309,993
Utilities And Environment	251,966	213,334	207,985	172,694	155,587	223,020
Transportation	396,667	485,488	460,061	433,208	651,940	417,995
Economic Environment	795,595	841,299	478,215	490,693	467,449	410,856
Mental & Physical Health	1,349	1,360	1,419	1,493	1,584	1,749
Culture And Recreation	332,057	292,702	256,183	241,515	224,294	248,565
Other Financing Uses/Debt Service/Capital Expenditures	587,355	242,349	17,233	143,581	1,006	39,046
Total	\$5,254,328	\$5,143,350	\$4,470,899	\$4,453,674	\$4,433,587	\$4,427,257

Source: Washington State Auditor's Office, Local Government Financial Reporting System, Property Counselors, 2014.



Figure ED-6 summarizes Duvall’s revenue trends graphically. The four largest sources of revenue are general property taxes, retail sales and use tax, intergovernmental revenues (revenues shared by the state and federal governments), and business taxes (primarily taxes on utilities). Total revenues dropped during the recession, but have since passed pre-recession levels. Revenue funds have been fairly stable in Duvall, including the retail sales tax. Most communities experience highly cyclical trends. Revenue funds generally decline during economic slowdowns, as consumer spending and new construction declines.

Figure ED-6. City of Duvall General Fund and Special Revenue Funds Trends

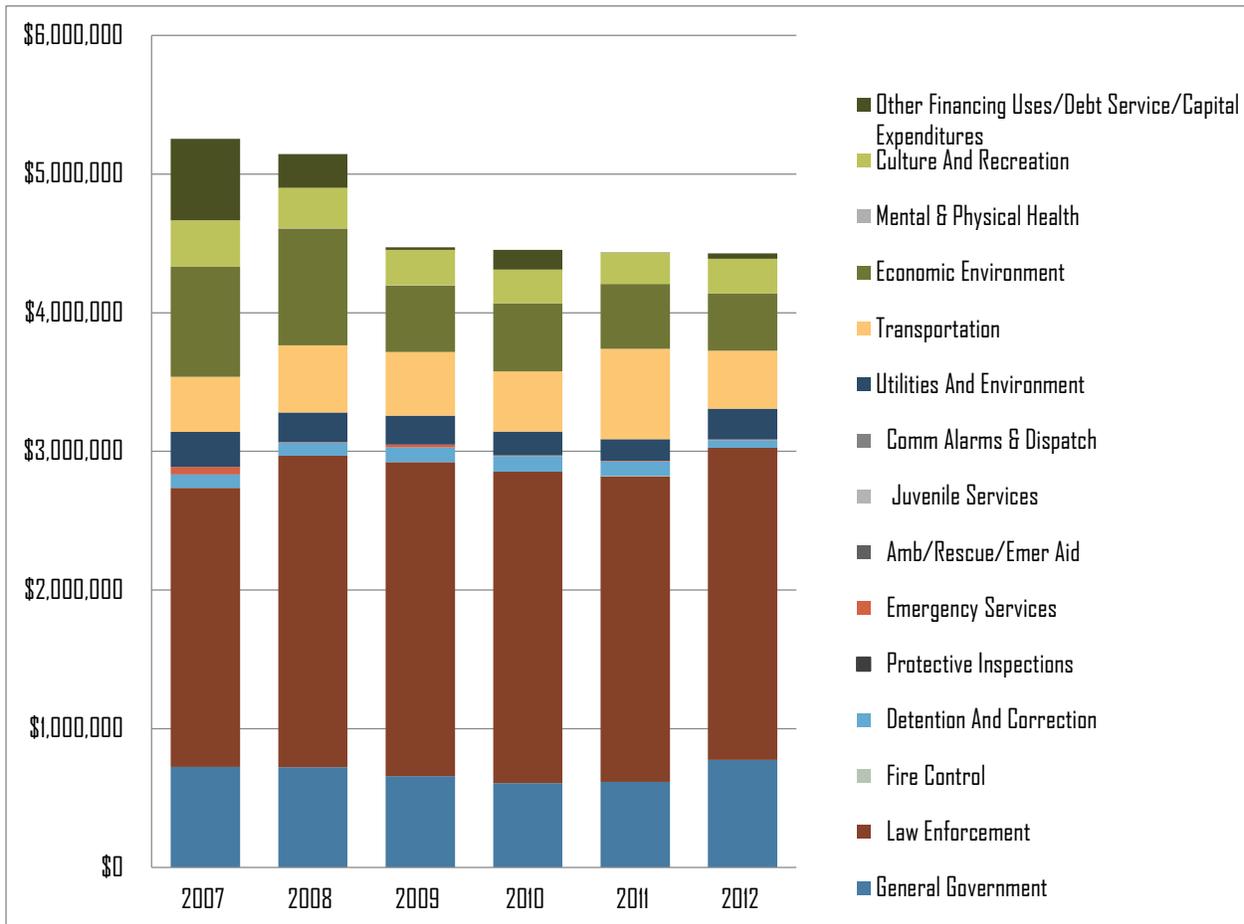


Source: Washington State Auditor’s Office, Local Government Financial Reporting System, Property Counselors, 2014.

Figure ED-7 presents operating expenditures for the same period. Expenditures exceeded revenues in 2007 and 2008 as the city drew down its fund balances. In subsequent years, expenditures dropped to levels equivalent to revenue collections. Public safety, primarily law enforcement, represents over half of total operating expenditures. Public safety expenditures have remained constant over the period while general government expenditures have grown. During this period, Duvall provided police coverage to Carnation on a contract basis. That contract ended at the end of 2013. Expenditures to serve Carnation were approximately \$520,000 to \$550,000 per year. “Economic Environment” which includes planning and community development, declined over the period, as did “culture and recreation.”



Figure ED-7. City of Duvall General Fund and Special Revenue Funds Expenditure Trends



Source: Washington State Auditor’s Office, Local Government Financial Reporting System, Property Counselors, 2014.

5.3.3.4 Comparison to Similar Communities

The LGFRS data can also be used to compare Duvall to other communities. The AWC has a classification scheme for cities based on size, property value, activity, growth, and geography (western or eastern Washington). Duvall is included in AWC Residential Cluster 8, along with similar small- to medium-sized cities that have seen high growth over the 1990s with low commercial activity, and have a relatively high median household income. Duvall is classified as a “metro area residential” city based on its medium size, high property value, moderate commercial activity, and high growth.

Table ED-10 compares per capita revenues and expenditures for Duvall and AWC Residential Cluster 8 city averages. Duvall has relatively low per capita property taxes reflecting lower property values than other residential communities in the residential cluster. It has comparable retail sales and business taxes. It has high levels of intergovernmental revenues, at least partly due to the previous contract with Carnation for police services. Overall, total per capita revenues are well below levels in the other communities.

On the expenditure side, the City has total per capita expenditures equal on average to the other residential cities. However, some of those cities provide fire protection. Duvall law enforcement



expenditures are much higher than the other cities. Much of this difference is due to the costs of serving Carnation under a previous contract. Culture and recreation expenditures are lower on a per capita basis.

These relationships are shown graphically in **Figures ED-8** and **ED-9** for revenues and expenditures respectively.

Table ED-14. Comparison of Per Capita Revenue and Expenses for General and Special Revenue Funds, Duvall and AWC Residential Cities 2012

Resources	Duvall (\$)	AWC Residential Cluster Averages (\$)
Taxes		
General Property Taxes	177.88	253.70
Retail Sales & Use Taxes	118.42	116.96
Interfund Taxes	37.75	8.30
Business Taxes	90.97	85.93
Excise Taxes	2.81	27.18
Other Taxes	-	0.21
Penalties & Interest On Delinquent Taxes	-	0.21
Subtotal	427.83	492.48
Licenses & Permits	65.55	45.57
Intergovernmental Revenues	122.64	66.68
Charges for Goods and Services	36.46	79.98
Fines & Penalties	7.99	12.15
Miscellaneous Revenues	15.73	24.61
Other Financing Sources	0.09	42.89
Total	676.30	764.36
Expenditures	Duvall 2012 (\$)	AWC Residential Cluster 2012 (\$)
General Government	112.47	128.39



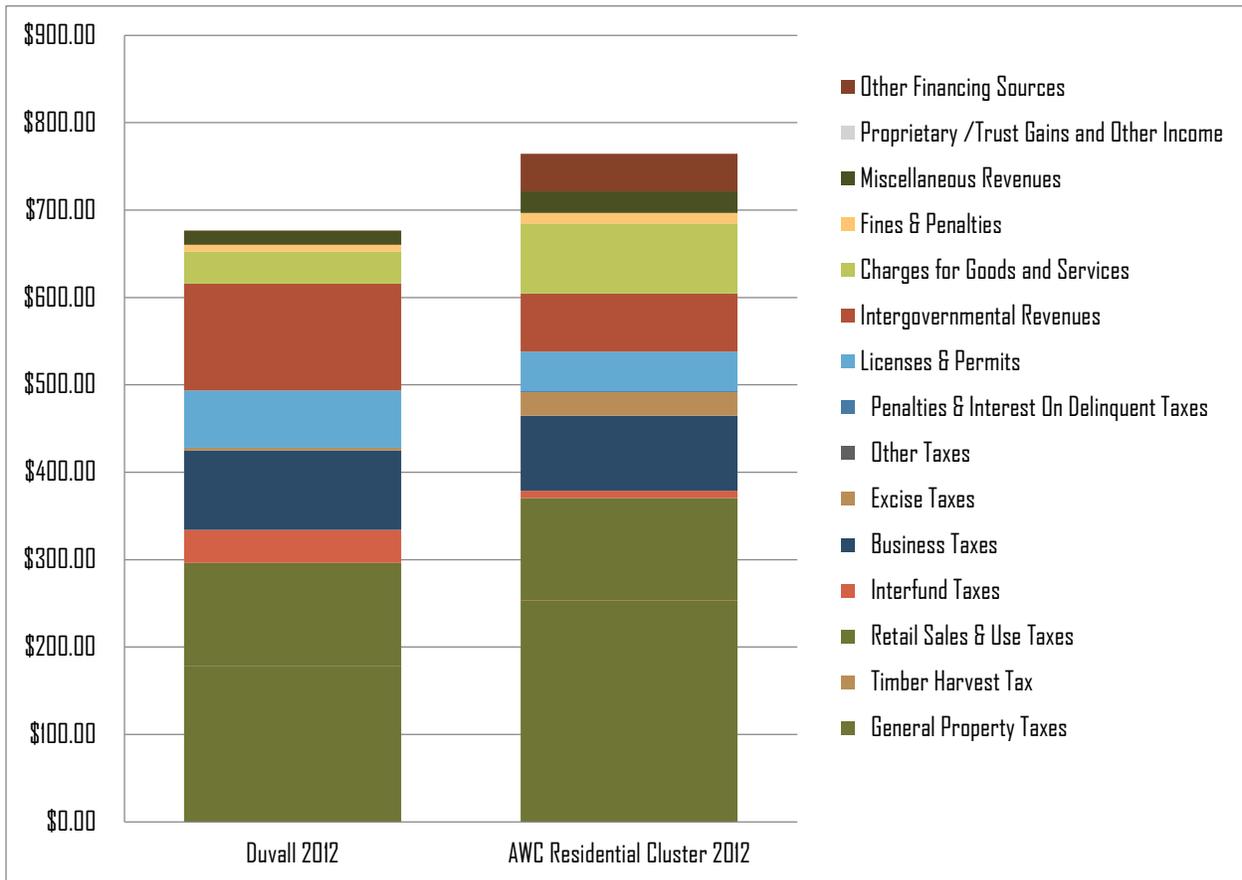
Table ED-15 Continued

Expenditures	Duvall 2012 (\$)	AWC Residential Cluster 2012 (\$)
Public Safety		
Law Enforcement	326.09	182.61
Fire Control	-	64.22
Detention And Correction	8.01	11.56
Protective Inspections	-	2.22
Emergency Services	0.69	1.73
Amb/Rescue/Emer Aid	-	17.16
Comm Alarms & Dispatch	-	9.38
Subtotal	334.78	288.88
Utilities And Environment	32.32	23.13
Transportation	60.58	58.21
Economic Environment	59.54	49.50
Mental & Physical Health	0.25	3.29
Culture And Recreation	36.02	62.02
Other Financing Uses/Debt Service/Capital Expenditures	5.66	24.68
Total	641.63	638.10

Source: Washington State Auditor's Office, Local Government Financial Reporting System, Property Counselors, 2014; Association of Washington Cities, 2014



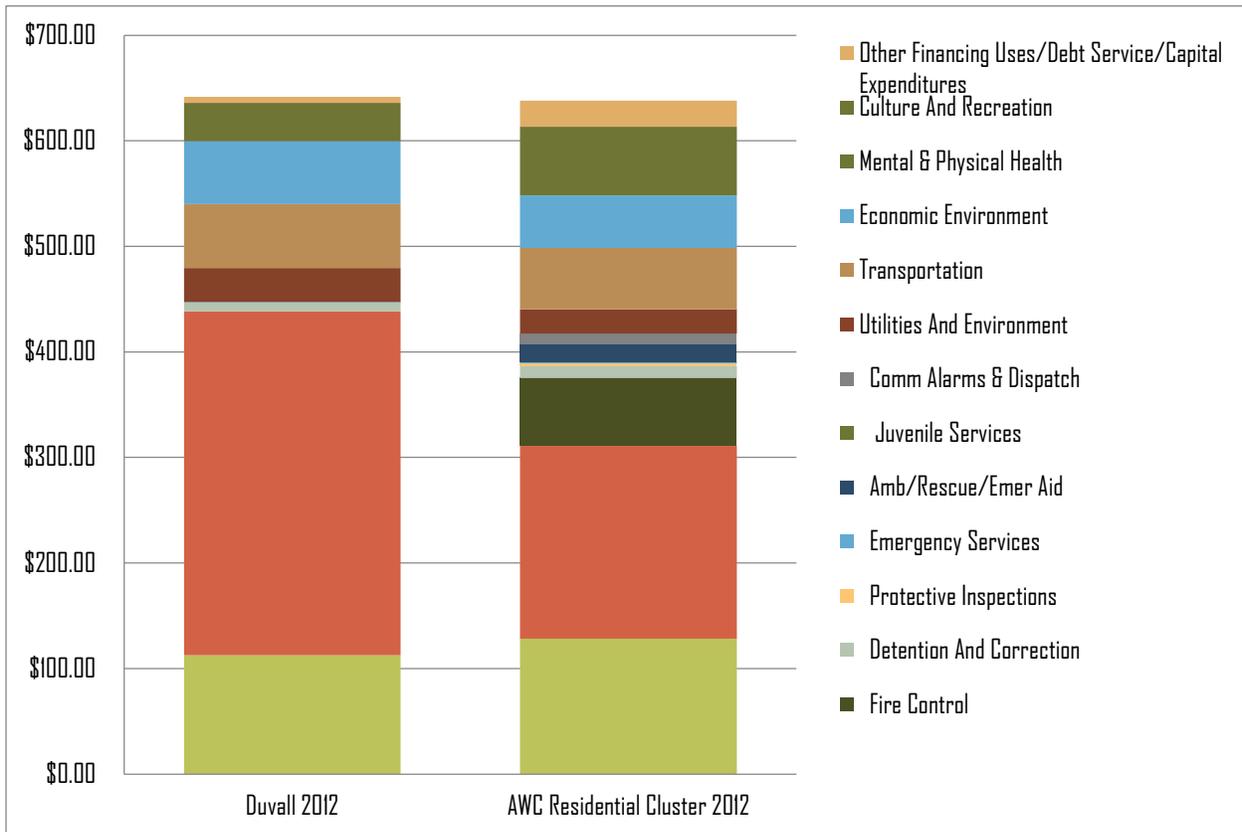
Figure ED-8. Comparison of Per Capita Revenues General Fund and Special Revenue Funds 2012



Source: Washington State Auditor’s Office, Local Government Financial Reporting System, Property Counselors, 2014.



Figure ED-9. Comparison of Per Capita Expenditures General Fund and Special Revenue Funds 2012



Source: Washington State Auditor’s Office, Local Government Financial Reporting System, Property Counselors, 2014.

5.3.3.5 Factors Affecting Future Revenues and Expenses

There are several factors that drive future revenues and expenses beyond public policy. Expenditures grow with population growth, inflation, demands for more sophisticated services, and efficiencies through economies of scale. Revenues grow with new development, consumer spending, and inflation. However, revenue sources can be volatile, and depending on their proportion of the revenue stream, can impact the City’s economic status. For example, retail sales tax is an important source of funds, but also the most volatile because of its reliance on construction sales tax on and the associated business cycle. Conversely, property taxes are a relatively consistent source of revenue but are limited by state statute to a 1 percent increase annually (plus taxes on new development). As a result, the property tax rate is driven down during times of strong growth in real estate values, and pushed up during times of slow or no growth. The combination of factors affecting revenues emphasizes the importance of a mix of revenue sources.



5.4 References

- Association of Washington Cities (AWC). 2014. Cluster 8 Residential Communities. Olympia, WA.
Available: https://www.awcnet.org/stateofthecities/soc05/profiles/2005_cluster_profile_08.htm
- Bureau of Labor Statistics. 2012. Consumer Expenditure Survey. Available: <http://www.bls.gov/ce/>.
- City of Duvall. 2016. Memorandum, *City of Duvall 2015 Capacity and Transportation Analysis Study/EIS Alternatives*. Dated January 15, 2016.
<http://www.duvallwa.gov/DocumentCenter/Home/View/2687>
- Berk and Associates. 2005. *Economic Development Strategic Action Plan (EDSAP): 2006-2011*. December. Prepared for City of Duvall, Duvall, WA.
- King County Growth Management Planning Council. 2009. *Housing and Employment Growth Targets (2006-2031)*. Available:
https://www.kingcounty.gov/property/permits/codes/growth/GMPC/MeetingArchive/~/_media/property/permits/documents/GMPC/2009/2009OctRptTargets.ashx
- King County Growth Management Planning Council. 2012. *Countywide Planning Policies*. December. Seattle, WA.
- King County Office of Performance, Strategy and Budget. 2014. *The King County Buildable Lands Report 2014*. July. Seattle, WA.
- Puget Sound Regional Council. 2009. *VISION 2040*. December. Seattle, WA.
- Property Counselors. 2014. *City of Duvall Comprehensive Plan Update - Economic Element - Economic Profile*. April. Seattle, WA.
- Puget Sound Regional Council. 2014. *Land Use Targets Workbook*. April. Seattle, WA.
- U.S. Census Bureau. 2010. Census 2010 General Demographic Characteristics (Population, Age, Sex, Race, Households, and Housing Information) from American Fact Finder. Washington, D.C.
Available: http://factfinder.census.gov/faces/nav/jsf/pages/community_facts.xhtml.
- Washington State OFM (Office of Financial Management). 2012. *Washington State Growth Management Population Projections for Counties: 2010-2040, 2012 Medium Series Projections*. Available:
<http://www.ofm.wa.gov/pop/gma/projections12/projections12.asp>.



CHAPTER 6. TRANSPORTATION ELEMENT

6.1 Introduction

6.1.1 PURPOSE AND INTENT

The Transportation Element guides the development of the City's transportation system to accommodate existing and future growth described in the Land Use Element. Significant residential and commercial development, along with associated population and employment, is anticipated by 2035 based on land use and zoning analysis. Planned transportation system improvements will support continued population growth, provide alternatives that enable system users to more easily travel via motorized and non-motorized routes, and contribute to Duvall's character as an attractive place for residents, businesses, and tourists.

The Transportation Element supports sustainable programs, projects, and services that address economic, social, and environmental needs in the context of transportation planning. It incorporates local, regional, and national transportation policies and focuses on interjurisdictional collaboration to support infrastructure connectivity for local and regional users.

The following Goals and Policies will guide the nature and development of Duvall's transportation system over the next twenty years. The Transportation Element Analysis following the goals and policies describes the existing transportation system, vehicular traffic forecast based on projected population and employment growth, anticipated level of service at key intersections, and funding strategies to support transportation improvement projects.

6.2 Goals and Policies

Goal T1: Transportation infrastructure enhances the quality of life in existing and new neighborhoods, is safe, and is functional for all users.

Policies

- T 1.1 Encourage well-designed, low-maintenance landscaping on road frontages and adjacent to public rights-of-way that is attractive to the traveling public.
- T 1.2 Encourage the development and integration of low-impact street designs.
- T 1.3 Encourage right-of-way improvements, expansions, and connections as warranted by increased population and traffic growth.
- T 1.4 Provide adequate parking, including for compact cars and motorcycles, to support business and population needs.
- T 1.5 Encourage shared parking and general parking areas for private developments to locate at the back or side of existing or proposed structures.
- T 1.6 Encourage shared parking and general parking areas for private developments to locate at the back or side of existing or proposed structures.



- T 1.7 Continue to provide public parking for McCormick Park and Snoqualmie Valley Trail jointly with the police facility at Stephens Street and Railroad Avenue.
- T 1.8 Support a public parking facility for the Snoqualmie Valley Trail in the vicinity of Main Street and NE 143rd Place.
- T 1.9 Ensure pedestrian walkways are established and maintained through parking facilities and between developments.
- T 1.10 Require pedestrian amenities for new public and private development and include passive recreation components such as resting spots or “eddies.”
- T 1.11 Expand Americans with Disabilities Act (ADA) improvements throughout Duvall’s transportation system.
- T 1.12 Revise the roadway classification system as needed to ensure that transportation system improvements are compatible with adjacent land uses and minimize potential conflicts. Street classifications should reflect the desired function of the street.
- T 1.13 Support trail interconnectivity throughout the City to schools, parks and community facilities.
- T 1.14 Incorporate options for non-motorized transportation into the City’s transportation system and use wayfinding signs to direct residents and visitors to desirable destinations within the City.
- T 1.15 Update and implement Duvall’s pedestrian corridor system design guidelines.
- T 1.16 Ensure development provides infrastructure for pedestrians and cyclists, and linkages to the surrounding community. Specifically, promote increased non-motorized connections for east-west corridors within the city.
- T 1.17 Promote Low Impact Development (LID) approaches where appropriate and alternative road standards including possible road width reductions to promote non-motorized transportation and healthy communities.
- T 1.18 Promote wayfinding, shared use of facilities, and safety through signage and public education materials.
- T 1.19 Support and encourage shared parking facilities as part of development or redevelopment of parks, trails, and open space.
- T 1.20 Establish connectivity standards for thoroughfares and non-motorized routes to ensure development is interconnected to adjacent properties and thoroughfares, and to reduce fragmentation in the transportation network as the City builds out.
- T 1.21 Discourage installation of new cul-de-sac except when topographical or circulation constraints warrant their use.



- T 1.22 Design streetscapes on main thoroughfares to accommodate multi-modal transportation options such as motor vehicles (including buses), bicycles, and pedestrians.
- T 1.23 Install bicycle racks at new commercial developments, industrial developments, and city parks (whether new or established) to accommodate bicycle use.
- T 1.24 Design street lighting to take into consideration the needs of motorists, cyclists, and pedestrians while limiting excessive glare to adjacent residential uses.
- T 1.25 Integrate traffic safety design techniques into the street design to assist in safeguarding pedestrians, and cyclists, particularly near schools, playgrounds, and at crosswalks.
- T 1.26 Include stalls specifically designed for compact cars and motorcycles within both public and private parking lots.
- T 1.27 Provide pedestrian access between new residential development and adjacent schools, parks, playgrounds, or commercial areas if such access is not conveniently provided by sidewalks (whether existing or proposed) in the right-of-way outside of the development.

Goal T2: Interagency coordination supports ongoing improvements to the transportation system.

Policies

- T2.1 Coordinate with King and Snohomish counties, Monroe and Carnation, WSDOT, and PSRC to encourage state and federal funding of the Rural Town Centers and Corridors Program and to plan and fund projects on SR-203.
- T2.2 Collaborate with the Washington Traffic Safety Commission and WSDOT to make safety improvements to SR-203.
- T2.3 Encourage the state to designate SR-203 a Highway Safety Corridor from Monroe to Fall City.
- T2.4 Use grants, local taxes and funds, impact fees, and other funding sources to implement capital projects as identified in the City’s CIP and TIP.
- T2.5 Coordinate with WSDOT to implement the Access Management Guidelines to protect the functional and economic viability of Main Street.
- T2.6 Coordinate with WSDOT and King County DOT to improve pedestrian and bicycle safety on State and County roads.
- T2.7 Encourage the Riverview School District to create and maintain a “Safe Routes to School Program.”



- T2.8 Encourage King and Snohomish counties to implement Snoqualmie Valley Trail improvements consistent with the “SR-203 Pilot Study: Corridor Concept Plan” (PSRC, 2004).
- T2.9 Solicit action by WSDOT and King County DOT to plan and construct improvements to State and County arterial systems that are needed to connect Duvall to regional employment and commercial districts.
- T2.10 Work with King County DOT to determine future configuration and relocation of the Woodinville-Duvall Bridge.
- T2.11 Encourage King County DOT and WSDOT to improve capacity and safety for Duvall commuters outside of City limits.

Goal T3: Main Street is the heart of Duvall and an attractive destination for citizens, tourists and businesses.

Policies

- T3.1 Preserve and enhance the visual character of the corridor to support Main Street’s economic vitality.
- T3.2 Enhance the flow of traffic without increasing vehicular speeds or compromising the pedestrian and bicycling environment by making necessary improvements to the transportation system.
- T3.3 Minimize the use of traffic signals, where feasible, by employing alternative traffic control methods such as traffic circles and roundabouts.
- T3.4 Encourage appropriately scaled and designed parking to support business and recreational uses.
- T3.5 Support non-motorized activity by creating ample, safe, interconnected pedestrian and bicycle corridors.
- T3.6 Collaborate with WSDOT, King County DOT, and Snohomish County to identify a truck bypass route for Main Street to minimize truck traffic through the City.
- T3.7 Encourage transportation safety through implementation of appropriate traffic calming measures, improving and maintaining visibility at intersections, and ensuring adequate illumination.
- T3.8 Establish distinctive gateways at entrances through incorporation of over-the-road gateway signs, landscaped medians and planter strips, art, or other entry features.
- T3.9 Enhance the streetscape with special features such as distinctive street lighting (capable of holding seasonal street banners and flower baskets), street trees, street furniture, art, embedded street names in the sidewalk at intersections, unique crosswalk designs, landscaped medians, water features, and other elements.



- T3.10 Develop, maintain, and expand a signage and wayfinding program that directs vehicles and pedestrians to parking areas, public facilities, and attractions in Old Town.
- T3.11 Encourage and educate Old Town businesses to preserve on-street parking spaces for business patrons and encourage employees to park off-street.
- T3.12 Allow for more short-term parking in Old Town to support businesses by restricting commuter parking and encouraging use by business patrons.
- T3.13 Identify opportunities to provide public off-street parking lots within Old Town and establish new parking as resources permit.



Photo T-1. On-street parking in Old Town

Goal T4: Duvall provides multimodal opportunities that reduce reliance on driving alone and support healthy lifestyles.

Policies

- T4.1 Develop transportation facilities that support transit, carpooling, and non-motorized transportation modes to reduce the use of single occupancy vehicles and associated impacts to air and water quality.
- T4.2 Coordinate with King County Metro to improve transit service within the Duvall area, particularly between Duvall and major commercial and employment districts within the Puget Sound region and in the surrounding Snoqualmie Valley region.
- T4.3 Coordinate with King County Metro to expand transit service to the south end of Duvall and to the upper residential neighborhoods when there is a demand for service.
- T4.4 Coordinate with KC Metro and Community Transit to improve transit to and from Snohomish County.



Photo T-2. King County Metro bus
Source: Leo Koszewski, www.busdrawings.com



- T4.5 Encourage high-density residential development within walking distance of Duvall's business districts and the Community Car Park.
- T4.6 Support improvements for non-motorized access to transit facilities in Old Town to encourage transit ridership.
- T4.7 Provide bus shelters and other enhancements at higher volume bus stops to provide for rider comfort and safety.
- T4.8 Enhance transit service commensurate with population growth and increased activity in Duvall.
- T4.9 Increase use of the Duvall Community Car Park as a park-and-ride facility by increasing public awareness of it and working with King County Metro to improve bus and pedestrian access to it.
- T4.10 Implement multi-modal improvements stipulated in the Transportation Improvement Projects and Programs and as prioritized in the Six-Year TIP.

Goal T5: Reduced dependency on single-occupancy vehicles and increased use of high-occupancy vehicles.

Policies

- T5.1 Develop and implement Transportation Demand Management (TDM) strategies to increase use of high-occupancy vehicles and support the efficient use of transportation facilities.
- T5.2 Participate in the education and promotion of City and regional non-motorized transportation and public transit facilities and services.
- T5.3 Implement a Commute Trip Reduction (CTR) ordinance at such time when an employer or commercial development has 100 or more employees working a shift.
- T5.4 Develop transportation plans and programs that consider the impact to air and water quality and support County, regional, and state air quality goals and requirements. Educate residents about air quality impacts, alternative modes of transportation and alternative fuels.

Goal T6: Transportation facilities are upgraded concurrent with new development to ensure the viability of the City's transportation system and to discourage urban sprawl.

Policies

- T6.1 Implement adopted Level of Service (LOS) standards for all major thoroughfares in the City and consider establishing and implementing LOS standards for all non-motorized routes within the City. LOS standards may be re-evaluated and adjusted as needed.
- T6.2 Implement a concurrency management system to assess the expected transportation impact of proposed development on the available capacity of the arterial system.



- T6.3 Allow new development only when transportation facilities are adequate at the time of development, or unless a financial commitment is in place to complete the necessary improvements or strategies that will accommodate the impacts within six years.
- T6.4 The City will not apply concurrency to the Main Street Corridor or intersections along Main Street.
- T6.5 Implement a reassessment strategy that alters land use or transportation assumptions or delays projects if funding levels cannot be met to implement the improvements.
- T6.6 Require new developments to plan for, design, and construct local streets that facilitate access, circulation, and emergency vehicle response.
- T6.7 Establish development review guidelines that implement the City's transportation policies, including LOS standards, concurrency, and mitigation requirements.
- T6.8 Establish requirements for Traffic Impact Analysis that will be required by all new developments above a specified threshold.
- T6.9 Regularly update the Transportation Plan to align with regional target allocations for housing and employment growth.

6.3 Transportation Element Analysis

This section describes the regulatory setting, existing transportation system, vehicular traffic forecast based on projected population and employment growth, anticipated level of service at key intersections, and funding strategies to support transportation improvement projects. Additional detail about the transportation system and Duvall's management of the system is provided in the Transportation Plan.

6.3.1 GENERAL OVERVIEW

The City of Duvall supports efficient, comprehensive, and cost-effective transportation systems that serve all aspects of the community including motorized, non-motorized, and transit users. The City strategically plans and funds system improvements that promote high quality of service for residents

and visitors alike. The Transportation Element is largely based on the 2009 City of Duvall Transportation Plan Update (City of Duvall, 2010) and includes the following:

1. Regulatory Setting
2. Transportation System
3. Transportation Improvement Plan
4. Healthy Communities
5. Transportation Demand Management
6. Transportation Finance Plan



7. Intergovernmental Coordination
8. Transportation Planning References

6.3.2 REGULATORY SETTING

The Transportation Element is based on State, Regional, and County legislation, as described below.

6.3.2.1 Growth Management Act

Under the Growth Management Act (GMA) (RCW 36.70A.070), the Transportation Element is required to assess the needs of a community and determine how to provide appropriate transportation facilities for current and future residents. The element must contain:

- Inventory of existing facilities;
- Assessment of future facility needs to meet current and future demands;
- Multi-year plan for financing proposed transportation improvements;
- Forecasts of traffic for at least 10 years based on adopted land use plan;
- Level of Service (LOS) standards for arterials and public transportation, including actions to bring deficient facilities into compliance;
- Transportation Demand Management (TDM) strategies;
- Identification of intergovernmental coordination efforts.

After adoption of the comprehensive plan, jurisdictions must prohibit development that causes the level of service on a locally owned transportation facility to decline below the standards adopted in the transportation element, unless transportation improvements or strategies to accommodate the impacts of development are made concurrent with the development.

6.3.2.2 Puget Sound Regional Council VISION 2040

VISION 2040 was adopted as the central Puget Sound region's long-range strategy for growth management, the environment, economic development, and transportation (PSRC, 2010). While VISION 2040 builds on previous regional plans, including the VISION 2020 (adopted in 1995) and Destination 2030 (PSRC, 2007) updates, it also introduces new provisions to guide and coordinate regional and local planning in King, Kitsap, Pierce, and Snohomish counties. Successful implementation of VISION 2040 relies on successful implementation of local comprehensive plans.

In order to address VISION 2040, updated countywide planning policies needed to be complete by December 2010 with the GMA review and update of local comprehensive plans in 2013. The City of Duvall addressed the majority of the VISION 2040 requirements as part of the 2009 Transportation Element Update (City of Duvall, 2010). Any remaining VISION 2040 deficiencies will be addressed as part of the 2016 Transportation Plan and Transportation Element update in 2016-2017.

6.3.2.3 Concurrency

The City addresses concurrency as part of the City of Duvall development review process to maintain adopted levels of service. On-site frontage improvements, as well as off-site improvements if needed



to mitigate impacts, are required at the time development occurs for motorized and non-motorized, pedestrian, and other multimodal transportation options. The City's concurrency program also considers local centers and subareas to encourage development that can be supported by transit. The City does not apply vehicle capacity or intersection concurrency requirements to SR-203 because the City does not have the authority to alter the level of service on a state highway, make final decisions concerning improvements to the highway, or have the ability to raise necessary funding for improvements.

6.3.2.4 Countywide Planning Policies

The King County Countywide Planning Policies (CWPPs) require that local jurisdictions develop a balanced Transportation Element that is consistent with VISION 2040 and proposed regional mobility (i.e. autos, transit, bicycle, pedestrian, air, and so forth). The CWPPs promote high capacity transit, non-motorized transportation, high-occupancy vehicle travel, mode-split goals, preservation and maintenance of existing transportation facilities, and development of financing strategies to meet future needs.

6.3.2.5 Clean Air Conformity Act

The Transportation Element is also subject to the Washington State Clean Air Conformity Act that implements the directives of the Federal Clean Air Act. Because air quality is a region-wide issue, the City of Duvall's Comprehensive Plan must support the efforts of state, regional, and local agencies as guided by WAC 173-420-080.

6.3.2.6 Healthy Communities

Recognizing the growing need for physical activity among citizens, the Washington State Legislature amended the GMA in 2005 with the Healthy Communities Amendment, ESSB 5186 (Washington State DOC, 2015). Comprehensive plans are directed to address the promotion of Healthy Communities through urban planning and transportation approaches. The two amendments to the GMA require that communities:

- Consider urban planning approaches that promote physical activity in the Land Use Element of a comprehensive plan;
- Include a bicycle and pedestrian component in the Transportation Element of a comprehensive plan.

6.3.3 TRANSPORTATION SYSTEM

6.3.3.1 Street System

The Street system is more than simply traffic conveyance: streets are the framework for development and act as the interface between public facilities and residential and commercial use. The quality of life for vehicle users, pedestrians, bicyclist, and transit riders is directly impacted by the quality of the street system. In addition, frontage features such as landscaping, parking, illumination, public art, street furniture, the relationship of buildings to the street, and other attributes greatly influence and enhance the overall livability of the city.

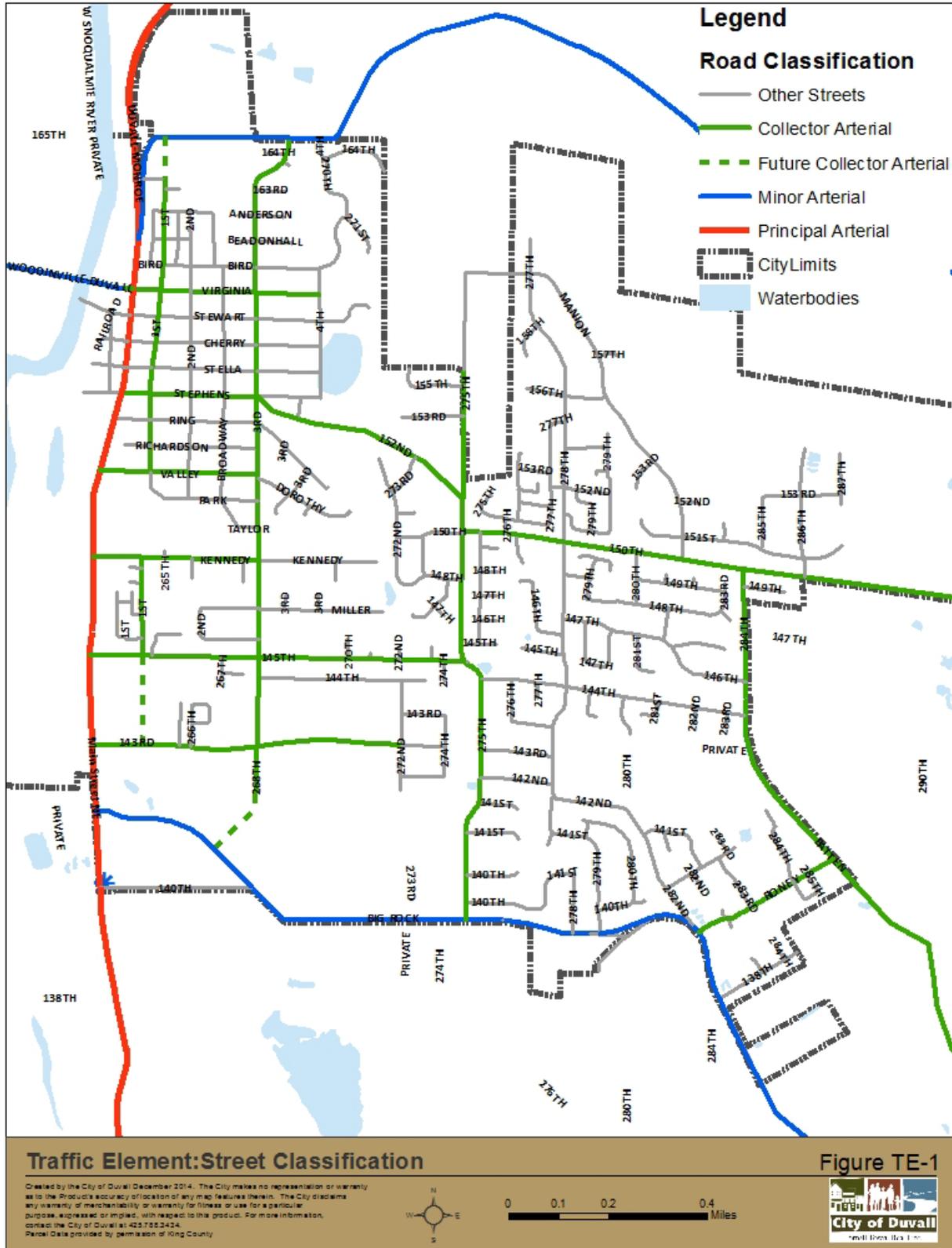


Streets will require strategic design, construction, maintenance, safety, and efficiency improvements to serve the City. In addition, street design must be compatible with adjacent land uses (as described in the Land Use Element), utilities and stormwater best management practices (as summarized in the Capital Facilities Element), and good environmental practices (as described in the Environment and Sustainability Element).

State Route 203, also known as Main Street NE, is a Principal Arterial that is managed by the Washington State Department of Transportation (WSDOT) and conveys the majority of all traffic entering and exiting Duvall. Minor Arterials including NE Big Rock Road and NE Cherry Valley Road convey traffic east into unincorporated King County, while west-bound traffic across the Snoqualmie River Valley is limited to NE Woodinville-Duvall Road or NE 124th Street. A network of Collector Arterials provides major internal connections to these roadways while Subcollector and Subaccess streets provide neighborhood access and circulation. The City of Duvall roadway system is depicted on Figure T-1.



Figure T-1. City of Duval Street Classifications





6.3.3.2 Traffic and Level of Service Forecasts

Level of service and traffic forecasts were developed using a travel demand forecasting model using existing data and forecast land use growth to estimate future traffic demands as summarized in “2015 Capacity and Transportation Analysis Study/EIS Alternatives” (City of Duvall, 2016). The City used a rigorous process to calibrate the forecast model based on 2015 traffic counts and mapped existing parcel-based land use. Forecast growth estimates were based on developer-submitted “pipeline” (in-progress) projects and anticipated growth based on the zoning of parcels without developer-submitted plans.

Forecast travel conditions estimate where future bottlenecks may occur based on future travel demand. Travel demand is based on anticipated changes to land use and the types of trips generated, based on the population and employment allocations. The aggregation of those trips on City roadways provides planners with a future snapshot of the transportation system as a whole. The future baseline transportation system is evaluated under forecast travel conditions and includes committed transportation system projects – those currently under construction or fully funded. This network serves as a base for developing the intersection and roadway projects.

Traffic volumes in urban areas are typically highest during the weekday PM peak hour. This reflects the combination of commuter work trips, shopping trips, and other day-to-day activities which result in travel between 4:00 and 6:00 p.m., Monday through Friday. Therefore, the weekday PM peak hour is typically used for evaluating transportation system needs. 2015 PM Peak hour trips, along with future growth 2035 PM Peak Hour trips, are presented in Table T-1.

Table T-1. Vehicle Traffic Forecast

Land Use Type	2015 PM Peak Hour Trips ¹	2035 Anticipated PM Peak Hour Trips ²
Single Family Residential	2,268	3,107
Multi-Family Residential ³	350	695
Commercial	2,990	9,235
Total	5,608	13,038

¹ Based on Land Use data presented in the memorandum titled “2015 Capacity and Transportation Analysis Study/EIS Alternatives” (City of Duvall, 2016). Includes trips generated within the entire study area (City Limits and UGA/UGAR areas).

² Value identifies the anticipated number of new housing units that could be accommodated within city limits consistent with the City’s Future Land Use Map (see Land Use Element) and Zoning Map along with the North UGA, two parcels in the UGA-Reserve South, and the Southwest UGA should they be annexed (City of Duvall, 2015).

³ Multi-Family is defined as attached fee-simple residential units, attached condominiums or apartments, and manufactured homes within manufactured home communities for the purpose of traffic modeling.

The term “level of service” is used to describe the performance of a transportation facility. Level of service, or LOS, is a qualitative measure used to describe operational conditions and the perception of these conditions by drivers and passengers. LOS are given letter designations from A to F, and are



assigned based on operating conditions; LOS A represents the best operating conditions and LOS F represents the worst. Motorist and passenger perceptions are influenced by travel conditions such as speed, time, freedom to maneuver, traffic interruptions and delays, comfort, and convenience.

The City adopted LOS standards for all intersections and evaluates service levels at weekday PM peak hours, which represent the worst traffic conditions. The City's standard for intersections with a functional classification of principal, minor, or collector arterial is LOS C. The standard for intersections along SR-203 is LOS D. The LOS standard for SR-203 is only established as a guideline for WSDOT to evaluate capacity deficiencies.

6.3.4 TRANSPORTATION IMPROVEMENT PROGRAM

A 20-year Transportation Improvement Program (TIP) was developed as part of the City of Duvall's Transportation Plan (City of Duvall, 2010). The 20-year TIP includes planned major system-wide transportation upgrades to accommodate and mitigate forecasted growth. The City of Duvall annually adopts a Six-Year TIP that documents near-term planned improvements (City of Duvall, 2015). The City's Six-Year TIP projects are selected from the 20-year TIP based on anticipated private development and planned public Capital Improvement Projects. Historically, the City of Duvall completed annual revisions and updates to the Capital Facility Element to document the updated Six-Year TIP list. Future updates to the TIP list will be completed by resolution and adopted by reference, and as amended, in the Transportation Element.

Project types within the TIP generally include intersection improvements, new roadways and major widening projects, minor widening and reconstruction projects, non-motorized improvements, and citywide programs. These projects may be constructed in association with new development or by the City as part of the CIP.

6.3.5 HEALTHY COMMUNITIES

The Transportation Plan promotes Healthy Communities and supports aspects related to pedestrian and bicycle connectivity. Key Healthy Communities concepts incorporated in the Transportation Plan include:

- Plan for all users;
- Plan complete streets for all users;
- Require connectivity;
- Create a safe pedestrian network;
- Consider multimodal concurrency;
- Identify and develop safe routes to school;
- Use parking management strategies to enhance bicycling and walking;
- Provide facilities to support bicyclists and pedestrians;
- Provide encouragement, education, and law enforcement to support bicyclists and pedestrians.



This Transportation Plan plans for bicycles, pedestrians, and public transit in order to support a physically active population. Street system design including connectivity, traffic calming, parking, and a grid system provide multiple options for non-motorized modes of transport. Such design is included in this element and is supported by the Duvall Municipal Code and construction standards. The amount of parking available affects the decision to walk, bicycle, or drive and is considered for both private development and development of public rights-of-way. Other facilities such as bicycle racks, public art, educational signage (interpretive and wayfinding), and resting or plaza stops with benches or other amenities also support Healthy Communities. Education regarding pedestrian and bicycle safety and enforcement of traffic laws for bicycles, pedestrians, and drivers is also stressed within this element to support Healthy Communities.

6.3.6 TRANSPORTATION DEMAND MANAGEMENT

Transportation Demand Management (TDM) consists of strategies that seek to maximize the efficiency of the transportation system by reducing the number, length and need of private automobile trips. Typically, TDM measures include provision of park and ride lots, improvements to pedestrian and bicycle facilities, and promotion of ridesharing activities. Examples of recent City of Duvall TDM projects include sidewalk and bicycle lane construction on Main Street NE and the Duvall Community Car Park located on the northeast corner of the intersection of Woodinville-Duvall Road and Main Street.

Within the State of Washington, alternative transportation solutions are necessitated by the objective of the Commute Trip Reduction (CTR) Law, which applies to employers with 100 or more employees. The purpose of CTR is to help maintain air quality in metropolitan areas by reducing congestion and air pollution. Currently, the City does not have any employer with 100 or more employees working during a shift between 6am and 9am. When such an employer does exist, the City could develop a Commute Trip Reduction Ordinance consistent with the Commute Trip Reduction Act. The ordinance should include TDM actions for employers, such as carpool matching, transit pass subsidies, and bicycle parking to discourage employees from commuting alone.

Duvall is a growing community in a rural area. TDM strategies are typically most effective in denser and larger urban areas. However, strategies coordinated with King County, WSDOT, and PSRC can provide alternatives for residents and employees in Duvall. Potential TDM strategies the City could promote through policy



Photo T-3. Bicycle lane through neighborhood



or investment include, but are not limited to:

- Transit-oriented and pedestrian-friendly street design, including sidewalks and bicycle lanes;
- Transportation coordinators for large employers;
- Telecommuting;
- Flexible/alternative work schedules;
- Additional park & ride facilities;
- King County Metro Alternative Services (King County Metro, 2015);
- Ridesharing/carpooling.

6.3.7 TRANSPORTATION FINANCE PLAN

The GMA requires the Transportation Plan of the Comprehensive Plan to include a multi-year financing plan based on the identified improvement needs in the transportation systems plan. Planning level cost estimates were prepared for each project and program within the 20-year TIP as part of the 2009 City of Duvall Transportation Plan Update (City of Duvall, 2010). Analysis of the City's capability to fund the projects was also conducted. This included review of existing and projected revenues and potential grants or other agency funding. In addition, the Plan provides a strategy for adjusting the funding program over time if identified revenues fall short of expectations. Implementation strategies are discussed and include items such as coordination with WSDOT and King County to prioritize and fund regional improvements. Other strategies include strengthening the transportation concurrency and impact fee programs to ensure development helps fund transportation improvements necessary to support new growth. The implementation plan sets up the framework for the City to prioritize and fund the improvements identified in the transportation systems plan.

6.3.8 INTERGOVERNMENTAL COORDINATION

Intergovernmental coordination efforts include both direct and indirect interaction between the City of Duvall and local, regional, and state government. A significant amount of traffic within the City is generated outside Duvall's city limits. SR-203, NE Big Rock Road, NE Cherry Valley Road, and NE Woodinville-Duvall Road all channel local and regional traffic through the City. In addition, non-motorized trips generated both inside and outside of the City utilize the Snoqualmie Valley Trail (SVT), the Tolt Pipeline Corridor Trail, and many City paths, trails, and roadways.

Effectively accommodating both internal and external traffic relies heavily on intergovernmental coordination and cooperation. Continued direct coordination (such as the 2015 WDSOT/City of Duvall Coe Clemons Creek Project), and indirect coordination (such as State funding and coordination with the Riverview School District for the 2012 and 2014 Cherry Valley Road Sidewalk projects), is vital to local and regional transportation improvements.



6.4 References

- City of Duvall. 2010 (and as amended) Transportation Plan. *City of Duvall 2009 Comprehensive Plan – Transportation Element*. December. Duvall, WA. Available: <http://www.duvallwa.gov/DocumentCenter/Home/View/2484>
- City of Duvall. 2015. *Resolution 15-13, A Resolution of the City Council of the City of Duvall, Washington, Approving the 2016-2021 Six-year Transportation Improvement Plan*. Available: <http://www.duvallwa.gov/DocumentCenter/Home/View/2474>.
- City of Duvall. 2016. Memorandum titled *City of Duvall 2015 Capacity and Transportation Analysis Study/EIS Alternatives*. Updated January 15, 2016. <http://www.duvallwa.gov/DocumentCenter/Home/View/2687>
- King County Metro. 2015. Overview of Metro Online Alternative Services. Available: <http://metro.kingcounty.gov/programs-projects/alternative-services/>. Accessed: December 21, 2015.
- PSRC (Puget Sound Regional Council). 2004. *SR-203 Pilot Study: Corridor Concept Plan*. December. Prepared by Makers, The Transpo Group, and The Langlow Associates, Inc. Available: <http://www.psrc.org/assets/1975/sr203final.pdf?processed=true>.
- PSRC (Puget Sound Regional Council). 2007. *Destination 2030 Update - Metropolitan Transportation Plan for the Central Puget Sound Region*. April. Seattle, WA.
- PSRC (Puget Sound Regional Council). 2010. *Transportation 2040 toward a sustainable transportation system*. May. Available: <http://www.psrc.org/assets/4847/T2040FinalPlan.pdf?processed=true>.
- Washington State DOC (Department of Commerce). 2015. *Growth Management Act Amendments 1995-2015*. Available: <http://www.commerce.wa.gov/Documents/GMA-amendment-changes-1995-2015.pdf>. Accessed: December 21, 2015.



CHAPTER 7. CAPITAL FACILITIES ELEMENT

7.1 Introduction

7.1.1 PURPOSE AND INTENT

The purpose of the Capital Facilities Element is to establish goals and policies for general public facilities, essential public facilities, and utilities to accommodate the anticipated levels of growth within Duvall and the designated Urban Growth Area (UGA). The Capital Facilities Element consolidates Capital Improvement Program (CIP) plans for all City infrastructure and services and is essential in maintaining adequate level-of-service standards for all facilities. The Capital Facilities Element functions as an integral part of the City's Comprehensive Plan and summarizes the existing capital facilities, forecasted future needs for such facilities, and funding strategies.

Public facilities that are owned and operated by the City include:

- Water, sewer, and stormwater systems;
- Community facilities, such as City Hall, the Police Department, and the Duvall Community Center;
- Parks, trails, and open space, such as the Dougherty Farmstead, McCormick Park, Taylor's Landing, and Big Rock Ball Fields; and
- Public Works facilities, such as the wastewater treatment plant, permit office, public works yard, roads, and parking areas.

Separate management plans form the basis of analysis for stormwater, water, and sewer facilities, as well as parks, trails, and open space. These plans have been adopted by reference (and as amended) into this document. In addition to City-owned facilities, a capital improvement plan (CIP) for the Riverview School District has been adopted by reference (and as amended) into this document.

In addition to City-owned utilities, private utility providers also serve Duvall and are also discussed in this Element. For non-City utilities, the City faces the challenge of facilitating system improvements and new technologies while minimizing impacts associated with aboveground utility installations. Private utilities that serve Duvall include:

- Electricity and natural gas services provided by Puget Sound Energy (PSE);
- Cable TV and cable internet services provided by Wave Broadband;
- Telephone service provided by Frontier Communications;
- Cell phone service provided by multiple wireless providers, such as AT&T, Verizon, Sprint, T-Mobile, and others; and
- Garbage, recycling, and yard/food waste collection provided by Waste Management.



The following goals and policies will guide the nature and development of Duvall’s capital facilities over the next twenty years. They address capital facilities and utilities that are owned and operated by the City, and those that are provided by other public entities. They also account for private utilities, such as electricity, natural gas, cable, and telephone. The Capital Facilities Element Analysis following the Goals and Policies section describes existing utilities and facilities, forecasted improvements based on projected commercial and residential growth, and funding strategies to support capital improvement projects.

7.2 Goals and Policies

GOAL CF-1: Public facility plans adequately address existing service deficiencies and future needs.

Policies

- CF1.1 Regularly review Capital Facilities Plans to ensure appropriate levels of infrastructure development.
- CF1.2 Ensure sufficient public funding for infrastructure improvements is included in City budgets.

GOAL CF-2: Adequate public facilities and services for new developments are concurrent at the time of final land use approval such that service provision for new developments will not lower existing service levels.

Policies

- CF2.1 Establish financially feasible strategies that address facility and service needs, consistent with the Comprehensive Plan and existing facility plans.
- CF2.2 Phase development to provide public facilities and services for existing and future growth, consistent with the City’s ability to provide and maintain adequate levels of service.
- CF2.3 The City shall accommodate expansion of public facilities for annexations while maintaining levels of service for existing customers.
- CF2.4 Management of capital facilities should emphasize the following concepts:
 - a. Preventive maintenance and cost-effective replacement of aging elements;
 - b. Extension and upgrades of capital systems while recognizing that system extension associated with new development should be the responsibility of those desiring service;
 - c. Systems inspections for conformance with design standards, effective fiscal management, and fair and equitable rate structures.



GOAL CF-3: Needed capital facilities are financed in an economic, efficient, and equitable manner.

Policies

- CF3.1 Prioritize capital facilities projects according to funding capacities and clearly identify sources of public financing using Duvall's six-year CIP.
- CF3.2 Equitably distribute the cost of capital facilities among the primary beneficiaries of the facility.
- CF3.3 Future development should bear facility improvement costs necessitated by the development to achieve and maintain adopted level-of-service standards and efficient service provision.
- CF3.4 Pursue all available funding sources for proposed community facilities and improvements including park and recreation facilities, trails/walkways, road improvements, and utility systems.
- CF3.5 Adopt and collect impact fees for public streets and roads; publicly owned parks; open space and recreation facilities; school facilities; and fire protection services to finance public facilities in accordance with the Revised Code of Washington (RCW), and balance funding between impact fees and other public sources.
- CF3.6 Adopt and collect connection charges for sewer, water, and stormwater in accordance with RCW 35.92.025.
- CF3.7 Seek public and private partnerships for new facilities, where possible, to share an equitable portion of expenses.

GOALCF-4: Efficient and equitable siting of public facilities is ensured through coordinated planning within City departments, non-city providers, users, and with other jurisdictions.

Policies

- CF4.1 Siting of capital facilities, including utilities, should be based upon criteria including, but not limited to:
 - a. Specific facility requirements, such as acreage or transportation access;
 - b. Land use compatibility;
 - c. Potential environmental impacts;
 - d. Consistency with the Comprehensive Plan.
- CF4.2 Capital facilities should be sited, designed, and buffered to be compatible with their surroundings. When sited within or adjacent to residential areas, special attention should be given to improving aesthetics and to mitigate land use impacts.



- CF4.3 Capital facilities should not be located in areas designated as critical or environmentally sensitive unless no other feasible alternatives exist.
- CF4.4 The City should not provide for the extension of public facilities and services outside the UGA, excepted as noted in Policy CF-5.9 regarding water services.

GOAL CF-5: Utilities are available at the appropriate levels of service to support the City's current and planned development.

Policies

- CF5.1 To facilitate the coordination of private services, the City should evaluate population forecasts and development plans and provide the information to service providers in order to meet the needs of Duvall's present and future service area.
- CF5.2 Encourage a coordinated approach to the development, installation, repair and replacement of utility lines and facilities and ensure that work is appropriately phased in conjunction with construction and roadway projects.
- CF5.3 Allow for siting of utility facilities as a permitted use, where appropriate and necessary, within the City.

GOALCF-6: An effective and efficient water system that meets Duvall's present and future population needs is maintained and improved at fair market value.

Policies

- CF6.1 Continue to work with Seattle Public Utilities (SPU) and regulatory agencies in order to achieve goals and objectives for providing reliable levels of service to Duvall residents and those within the water service area.
- CF6.2 Support and implement water conservation and reuse measures that reduce water use, such as:
 - a. Public education;
 - b. Billing rate structures which encourage conservation;
 - c. Evaluating feasibility of wastewater reclamation and re-use;
 - d. Encourage drought tolerant plantings and native vegetation for public and private development;
 - e. Impose water restrictions during droughts.
- CF6.3 Maintain an updated comprehensive water system plan that is coordinated with the Land Use Element so that new development is located where sufficient water system capacity can be provided.
- CF6.4 Ensure that water service necessary to support development will be adequate to serve the residents at the time new development is available for occupancy and use.



- CF6.5 Establish a reserve fund and pursue outside funding services to finance needed improvements to the water system.
- CF6.6 Coordinate with Duvall/King County Fire District 45 to ensure adequate fire flow in all areas of the City.
- CF6.7 Ensure that all new developments within city limits are served by the municipal water system and provide opportunities for service elsewhere within the service area boundary.
- CF6.8 Monitor the City's water supply to ensure that future water supply needs and water quality requirements will be met.
- CF6.9 Continue to provide water service to those properties within the service area boundary outside of the City's UGA.

GOAL CF-7: An effective and efficient wastewater treatment plant and collection system meets the needs of Duvall's present and future population.

Policies

- CF7.1 Require all properties that develop or redevelop within the city limits to connect to the City's sewer system.
- CF7.2 Increase sewer treatment plant and collection line capacities to meet the needs of Duvall residents and land within the UGA, as well as state and federal discharge standards. Service to the UGA shall not occur until such properties are annexed into Duvall.
- CF7.3 Increase capacity to reflect increased usage trends influenced by the City's growth and economic development.
- CF7.4 Maintain an updated comprehensive sewer system plan that is coordinated with the Land Use Element so that new development is located where sufficient sewer system capacity exists or can be efficiently and logically extended.
- CF7.5 Ensure that existing deficiencies in the sewer system are upgraded.
- CF7.6 Encourage all non-redeveloping properties that annex into the City to phase out their septic systems and connect to the City sewer system.



Figure CF-1. Duvall Wastewater Treatment Plant
Source: City of Duvall



GOAL CF-8: Duvall’s stormwater management system is effective, efficient, and enhanced to meet present and future population needs.

Policies

- CF8.1 Manage the quality and quantity of stormwater runoff to protect public health, safety, and surface and groundwater quality, and to minimize potential erosion and sedimentation within natural drainage systems such as rivers, streams, lakes and wetlands.
- CF8.2 Require development regulations that encourage the use of Low Impact Development (LID) measures, reduce impervious surface coverage, and retain natural vegetation.
- CF8.3 Require design of new development to allow for efficient and economical provision of storm drainage facilities and require new development to pay general facility charges.
- CF8.4 Participate in regional water quality and flood hazard reduction efforts with King County and other Snoqualmie Valley cities.
- CF8.5 Comply with all National Pollution Discharge Elimination System (NPDES) Phase II permit requirements, including regular review and updates of stormwater development standards.
- CF8.6 Continue to seek and apply for grants to fund stormwater management projects and planning efforts.

GOAL CF-9: Transportation improvement plans and programs provide for future road projects throughout the City to allow growth-related improvements.

Policies

- CF9.1 Continue to assess impact fees to help alleviate the City’s burden of funding transportation projects.
- CF9.2 Seek state and local grants to help fund road improvements within the City.
- CF9.3 When improving new roads, facilities should be undergrounded where feasible, and sewer, water, and stormwater facilities that are in disrepair should be repaired or replaced if funding allows.

GOAL CF-10: High-quality parks, trails and open space facilities are effectively developed, managed, and maintained, meeting the needs of Duvall’s present and future population.

Policies

- CF10.1 Seek innovative methods of financing projects listed in the Parks, Trail, and Open Space (PTOS) Plan.



- CF10.2 Consider joint ventures with public, private, and nonprofit agencies; private development projects; and user groups such as youth sports leagues to assist in facility development; maintenance and operation; and overall cost reduction.
- CF10.3 Encourage park facilities that are designed for low maintenance and high capacity to encourage high return on investment.
- CF10.4 Consider ongoing maintenance costs and how those ongoing needs will be addressed prior to the development of new park facilities.
- CF10.5 Update the PTOS Plan to address current and future anticipated land, facility, and recreation needs.

GOAL CF-11: Cost effective municipal public facilities are provided to all residents of Duvall in a manner that maximizes investment and use of existing facilities, expands facilities in a cost efficient manner, and meets the needs of Duvall’s present and future population.

Policies

- CF11.1 Ensure public safety services are adequately funded to provide the necessary level of services for present and future needs of the community.
- CF11.2 Set aside funds for the City’s share of improvements required by growth to achieve an efficient level of service for essential public services and facilities. Apply for grants whenever feasible to finance public facilities.
- CF11.3 Support and encourage joint development and use of community facilities between City programs and with other governmental or community organizations in areas of mutual concern and benefit.

GOAL CF-12: Riverview School District and the City work together to accomplish the District’s capital improvement objectives and mitigate growth impacts, where possible, to ensure the provision of adequate school facilities.

Policies

- CF12.1 Require impact fees to ensure that school facilities will be provided concurrently with future development within the City.
- CF12.2 Annually review and adopt the District’s six-year Capital Facilities Plan and associated impact fee.

GOAL CF-13: Safe, reliable, and efficient electrical power and gas services are provided for residents and businesses of Duvall.

Policies

- CF13.1 Ensure that all existing and proposed electric and gas lines for Duvall meet County, State and Federal safety standards.



- CF13.2 Where practical, co-locate electrical facilities, natural gas supply lines and other facilities within common or adjacent utility corridors using street or alley rights-of-way.
- CF13.3 Require installation of existing and proposed power distribution lines underground at the time of new construction to reduce possible storm damage and increase aesthetic character and views.

GOAL CF-14: Cable services and associated technology are widely available to Duvall's residents and businesses.

Policies

- CF14.1 Encourage cable service providers to offer products and services that meet the needs and interests of the community.
- CF14.2 As cable services are upgraded, encourage cable service providers to expand the service to reach all segments of the community.
- CF14.3 Encourage the provision of basic cable services to all residents, regardless of income or economic status.
- CF14.4 Require cable service providers to provide fiber optic connections to link public facilities.

GOAL CF-15: Telephone and DSL, and associated technology, are widely available to Duvall's residents and businesses.

Policies

- CF15.1 As telecommunication technology changes, ensure that companies have provisions to upgrade capacity of facilities to allow residents to take advantage of innovative technologies.
- CF15.2 Minimize the visual impacts of telecommunication facilities, such as telephone poles, antennas, substations and telephone lines, near residential areas of Duvall.
- CF15.3 Ensure telecommunication services are available to all residents, regardless of income or economic status.
- CF15.4 Encourage residential and commercial developers to work with telecommunication companies to design high-speed Internet-ready homes and businesses in the City.

GOAL CF-16: Wireless communication facilities are sited to minimize impacts to adjacent land uses and aesthetics.

Policies

- CF16.1 Require the placement of wireless communication facilities in a manner that minimizes the adverse impacts on adjacent land uses. Consider undergrounding of related equipment facilities.



- CF16.2 Require wireless communication facilities to attach to existing facilities, such as public facilities, buildings, utility poles, light standards and signals, prior to considering new sites.
- CF16.3 Consider allowing the replacement of some existing utility poles with poles of greater heights for use as wireless facility platforms.
- CF16.4 Allow wireless communication companies to install new freestanding towers, including monopoles, only when no other feasible alternative exists and when the visual intrusion is less than co-location on another facility or structure. Ensure such facilities are removed when they become obsolete.
- CF16.5 Require freestanding towers to fit in with surrounding land uses through methods such as stealth towers, landscaping, and other camouflage techniques.
- CF16.6 Encourage upgrades of wireless communication facilities as technology becomes available to minimize visual impacts of the environment.
- CF16.7 Promote a streamlined permit process for wireless communication companies that choose to install facilities which share existing poles and facilities and are less visually obtrusive than new monopoles or facilities.

GOAL CF-17: Coordinate with Waste Management to provide efficient and reliable solid waste and recycling services for all residents and businesses.

Policies

- CF17.1 Encourage Duvall residents to appropriately dispose of solid waste to protect the quality of air, water, and public health.
- CF17.2 Encourage Duvall residents to recycle and reduce the amount of solid waste transported to the landfill.
- CF17.3 Continue to participate in regional planning for future solid waste disposal options.
- CF17.4 Continue to seek grant funding for recycling programs and events, and implement initiatives to increase and encourage recycling as funds are available.

GOAL CF-18: Capital Facilities and Land Use Elements are periodically reassessed and updated for consistency and to reflect funding availability.

Policies

- CF18.1 Reassess the Land Use Element and functional plans and propose modifications, as necessary, to ensure that the Land Use Element remains consistent with the capital facilities financing plan.



GOAL CF-19: Ensure that the Capital Facilities Element is consistent with County Wide Planning Policies (CWPP).

Policies

- CF19.1 Regularly review King County’s CWPP to ensure coordination and consistency with the City’s Capital Facilities Element.

GOAL CF-20: Develop and implement a process for siting essential public facilities (EPFs).

Policies

- CF20.1 The City should maintain criteria, regulations, and procedures that allow for the siting of EPFs, including secure community transition facilities. Until the time the Duvall Municipal Code is updated to implement this policy, the following criteria and regulations should apply:
 - A. An agency or organization requests in writing that a proposed facility be reviewed through Duvall’s EPF siting process. This request should be in the form of a letter to the Planning Director, addressing Type 1 Master Permit Application criteria along with any associated Type II to Type VI Master Permit Application Criteria and associated supporting permit information.
 - B. The Planning Director shall review this request and process the application if the following criteria are met:
 - (1) The facility meets the definition of EPF defined by the state (RCW 36.70A.200);
 - (2) The facility is a type difficult to site because of one of the following:
 - (a) the facility needs a type of site of which there are few sites,
 - (b) the facility can locate only near another public facility,
 - (c) the facility has or is generally perceived by the public to have significant adverse impacts that make it difficult to site, or
 - (d) the facility is of a type that has been difficult to site in the past;
 - (3) It is likely this facility will be difficult to site, and;
 - (4) There is need for the facility and Duvall is in the facility service area.
 - C. The Planning Director shall determine if the facility serves a regional, countywide, statewide or national need. If it does, the Director may condition the review with a requirement that the review process consider sites in parts of the service area outside Duvall. If the facility serves a regional, countywide, statewide or national need, a multi-jurisdictional planning process should be used.



- D. The facility shall be reviewed in the same manner as a conditional use permit or a rezone, if one or more potential sites would require a rezone, as modified by this policy. If the facility would require a variance or other development permit, those approvals also shall be decided through the conditional use permit or rezone process. The City Council shall be the final decision maker for all land use actions related to EPFs.
 - E. The Planning Director shall require that the facility siting process includes a public involvement component with at least one public hearing before the City Council, and additional public involvement process that gives those within the zone of likely and foreseeable impacts the opportunity to affect the design and location of the facility.
 - F. An analysis of the facility's impact on City finances shall be undertaken. If the study shows that locating a facility in Duvall would result in a disproportionate financial burden on the community, an agreement should be executed to mitigate the adverse financial impact or the approval shall be denied.
 - G. The following criteria shall be used to decide the application:
 - (1) Whether there is a public need for the facility.
 - (2) Whether the facility impacts the surrounding uses and environment, the City and the region.
 - (3) Whether the design of the facility or the operation of the facility can be conditioned, or the impacts otherwise mitigated, to make the facility compatible with the affected area and the environment.
 - (4) Whether City or County services, businesses, and public transportation are sufficient to accommodate the proposed use.
 - (5) Whether a package of incentives can be developed that would make siting the facility within the community more acceptable.
 - (6) Whether the factors that make the facility difficult to site can be modified to increase the range of available sites or to minimize impacts on affected areas and the environment.
 - (7) Whether the proposed EPF is consistent with the Duvall Comprehensive Plan.
 - (8) If a variance is requested, compliance with the variance criteria.
 - (9) Compliance with any applicable state siting and permitting requirements.
- CF20.2 EPFs should be equitably located throughout the City, County and state. No jurisdiction should receive a disproportionate share of EPFs.
- CF20.3 The City should participate in a cooperative inter-jurisdictional approach to the siting of EPFs in accordance with the King County Countywide Planning Policies.



GOAL CF-21: Establish and update as necessary the definition of “essential public facilities”.

Policies

- CF21.1 A facility should be classified as an EPF if it has one or more of the following characteristics:
- a. The facility meets the Growth Management Act definition of an EPF;
 - b. The facility is on a state, county, or city list of EPF;
 - c. The facility services a significant portion of the county or region or is part of a countywide service system;
 - d. The facility is the sole existing facility in the county for providing that essential public service; or
 - e. Similar facilities as determined by the planning director.

7.3 Capital Facilities Element Analysis

This section describes the existing capital facilities and utility systems, forecasted future capital facility needs, and funding strategies. Additional transportation and park system information is presented in the Transportation and Park Elements. Additional utility system information and plans, adopted by reference and as amended, are included in the following documents:

- Water System - City of Duvall Comprehensive Water System Plan (2012);
- Sewer System - City of Duvall Wastewater Facility Plan (2001);
- Stormwater System - City of Duvall Phase II NPDES Stormwater Management Program Report for 2014 (2014) and the City of Duvall Stormwater Management Plan (1997); and
- General Government Property and Facilities – Draft City Facilities Inventory Summary and Plan (2013).

7.3.1 GENERAL OVERVIEW

The City of Duvall endeavors to provide safe, cost-effective, high-quality capital facility systems that serve existing residents and that are designed to accommodate future growth. The Capital Facilities Element guides planning for capital projects completed by the City and provide guidance for improvements associated with private development. This Element includes the following:

- A. Regulatory Setting
- B. Capital Facilities Inventory, Planning, and Funding Strategies
- C. Locating Facilities and Services
- D. Reassessment Strategy



7.3.2 REGULATORY SETTING

The Capital Facilities Element is based on Federal, State, Regional, and County legislation:

GROWTH MANAGEMENT ACT

Under the Growth Management Act (GMA) (RCW 36.70A.070), a Capital Facilities Element is required to assess the needs of a community and determine how to provide appropriate facilities for current and future residents. The element must contain an inventory of existing facilities, an assessment of future facility needs, the proposed locations of new or expanded facilities, a plan to finance such facilities within projected funding capacities, and a requirement to reassess the land use element if probable funding falls short of meeting existing needs. King County has established Countywide Planning Policies (CWPPs) that shall be addressed by all of the cities in King County. The policies in the Capital Facilities section must reflect the CWPPs that are concerned with capital facilities.

The Growth Management Act (GMA) also requires that counties and cities planning under RCW36.70A.040 include a process for the identification and siting of EPFs, which can be government-owned and operated facilities or privately-owned facilities that are regulated by public entities.

FEDERAL POLICIES

Stormwater System: The National Pollution Discharge Elimination System (NPDES) Program is intended to protect and restore surface water quality. Coverage under the Phase II NPDES Permit (Permit) authorizes discharge of stormwater to waters of the State of Washington in accordance with the Federal Clean Water Act. The Washington State Department of Ecology is administering the Permit for the EPA. The NPDES program requires annual reporting and maintenance of the Stormwater Management Plan. The City of Duvall Phase II NPDES Stormwater Management Program is consistent with long-term goals, objectives and policies as outlined in the City of Duvall Comprehensive Plan, Comprehensive Stormwater Plan, and NPDES Phase II Permit requirements.

STATEWIDE POLICIES

General: WAC 365-196-415 defines requirements for the Capital Facilities Element of a Comprehensive Plan. The City of Duvall Capital Facilities Element meets the WAC 365-196-415 requirements.

Transportation and Park Systems: See Transportation Element and Parks Element.

Water System: The water system plan shall be reviewed and approved by the Washington State Department of Health every six years in accordance with current drinking water regulations under WAC 246-290-100. The City of Duvall Comprehensive Water System Plan meets WAC 246-290-100 Water System Plan requirements.

Sewer System: Sewer treatment facilities are regulated by the Washington State Department of Ecology under WAC 173-240. The 2001 wastewater facility plan meets the requirements of WAC 173-240-050 for a General Sewer Plan.

Stormwater System: Administration of federal stormwater policies is through the Washington State Department of Ecology; see Federal Policies section for details.



Essential Public Facilities: RCW 36.70A.200 states that EPFs are “those facilities that are typically difficult to site, such as airports, state education facilities and state or regional transportation facilities as defined in RCW 47.06.140, regional transit authority facilities as defined in RCW 81.112.020, state and local correctional facilities, solid waste handling facilities, and in-patient facilities including substance facilities, mental health facilities, group homes, and secure community transition facilities as defined in RCW 71.09.020.” This definition is not considered all-inclusive, but provides examples of facilities that are difficult to site. Expansion of facilities that are considered EPFs or that support EPFs are to be handled in the same manner as an EPF.

The requirement to adopt a process for siting of EPFs is due to the difficulties that are associated with finding suitable locations for these types of facilities, typically due to perceived or real environmental, social or economic costs. Facility size, location, and adverse impacts such as noise, odor, pollution, traffic impacts, aesthetics, and health and safety concerns are examples of some of the characteristics that make EPFs difficult to site. Experience shows that there is often public opposition when jurisdictions or service providers consider new locations for EPFs. However, RCW 36.70A.200(5) states, “No local comprehensive plan or development regulation may preclude the siting of EPFs.”

State law (see RCW 36.70A.200) also requires that “secure community transition facilities” (SCTF) be treated as an EPF. A SCTF is “a residential facility for persons civilly committed and conditionally released to a less restrictive alternative under this chapter. A secure community transition facility has supervision and security, and either provides or ensures the provision of sex offender treatment services. Secure community transition facilities include but are not limited to the facility established pursuant to RCW 71.09.250(1)(a)(i) and any community-based facilities established under this chapter and operated by the secretary or under contract with the secretary.” SCTFs are subject to the same City policies and permitting requirements as EPFs.

Electrical and Natural Gas System: PSE’s electrical and natural gas utilities operating within Duvall are not managed by the City. These utilities conduct their own planning processes and maintain their own systems consistent with federal and statewide policies with limited involvement from the City. However, all development and expansion proposals by PSE and other private utility providers are subject to the relevant policies and regulations of the jurisdiction(s) where the proposals are located.

COUNTYWIDE PLANNING POLICIES

An overarching goal of the King County Countywide Planning Policies is to provide public facilities and services in order to “advance public health and safety, protect the environment, and carry out the Regional Growth Strategy” (King County, 2102). The CWPPs differentiate between urban and rural services and promotes coordination and calibration between jurisdictions and public/private entities to provide efficient, high-quality and reliable services to support the Regional Growth Strategy.

7.3.3 CAPITAL FACILITIES INVENTORY, PLANNING, AND FUNDING STRATEGIES

In general, City of Duvall CIP projects strive to maximize use of funds by coordinating projects to address multiple goals as possible. Separate improvements, such as increases in water main and transportation capacity within a corridor, are consolidated to provide efficient, holistic, cost-effective projects. Similarly, Duvall Municipal Code and Public Works Standards require that private



development projects complete improvements to mitigate impacts associated with new development.

The GMA, WAC, and RCW provide Duvall with the authority to collect impact fees to fund CIP projects to mitigate growth impacts for transportation, parks and recreational facilities, schools, and fire protection facilities. General Facility Charges (GFCs), commonly referred to as “connection charges,” may also be collected to pay for the equitable cost of water, sewer, and stormwater systems in accordance with RCW 35.92.025. The City aggressively pursues opportunities for multi-jurisdictional coordination, private and non-profit partnerships, grants, and other strategies to support the CIP.

CIP project lists are contained within facility management plans, adopted by reference and as amended, for each Capital Facility Element program. In general, the CIP project lists are developed for a 20-year period based on forecasted growth and required improvements. Six-year CIP project lists are then selected from the 20-year CIP lists based on anticipated private development, planned public CIP projects, and funding considerations. Historically, the City of Duvall completed annual revisions and updates to the Capital Facility Element to document updated six-year CIP lists. Future updates to the six-year CIP lists will be completed by resolution and adopted by reference, and as amended, in the Capital Facility Element.

The documents presented within the Reference section of this Element include more detailed information on existing and planned facilities, project costs, and funding opportunities. Figures CF-2 (Capital Facilities Overview), CF-3 (Utilities Overview) and the following presents a brief overview of existing publically-owned facilities, planning improvements, and funding strategies.



Figure CF-2. Capital Facilities Overview

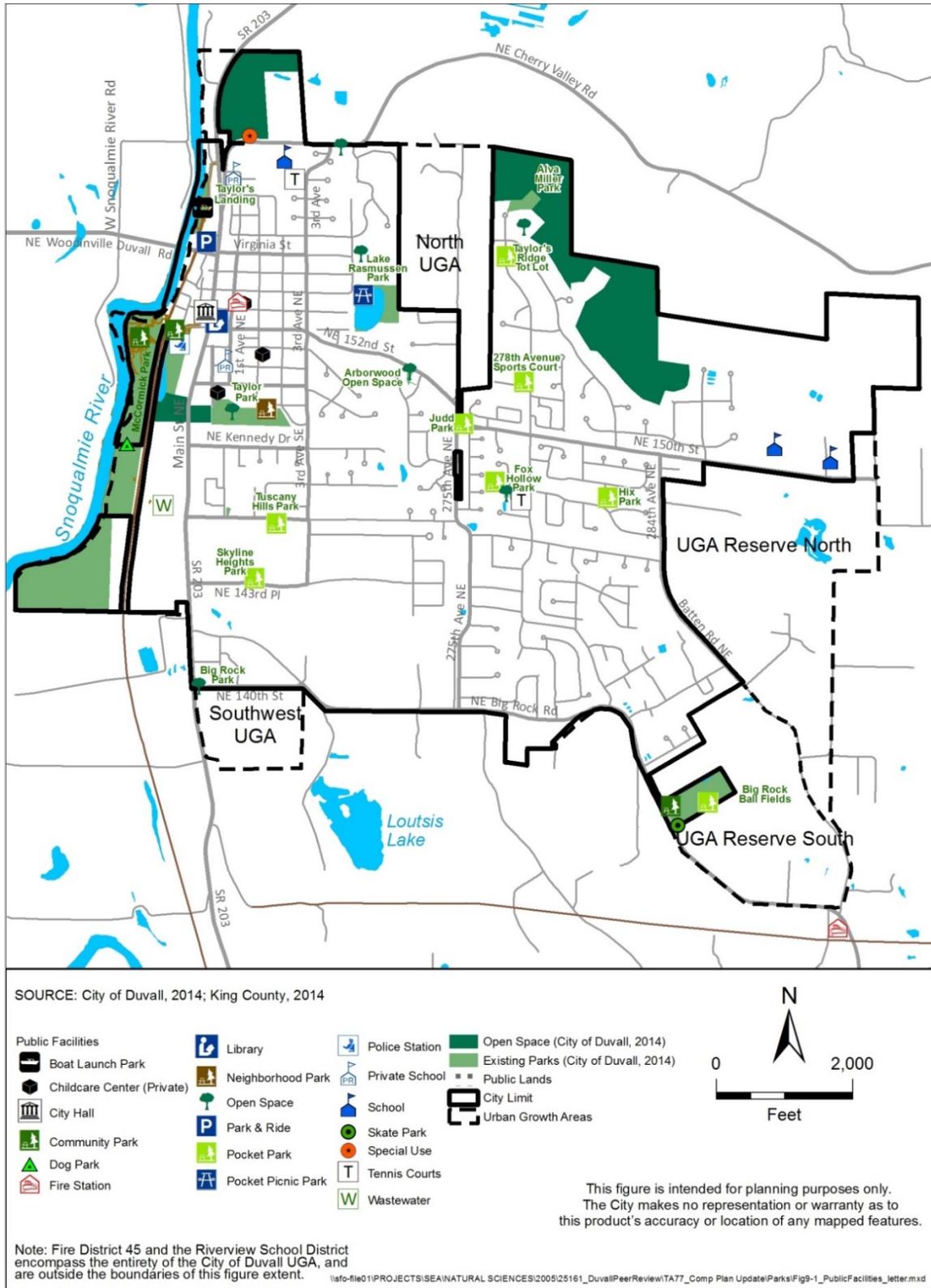
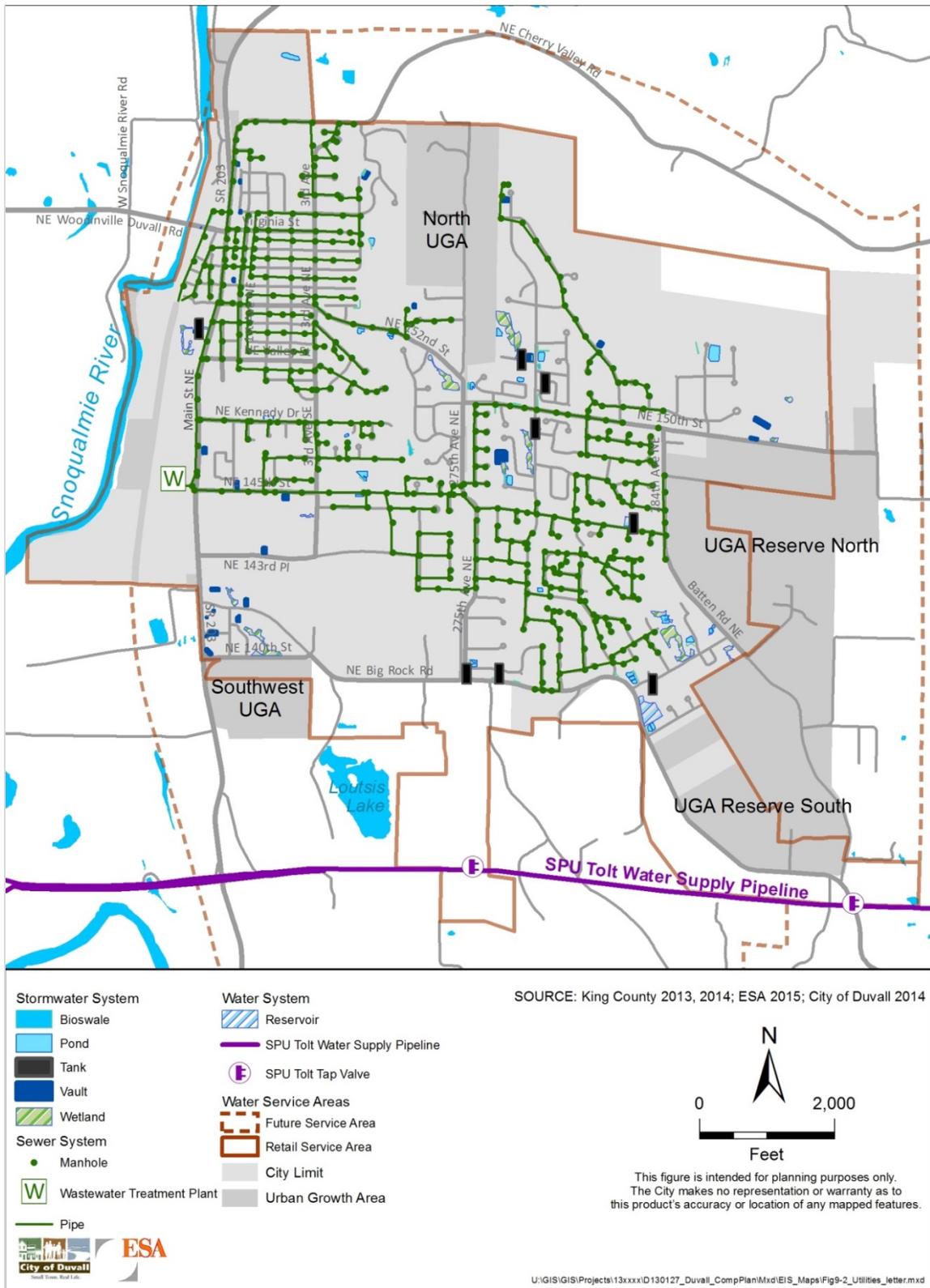




Figure CF-3. Utilities Overview





TRANSPORTATION SYSTEM

The City of Duvall is served by a wide variety of transportation facilities, including county equestrian and mountain biking trails, a network of approximately 33 miles of arterial and secondary roads, and state highway SR-203 (Main Street NE). The City is primarily responsible for the development and maintenance of facilities within City limits, such as streets and associated traffic control, sidewalks, and bicycle lanes. Public transportation facilities operated by King County METRO include a City-owned park & ride lot at Woodinville-Duvall Road/Main Street and transit loading facilities along Brown Avenue and on Main Street. Limited bus service is also provided by Snoqualmie Valley Transportation (SVT) service.

The 20-year Transportation Improvement Program (TIP, see Transportation Element) identifies planned major system-wide transportation upgrades to accommodate and mitigate forecasted growth. This program is funded by Traffic Impact Fees (TIF) collected in association with commercial and residential construction permits assessed at an equivalent per trip (PM Peak Hour) rate. The program strives to enhance the City's roadway infrastructure by utilizing the impact fees and other funds for capacity projects that mitigate the impacts of growth within our community's city limits.

PARKS SYSTEM

The Parks System serves as a key resource for residents of Duvall and surrounding communities. Parks, open space, and other recreation areas stimulate tourism, economic development, and enhance quality of life. The park system includes approximately 14 sites encompassing nearly 45 acres of land including developed parks, playgrounds, entrance gateways, a riverfront beach area, a boat launch, sports facilities, an informal dog park, Historic Dougherty Farmstead, Railroad Depot, and trails in McCormick Park and other areas.



Figure CF-4. Depot Park
Source: City of Duvall

The 20-year Parks CIP (see Parks Element) sets the path for future projects to accommodate and mitigate forecasted growth. This program is funded by Park Impact Fees (PIF) collected in association with residential construction permits and assessed based on equivalent residential units (ERUs) for single- and multi-family residences. The program strives to enhance the City's park, open space, and recreational facilities by effectively utilizing funds for capacity projects that mitigate growth impacts and improve recreational opportunities for our community.

WATER SYSTEM

The City of Duvall water system provides safe, reliable, high quality water at sufficient flow and pressure within a service area that includes city limits, UGA, and adjacent portions of King County. System water is purchased from Seattle Public Utilities (SPU), originates at SPU's Tolt River Pipeline, and is distributed to consumers via approximately 39 miles of City distribution main. Storage is provided in the system by two above-ground reservoirs and one pressure boosting station.



The 20-year Water CIP (City of Duvall Comprehensive Water System Plan) serves as a key resource for our community and its continual growth. This program is funded by water connection GFC's collected in association with commercial and residential construction permits assessed on meter size and associated system impact. The program seeks to improve City's water system infrastructure by utilizing the facilities charges and other funding for system wide capacity improvements and expansion projects. The program also identifies conservation as a primary method of increasing supply and reducing system burden and environmental impacts through reducing per capita and per connection usage rates.

SEWER SYSTEM

The City of Duvall provides a modern, reliable sewer distribution and treatment system sized to serve existing development with expansion capabilities to serve future growth. The Sewer utility includes approximately 30 miles of sewer collection pipe, six lift stations, and a membrane bioreactor waste water treatment plant (WWTP). Much care and attention is taken to provide an efficient, clean and well cared for sewer system. Current capacity of the WWTP will serve a population of approximately 9,000 with ultimate build out providing process treatment capacity for a population of approximately 13,000.

The sewer CIP (City of Duvall Wastewater Facility Plan) includes system improvements to accommodate growth such as WWTP expansion, and installation of major conveyance main, and lift station removal/retrofits. This program is funded by sewer connection GFC fees collected in association with commercial and residential construction permits and assessed on ERU-specific flow rates.

STORMWATER SYSTEM

The City of Duvall Stormwater System is a key resource for our community, habitat, and environment. The Storm System includes approximately 53 miles of storm drainage collection pipes and ditches along with approximately 90 water quality treatment facilities (vaults, detention pipes, and ponds). Stormwater program activities are driven in large part by increasing federal and state regulations requiring compliance with the Clean Water Act.

The stormwater CIP (City of Duvall Stormwater Management Plan) includes system improvements and policies that affect urban stormwater, flooding, and associated water-dependent resources. This program is funded by storm drainage area charges collected on a per-acre basis in association with commercial and residential construction permits. The program strives to improve the City's storm system infrastructure by completing system wide capacity and water quality improvement projects and retrofits that directly benefit our community and the environment.

GENERAL GOVERNMENT FACILITIES

General government facilities owned by the City of Duvall include City Hall, the Public Works Buildings, the Police Department, the Duvall Visitor Center, and the Duvall Community Center. Fire protection in Duvall is provided by King County Fire District 45, a regional fire district that is separate from City government.

The City Facilities Inventory Summary and Plan documents existing facilities, required facilities upgrades, proposed replacement facilities, and potential surplus facilities and properties. Funding for



potential facility projects include grants and internal service funds, a shared fund used only for capital improvements along with building maintenance, upgrades and repairs. Currently, every department or program within the City contributes its fair share of funding based on full time employee (FTE) count and individual department needs.

ESSENTIAL PUBLIC FACILITIES

The City of Duvall has no identified EPFs or SCTF's. State Route 203 is not a highway of statewide significance and is therefore not considered an EPF.

RIVERVIEW SCHOOL DISTRICT FACILITIES

The Riverview School District provides educational services to King County, the City of Carnation, and the City of Duvall. The district service area encompasses 250 square miles and includes three elementary schools, one middle school, one high school, an alternative high school program, two alternative elementary school programs district office, and operation and maintenance facilities. The grade configuration is kindergarten through fifth grade for elementary school, sixth through eighth for middle school, and ninth through twelfth for high school. The Riverview School District Capital Facilities Plan shall be considered a part of this Element and is adopted as part of the Duvall Comprehensive Plan by reference and as amended.

ELECTRICITY & GAS

Puget Sound Energy (PSE) supplies electric service to more than 982,000 customers throughout 9 counties in Western Washington and Kittitas County. The City of Duvall and the surrounding area in King County are included in PSE's electric service territory. The Duvall area is currently supplied with enough electricity to satisfy the demand for electrical power.

PSE is regulated by the Washington Utilities and Transportation Commission (WUTC) to serve natural gas in the area that lies along the route of the Northwest Pipeline from Marysville and Lake Stevens in Snohomish County south through Olympia to Centralia in Lewis County. The entire Duvall planning area is contained within this service area.



Figure CF-5. Duvall Fire Station 66
Source: Duvall Fire



Figure CF-6. Cedarcrest High School in the Riverview School District
Source: Riverview School District, 2015



Electricity – The City of Duvall and surrounding area is presently provided electrical power service from the “Duvall Substation” located on NE 145th Street east of 275 Avenue NE. The transmission lines which feed the Duvall Substation are 115,000 volt (115kV) overhead transmission lines known as the Snoqualmie-Stillwater 115 kV and Stillwater-Cottage Brook 115 kV transmission lines. The Snoqualmie-Stillwater 115 kV line extends north from Snoqualmie Falls to south of Duvall at approx. NE 132nd Street and 277th Avenue NE. The Stillwater-Cottage Brook 115 kV line extends north from that location within a PSE right-of-way corridor through the City from the southern city limits at Big Rock Road adjacent to 275th Avenue NE to the Duvall Substation. The Stillwater-Cottage Brook 115 kV transmission line then continues west from the substation past the Duvall wastewater treatment plant and across the Snoqualmie River Valley to provide service to the Woodinville area. The remaining powerline corridor north of NE 145 Street is used for local electrical service lines only.

From the Duvall Substation, 3 distribution circuits or 12,500 volt lines extend in all directions to serve the immediate electrical customer load in the City of Duvall and surrounding area. The main feeder circuits are overhead conductors on wood poles as well as most of the lateral taps from the main feeder with some underground cables in newer developments.

The Bonneville Power Administration’s (BPA) 230,000-volt (230 kV) overhead transmission line (the BPA Monroe-Sammamish 230 kV transmission line) extends from Lake Sammamish around Duvall to Monroe. This primary transmission line is part of the Northwest power grid that serves all of Puget Sound.

Natural Gas - PSE’s principal natural gas supply route, the Northwest Pipeline (operated by Williams), is located within an easement corridor that runs north to south across Norway Hill in Bothell and the Sammamish River corridor. The Duvall planning area is served from a 6-inch intermediate pressure supply line that extends east from the Northwest Pipeline along Woodinville-Duvall Road to the Snoqualmie River Trail then south to Stephens Street. A 4-inch intermediate pressure line supports a local service line south in the Main Street right-of-way to about NE 145th Street. Another 4-inch intermediate pressure line supplies local service lines east in the Stephens Street/150th Street right-of-way to Batten Road NE, then south to Big Rock Road. The local gas supply is controlled by 24 main valves that are located along the 4 to 6-inch intermediate pressure lines.

CABLE TV, CABLE INTERNET, AND DIGITAL PHONE

Wave Broadband rents pole space and shares trenches with PSE and Frontier Communications to carry overhead and underground cables which supply cable TV, Internet and phone service to homes and businesses within Duvall and the UGA. The City currently has a non-exclusive franchise with Wave Broadband

TELEPHONE SERVICE AND DSL INTERNET

Frontier Communications rents pole space and shares trenches with PSE and Wave Broadband to carry overhead and underground phone lines. Phone service and Digital Subscriber Line (DSL) internet service is provided through these phone lines.

CELL PHONE SERVICE

Cell phone wireless network coverage within Duvall and surrounding areas is provided by AT&T, Verizon, Sprint, T-Mobile, and other networks.



GARBAGE, RECYCLING, AND YARD/FOOD WASTE COLLECTION

Waste Management operates garbage, recycling, and yard/food waste services for Duvall residents. This service is contracted through the City of Duvall for areas within city limits.

7.3.4 LOCATING FACILITIES AND SERVICES

GMA requires governments to identify lands useful for public purposes such as parks, public building, roadways, utilities, and other public uses. The City of Duvall identifies locations for public facilities and services within functional plans and following coordinated planning within City departments, between City and non-city providers, and with other jurisdictions. The Transportation Element, Parks Element, and Utility Plans presented within the Reference section of this Element include more detailed information concerning potential facility and service locations.

7.3.5 REASSESSMENT STRATEGY

GMA requires that provision should be made to reassess plan elements periodically in light of the evolving Capital Facilities Plan. This is to determine if probable funding for CIP project is sufficient to meet existing needs. If a funding shortfall occurs, the Land Use and Capital Facility Elements must be reassessed. Changes can then be made to rectify the shortfall either by restricting land use development or by lowering facility standards.

7.4 References

- City of Duvall. 1997 (and as amended). *City of Duvall Stormwater Management Plan*. Prepared by Gardner Consultants for City of Duvall, WA. Available at: <http://www.duvallwa.gov/DocumentCenter/Home/View/2483>
- City of Duvall. 2001 (and as amended). *City of Duvall Wastewater Facility Plan*. May. Prepared by Parametrix, Inc. for City of Duvall, WA. Available at: <http://www.duvallwa.gov/DocumentCenter/Home/View/2486>
- City of Duvall. 2012 (and as amended). *City of Duvall Comprehensive Water System Plan*. May. Duvall, WA. Available at: <http://www.duvallwa.gov/documentcenter/view/320>
- City of Duvall. 2013 (and as amended). *Draft City Facilities Inventory Summary and Plan*. March. Duvall, WA. Available at: <http://www.duvallwa.gov/DocumentCenter/Home/View/2485>
- City of Duvall. 2015 (and as amended). *City of Duvall Phase II NPDES Stormwater Management Program Report for 2014*. March. Duvall, WA. Available at: <http://wa-duvall.civicplus.com/ArchiveCenter/ViewFile/Item/184>
- King County. 2012 (and as amended). *2012 King County Countywide Planning Policies*. November. Available at: http://www.kingcounty.gov/~media/property/permits/documents/GMPC/CPPsApproved/2012-0282_striker_attach_A.ashx?la=en
- Riverview School District. 2015 (and as amended). *Riverview School District No. 407, 2015 Capital Facilities Plan*. June. King County, WA. Available at: http://www.riverview.wednet.edu/business/business_forms/Annual%20Capital%20Facilities%20Plan.pdf



CHAPTER 8. ENVIRONMENT AND SUSTAINABILITY ELEMENT

8.1 Introduction

8.1.1 PURPOSE AND INTENT

The Environment and Sustainability element prioritizes protection of sensitive areas and watershed processes in Duvall and identifies steps the City and the Duvall community should take to ensure a sustainable future that meets the needs of the present without compromising the needs of future generations. Its purpose is to accommodate population and job growth in a sustainable manner that avoids negatively impacting sensitive areas and watershed processes. The goals and policies in this element are organized by the following three themes: sustainability, natural environment, and shoreline management.

The City of Duvall had made a number of commitments to avoid or minimize environmental impact that could result from the 2015 Adoption of the Duvall Comprehensive Plan Amendments. The Final Environmental Impact Statement (Chapter 6 – Environmental Commitments) outlines the City of Duvall’s commitment through mitigation measures that will be implemented through policy development and project review.

8.2 Goals and Policies

8.2.1 SUSTAINABILITY

Sustainability is simply defined as meeting the needs of the present without compromising the ability of future generations to meet their own needs. It includes the interdependent pillars of environmental quality, economic vitality and social equity. Sustainability allows us to preserve and enhance what we have in order to plan for and achieve a livable Duvall community. Planning for sustainability requires a systematic, integrated approach that brings together environmental, economic, and social actions directed toward the following 10 goals and corresponding policies:

8.2.1.1 Healthy Community

GOAL ES 1: Preserve and revive local identity; support and participate in the arts.

Policies

- ES 1.1 Establish a voluntary program to protect properties with historic, architectural, or social significance that contribute to Duvall’s identity.
- ES 1.2 Capitalize on public projects by expressing the identity and special character of Duvall through excellent urban design and architecture that:
 - a. responds to local climate conditions, respects the surrounding context, uses local



building and landscaping materials, emphasizes conservation, and draws on the region's cultural heritage; and

- b. communicates the purpose of the project and the identity, history, and uniqueness of different places within the city.



Photo ES-1. Duvall Days Parade

- ES 1.3 Sustain and enhance arts and cultural institutions for an active and vibrant community life.
- ES 1.4 Encourage establishment of live-work art studios.
- ES 1.5 Promote and fund public art and community arts groups.
- ES 1.6 Promote the creation and display of public art, especially art that reflects Duvall's community identity.
- ES 1.7 Incorporate the arts into the design of public projects and the use of public spaces.

GOAL ES 2: Have access to goods, services, employment, and housing.

Policies

- ES 2.1 Balance the geographic distribution of positive amenities like local businesses, recreation, and civic services.
- ES 2.2 Seek out and encourage the use of public and underutilized land, such as unused parking lots, abandoned properties, and public parks, for community gardens and open space tracts.
- ES 2.3 Adjust open space requirements for subdivisions to include provision of community gardens.
- ES 2.4 Promote gardens as a tourism draw by working with local agricultural providers.
- ES 2.5 Explore opportunities to collaborate with the Riverview School District and nonprofit organizations to better serve youth employment and housing needs.
- ES 2.6 Provide housing for seniors by creating incentives for single-story houses.



ES 2.7 Provide housing for young adults by creating incentives for first-time home buyers.

ES 2.8 Strive to create mixed-income neighborhoods by integrating affordable housing with market-rate housing, avoiding concentrations of below-market-rate or subsidized housing in any one area of the city.

GOAL ES 3: Encourage safe and active outdoor recreation that caters to youth, families, and seniors to promote good health and well-being.

Policies



Photo ES-2. Play structure at Judd Park

- ES 3.1 Create incentives for developers to incorporate outdoor recreational areas into their project design.
- ES 3.2 Seek grants to improve existing Duvall parks and to construct new parks with active recreational opportunities. Active play structures and/or amenities should be designed to accommodate a range of ages and abilities.
- ES 3.3 Incorporate crime prevention through environmental design (CPTED) into the design process for public streets and parks.
- ES 3.4 Encourage and support existing and new youth programs that contain social, academic, health, and cultural programs as funding becomes available.
- ES 3.5 Encourage recreation programs to be affordable and meet the diverse needs in the community for users such as seniors, youth, disadvantaged communities, and families.
- ES 3.6 Explore regulatory or financial incentives in the zoning code and development approval process to encourage the location of private/non-profit recreation facilities (e.g., gyms, yoga or dance studios, martial arts, etc.).
- ES 3.7 Create joint-use agreements with Riverview School District to maximize community use of school facilities and expand school use of City park facilities where appropriate and community space exists to expand opportunities for physical activity.
- ES 3.8 Promote volunteer programs with local nonprofit organizations, partnership collaborations, and public schools to foster a sense of ownership and pride among residents that supports community interactions (e.g., between youth and elders).
- ES 3.9 Promote awareness of regional services for seniors (e.g., Sno-Valley Senior Center located in Carnation).



8.2.1.2 Economy and Employment

GOAL ES 4: Create a prosperous and sustainable economy by expanding local businesses and job creation, creating diverse neighborhoods, and maintaining a high quality of life and natural environment.

Policies

- ES 4.1 Create a meaningful diversity of City budget sources.
- ES 4.2 Take care of assets and investments such as Main Street, existing infrastructure, and places the community values by:
- investing public and private funds in existing places adjacent to State Route 203 (SR-203);
 - encouraging private sector investment;
 - building on past community investments; and
 - fostering economic development in Old Town, Mid-town, and Big Rock Road by improving transportation connections.
- ES 4.3 Target city budget decisions to support the Riverview School District's major capital investments through complementary improvements including recreational facilities, sidewalks and safe crossings, and others that leverage limited capital funding available for schools within the city.
- ES 4.4 Provide programs or incentives that support locally owned businesses to promote a diverse local economy that serves the needs of local consumers.
- ES 4.5 Promote food security (e.g., food banks), local businesses, organic food, and public health by encouraging locally-based food production, distribution, and choice through the support of home and community gardens, farmers or public markets (e.g., Duvall Farmers Market, Figure 3), and other small-scale, collaborative initiatives.
- ES 4.6 Strengthen ties with schools, institutions, arts and cultural entities, nonprofits, and other organizations and recognize their contributions to economic diversity, living wage jobs, and economic activity in the city.
- ES 4.7 Evaluate annexation proposals based on costs to City services and avoid incorporating areas that negatively affect the City budget.



Photo ES-3. Booth at Duvall Farmers Market

Source: Duvall Farmers Market, 2015



8.2.1.3 Land Use and Community Character

GOAL ES 5: Focus growth within already urbanized areas and manage incremental growth in urban growth areas to create walkable and compact neighborhoods that maintain unique local character.

Policies

- ES 5.1 Strive to create development patterns such that the majority of residents are within one-half mile walking distance to a variety of neighborhood goods and services, including supermarkets, restaurants, religious institutions, cafes, dry cleaners, laundromats, farmers markets, banks, pharmacies, medical clinics, and other goods and services.
- ES 5.2 Regulate new development to ensure new blocks encourage walkability by maximizing connectivity and route choice and creating reasonable block lengths of 300-600 feet to encourage more walking and physical activity.
- ES 5.3 Provide a greater diversity and range of housing by location, tenure, size, amenities, type of unit, and price throughout the City to help ensure residents of all stages of life have housing opportunities.
- ES 5.4 Focus growth in areas with existing utility and transportation infrastructure, such as near transportation arterials, and maintain lower densities in neighborhoods with limited utility or transportation capacity.
- ES 5.5 Ensure growth is not disruptive of the cultural integrity of Old Town
- ES 5.6 Plan for phased growth in urban growth areas alongside utility and transportation infrastructure investments.

8.2.1.4 Transportation and Mobility

GOAL ES 6: Create a safe, clean, and integrated multimodal transportation system that supports the City's growth strategy, promotes economic and environmental vitality, and contributes to better public health.

Policies

- ES 6.1 Encourage new developments, and projects involving reconstruction or repaving of parking facilities, to provide designated and preferred parking spots with alternative fueling stations for electric cars.
- ES 6.2 Increase capacity on roadways only if needed to improve safety, improve connectivity of the transportation network, or where other measures are impractical to achieve level-of-service standards.
- ES 6.3 Avoid supporting highway expansion for the sole purpose of increasing general traffic capacity.



- ES 6.4 Encourage new developments to incorporate alleys that connect into the transportation network to serve as a valuable resource for access, location of utilities, and solid waste collection.
- ES 6.5 Maintain existing alley network.
- ES 6.6 Establish a pilot program that retrofits alleys as greenways.
- ES 6.7 Require the continuation of the street network between adjacent development projects to promote walkability and allow easier access for emergency vehicles.
- ES 6.8 Create interconnected pedestrian and bicycle facilities.
- ES 6.9 Promote safe walking, bicycling, and driving behavior through education, enforcement, and engineering design, in order to provide public health benefits and to reinforce pedestrian, bicyclist, and motorist rights and responsibilities.
- ES 6.10 Identify, evaluate, and mitigate environmental impacts of transportation investments and operating decisions (including impacts on air and water quality, regional and state air quality goals and requirements, noise, environmentally sensitive areas, and endangered species). Pursue transportation projects, programs, and investment strategies consistent with noise reduction, air quality improvement, vehicle trip reduction, protection of critical areas and endangered species, and water quality improvement objectives.
- ES 6.11 Educate residents about air quality impacts associated with vehicle usage, alternative modes of transportation, and alternative fuels.
- ES 6.12 Develop a complete streets standard that is designed and operated to enable safe access for all users, including pedestrians, bicyclists, motorists, and transit riders of all ages and abilities.

GOAL ES 7: Increase commute alternatives with multimodal transportation connections to the surrounding community and between Duvall neighborhoods, and invest in technological infrastructure to enhance telecommuting.

Policies

- ES 7.1 Work with transit providers to reestablish and improve transit service between Duvall and major employment centers. Pursue strategies that make transit safe, secure, comfortable, and affordable.
- ES 7.2 Enable universal, affordable, and reliable access to high-speed information technology (e.g., provide free WiFi in downtown).
- ES 7.3 Evaluate and improve infrastructure serving population groups with special needs to ensure they are connected to neighborhoods with safe access for pedestrians and bicyclists.



- ES 7.4 Promote investments in telecommunication infrastructure and offices that promote shared work space to reduce single occupancy car travel.
- ES 7.5 Explore alternative transportation services, including bike sharing and car sharing programs.

8.2.1.5 Natural Resources and Environmental Quality

GOAL ES 8: Reduce waste and reuse and recycle where possible.

Policies

- ES 8.1 Encourage waste reduction and cost-effective reuse and recycling by residents, businesses, and City employees through education, incentives and increased availability of recycling options.
- ES 8.2 Improve waste diversion rates in select City-owned public spaces, prioritizing community and neighborhood parks
- ES 8.3 Educate residents and businesses to divert food and yard waste from landfill through composting and other means, to decrease utility expenses, as well as to reduce fertilizer and pesticide use and greenhouse gas emissions.
- ES 8.4 Facilitate and partner with local community groups and schools on a youth-focused public education program about reducing litter and recycling strategies in the parks and in the city.
- ES 8.5 Encourage partnerships between grocery stores, restaurants, and the Riverview School District with nonprofit organizations to rescue leftover food and deliver it to nearby shelters and food pantries.
- ES 8.6 Work with community service organizations to develop events and outreach programs on reducing waste and landfill diversion approaches.

GOAL ES 9: Value and support environmental quality and support choices that minimize impacts to the environment.

Policies

- ES 9.1 Preserve and restore habitat connections and tree canopy to link stream and river corridors, landslide prone areas, floodplains, wetlands, and critical habitat sites into a system of habitat corridors. This provides connections for wildlife, supports biodiversity, improves water quality, reduces risks due to flooding and landslides, and supports Duvall's adaptation to climate change.
- ES 9.2 Encourage voluntary planning to suitable native trees and native vegetation within degraded streams, wetlands, lake buffers, and steep slopes. Create mitigation banks or voluntary programs to facilitate planting efforts.



- ES 9.3 Create a reclaimed water program that identifies funding, infrastructure improvements, and regulatory requirements to reuse water from the Duvall Wastewater Treatment Plant for landscape irrigation, sewage conveyance, and other non-potable uses.
- ES 9.4 Support and implement water conservation and reuse measures that reduce potable water use, such as: (a) public education; (b) billing rate structures which encourage conservation; (c) encouraging drought tolerant plantings and native vegetation for public and private development, and; (d) imposing water restrictions during droughts. Maintain City membership with Saving Water Partnership to continue collaborating with local utilities on water conservation programs.
- ES 9.5 Support the use of greywater (also known as on-site water recycling) and establish criteria and standards to permit the safe and effective use of greywater.
- ES 9.6 Consider replacing the Duvall government fleet with vehicles that have a lower carbon footprint or are more fuel-efficient.
- ES 9.7 As funding becomes available, implement a program to install energy-efficient technologies for existing street and parking lot lights. Consider requiring energy-efficient technologies for new lights.
- ES 9.8 Assist and encourage new development to meet the criteria of green building certification or credentials through established programs such as Leadership in Energy & Environmental Design (LEED) and ENERGY STAR®.
- ES 9.9 Allow the incorporation of alternative energy generation (e.g., solar, wind, biomass, geothermal) in public and private development.
- ES 9.10 When reviewing applications for new subdivisions, encourage all residential buildings to optimize passive solar heating and cooling.

8.2.1.6 Climate Change

GOAL ES 10: Develop a response to the challenge of climate change (NEW).

Policies

- ES 10.1 Update and implement hazard mitigation plans to reduce and minimize, to the extent feasible, the exposure of Duvall citizens to future disasters or hazards (e.g., flooding, earthquakes, winds).
- ES 10.2 Assess the risks and potential impacts on both City government operations and on the larger Duvall community due to climate change. The assessment of risk and potential responses of adapting to climate change should evaluate the full range of issues.
- ES 10.3 Work with Seattle Public Utilities to minimize climate risks to potable water sources.
- ES 10.4 Develop strategies that can be used by both the public and private sectors to help minimize the potential impacts of climate change on new and existing development and



operations. Develop programs and strategies that will encourage the retrofitting of existing development and infrastructure to adapt to the effects of climate change.

- ES 10.5 If the City is able to obtain grant money, identify programs and strategies for reducing greenhouse gas emissions over time. Sequestration should be included as a strategy.
- ES 10.6 Incorporate the impacts of development on climate change into the environmental review process.
- ES 10.7 Incorporate climate change considerations into City comprehensive and operational plans.

8.2.2 NATURAL ENVIRONMENT

The City of Duvall has a beautiful natural setting, located above the Snoqualmie River and Cherry Creek valleys and surrounded by Puget Sound lowland forests to the east and south. The natural features in Duvall include sensitive areas that must be protected under state law (geologically hazardous areas, critical aquifer recharge areas, frequently flooded areas, wetlands, and fish and wildlife habitat areas) and that provide benefits to fish and wildlife, water quality, property, and quality of life. The movement of surface and subsurface water through wetlands, streams and other sensitive areas also influences water quantity, and with the proper management can limit flooding along rivers and streams, urban flooding from overflowing stormwater facilities, and stream erosion. Because of this, the City has identified a watershed management approach that is intended to ensure that future development and management of sensitive areas occurs in a way that maintains important watershed processes and functions. The goals and policies are accordingly organized by sensitive areas and watershed management. See Figures ES-1 thru ES-7 for mapped sensitive areas and watershed management subbasins.

8.2.2.1 Sensitive Areas

GENERAL

GOAL ES 11: Protect and preserve sensitive areas.

Policies

- ES 11.1 Implement and periodically update sensitive area regulations consistent with best available science while also taking into consideration Duvall's obligation to meet urban-level densities and other requirements under the Growth Management Act.
- ES 11.2 New infrastructure should be located away from sensitive areas, where feasible, or constructed to reduce or avoid impacts using non-invasive construction methods. Maintenance of existing infrastructure in sensitive areas should be subject to best management practices that minimizes impacts.
- ES 11.3 Preserve and enhance sensitive area buffers to maximize natural functions, especially when such areas have high ecological functions. Clearing, grading, and development should generally not be permitted within such buffers.



- ES 11.4 Participate in the Snoqualmie Watershed Forum and Snohomish Basin Forum and encourage development of watershed and basin policies that support the restoration of the Snoqualmie River and tributary subbasins.
- ES 11.5 Preserve and protect sensitive areas including wetlands, open space, woodlands, streams and stream corridors, steep slopes, shorelines, and other unique natural features.
- ES 11.6 Proponents of development should be required to provide mitigation proportionate and related to expected impacts of the proposed development.
- ES 11.7 New roads, utilities, and other public facilities should not be located in sensitive areas unless no other alternative is available.

GOAL ES 12: Serve as a leader in environmental stewardship of the natural environment for current and future generations.

Policies

- ES 12.1 Preserve and protect significant environmental features that reflect Duvall’s natural heritage.
- ES 12.2 Encourage the implementation of appropriate natural resource projects within the park, trail and open space system such as those detailed in Habitat Assessment Existing Conditions Report (Herrera 2002), Fish Habitat Restoration Plans (Herrera 2002), and future studies.
- ES 12.3 Pursue the acquisition of additional undeveloped open space within the city and UGA, including areas located within the Snoqualmie River floodplain and other undeveloped lands that include sensitive areas and/or provide significant natural function.
- ES 12.4 Foster and promote environmental stewardship, responsibility and awareness within the city.
- ES 12.5 Maintain and, where feasible, improve environmental quality and ecosystem function to ensure the health and well-being of people, wildlife, and habitats.
- ES 12.6 Incorporate Best Management Practices (BMPs) and technology in City practices to achieve effective environmental stewardship and continual improvement in environmental management practices.

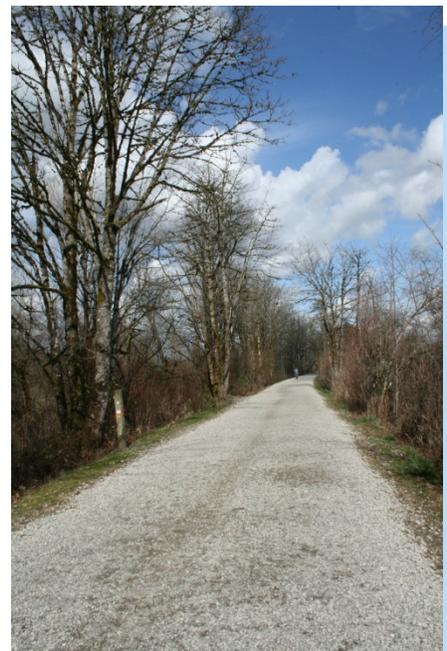


Photo ES-4. Snoqualmie Valley Trail



- ES 12.7 Work cooperatively with local, state, regional and federal governments and community organizations to protect and enhance the environment.

GEOLOGICALLY HAZARDOUS AREAS

GOAL ES 13: Protect people, property and the environment within geologically hazardous areas.

Policies

- ES 13.1 Sensitive areas regulations should give special protection to landslide hazard areas where mass wasting events could impact life and property or damage stream systems.
- ES 13.2 Promote soil stability through retention of existing vegetation.
- ES 13.3 Manage development in and near steep slope and erosion hazard areas to minimize erosion and risk to people and property.
- ES 13.4 Support and promote seismic / liquefaction hazard preparedness efforts.

CRITICAL AQUIFER RECHARGE AREAS

GOAL ES 14: Protect the multiple beneficial water resource functions provided by Critical Aquifer Recharge Areas, including water quality control, water supply for human and agricultural uses, and water supply that maintains stream base flows.

Policies

- ES 14.1 Protect the quality of groundwater that has been identified for potential use as a public water supply.
- ES 14.2 Protect groundwater quality by utilizing the most current groundwater protection standards.
- ES 14.3 Encourage retention of open space and vegetation in critical aquifer recharge areas with a high potential for groundwater recharge.

FREQUENTLY FLOODED AREAS

GOAL ES 15: Protect people, property and the environment within frequently flooded areas, including the floodplain of the Snoqualmie River.

Policies

- ES 15.1 New floodplain development should generally be limited to passive park and utility uses, and should be consistent with the City's shoreline management standards.



WETLANDS

GOAL ES 16: Protect wetlands from encroachment and degradation, and promote wetland restoration, especially at sites that provide important ecological functions.

Policies

- ES 16.1 Impacts to wetlands should be limited. All efforts should be made to use the following mitigation sequencing approach: avoid, minimize, rectify, reduce over time, compensate, and monitor.
- ES 16.2 Preserve wetland systems by maintaining native vegetation between nearby wetlands and between wetlands and nearby streams and other wildlife habitat areas.
- ES 16.3 Use multiple tools to achieve wetland protection and restoration, including property acquisition, voluntary enhancement, property developer incentives and code requirements.
- ES 16.4 Public access within wetlands and wetland buffers should be avoided whenever feasible, and when allowed, should ensure that habitat continuity, water quality, and hydrologic functions is maintained.
- ES 16.5 Prohibit stormwater management facilities within wetlands and limit such facilities within wetland buffers; ensure that wetland hydrology and water quality is maintained as adjacent development occurs.
- ES 16.6 For significantly altered or isolated wetlands with limited ecological functions, consider allowances for land development provided that adequate compensatory mitigation is provided.

FISH AND WILDLIFE HABITAT

GOAL ES 17: Maintain and protect stream resources that provide multiple functions, including surface water transport, fish and wildlife habitat, and aesthetic value.

Policies

- ES 17.1 Protect, preserve and enhance lakes, rivers and streams for their hydraulic, hydrologic, ecological and aesthetic functions.
- ES 17.2 Protect and restore riparian areas sufficient to sustain fish populations, water quality and hydrologic processes consistent with the associated stream.
- ES 17.3 Maintain and restore natural streambank conditions except where it is necessary to protect public access, critical public facilities or infrastructure.
- ES 17.4 Manage the quality and quantity of stormwater runoff entering streams, so as to protect public health and safety, surface and groundwater quality, and the ecological functions of natural drainage systems.



GOAL ES 18: Assure preservation, protection and restoration of salmon habitat to a sufficient extent and quality to support the productivity and diversity of all wild salmon stocks in the Snoqualmie River watershed at a level that will sustain fisheries as well as other salmon-related cultural and ecological values.

Policies

ES 18.1 Retain large woody debris in streams to support salmon populations and watershed processes; only removing large woody debris when it possesses a threat to public safety or public facilities.



Photo ES-5. Chinook Salmon

ES 18.2 As financially feasible, eliminate man-made barriers to anadromous fish passage, prevent the construction of new barriers, and provide for transport of water, sediment and organic matter at all stream crossings.

ES 18.3 As financially feasible, implement the projects listed in the Shoreline Restoration Plan (ESA, 2011) and the Fish Habitat Restoration Plan (Herrera Environmental Consultants, 2002).

ES 18.4 Support the continuation of the King Conservation District (KCD) assessment and apply for KCD grants for design and implementation of projects that protect, preserve or restore salmon habitat.

ES 18.5 Support the implementation of salmon recovery and habitat restoration actions as identified through the Snoqualmie Watershed Forum and the Snohomish Basin Forum as resources allow.

ES 18.6 Where bank stabilization is required, consider using bioengineering techniques that incorporate vegetation and woody debris as the primary means of stabilization. Bank armoring may be necessary at outfall locations.

ES 18.7 All streams, including the Snoqualmie River, other salmonid-bearing streams, and other non-fish bearing streams, and adjacent riparian buffers should be included as fish and wildlife habitat conservation areas.



GOAL ES 19: Protect and promote a diversity of plant and animal species and habitat in Duvall.

Policies

- ES 19.1 Connect wildlife habitats within Duvall and within the region to achieve a continuous wildlife and watershed network. Habitat corridors may include preserved public or private open space, utility rights-of-ways, riparian corridors, wetland buffers or other features.
- ES 19.2 Protect priority species and habitats, as listed by the Washington Department of Fish and Wildlife and the City.
- ES 19.3 Protect native plant communities by encouraging management and control of non-native invasive plants, including aquatic plants.
- ES 19.4 Promote or require the use of native plants in site landscaping and the restoration of stream banks, Lake Rasmussen, and wetlands on public and private development projects. Use of native plants should be required for all public projects.
- ES 19.5 Incorporate public facility management practices that minimize impacts to wildlife and water quality, such as limiting the use of toxic pesticides, herbicides and fertilizers, incorporating alternative pest management methods, and providing public outreach materials about best practices.
- ES 19.6 Minimize impacts from public projects, especially utility and transportation projects, on wildlife corridors and habitat connectivity.

8.2.2.2 Watershed Management

The City of Duvall developed a Watershed Plan in 2015 that evaluates watershed processes within Duvall's city limits and its UGA, as well as downstream areas (ESA, 2015). The Report was developed with funding provided by the Environmental Protection Agency through a National Estuary Program grant, and City matching dollars. Watershed processes that were evaluated focused on the movement of water through the landscape (via streams and stormwater pipes, wetlands, springs, and groundwater). The water flow processes studied included delivery, surface storage, recharge, and discharge as well as sediment delivery processes, wetland density, and forest cover. The report divides and ranks subbasins within Duvall based on the relative importance of these watershed processes to the overall watershed and on the extent of degradation these processes have sustained as a result of past human practices (e.g., converting forested lands to impervious surfaces). The subbasins are ranked according to the following five management categories (also see Figure ES-7):

Group 1 – Protect / Restore

- Applies to Snoqualmie River/Cherry Creek floodplains.
- Assigned to subbasins that are of highest importance to multiple watershed processes and are a high priority for protection and restoration.



Group 2A – Highest Conservation

- Applies to six subbasins along east and south edges of the city.
- Assigned to subbasins that are the highest priority for conservation and are likely not appropriate for much additional development. Assessment results show moderate importance to multiple watershed processes that are also highly intact.

Group 2B – Moderate Conservation

- Applies to Cherry Creek B and Upper Weis Creek subbasins.
- Assigned to subbasins that may be appropriate for some additional development, but also require protection of areas important for remaining watershed processes.

Group 2C – Lowest Conservation

- Applies to three subbasins including North urban growth area and southeast City / South urban growth area.
- Assigned to subbasins where more intense development is appropriate. The remaining resources and areas important to watershed processes would benefit from protection.

Group 3 – Urban Development

- Applies to four subbasins in historic downtown Duvall.
- Assigned to subbasins where more intense development should be focused. These subbasins are below average for water flow importance and have the highest existing degradation.

Goals and policies identified below are included in the Watershed Plan adopted in 2015.

GOAL ES 20: Improve important watershed processes and functions through progressive review and updates of land use designations, development practices, and infrastructure improvements.

Policies

- ES 20.1 Improve protections of watershed processes by amending zoning and subdivision regulations, sensitive area protections, and storm drainage standards that are appropriate for each Management Group. Standards should afford more protection for subbasins that are important for watershed processes and allow for higher intensity development in subbasins of lower importance.
- ES 20.2 Update zoning, subdivision, sensitive areas, and storm drainage standards and other development standards consistent with the subbasin management group framework established in the Watershed Plan.
- ES 20.3 Work with King County to designate urban growth areas to exclude subbasins in the Management Group 2A and include subbasins in the Management Groups 2B and 2C, where feasible.



- ES 20.4 Consider the findings of the Watershed Plan when designating urban growth areas and urban growth area reserves with Comprehensive Plan designations and zoning districts.
- ES 20.5 Minimize impervious surfaces associated with off-street parking lots, driveways, and subdivision designs.

GOAL ES 21: Improve watershed processes by investing in stormwater infrastructure, parks, open spaces, and restoration in the City’s capital improvement program.

Policies

- ES 21.1 Use the findings of the Watershed Plan to identify and prioritize park improvements that achieve multiple benefits (e.g., restore wetlands and create a trail network).
- ES 21.2 Partner with King County to leverage their expertise and resources to implement subbasin management priorities and objectives identified in the Watershed Plan for areas outside the city limits.
- ES 21.3 Partner with conservation groups, other government agencies, not-for-profit organizations, businesses, and other partners to restore habitat and watershed processes within the city limits.
- ES 21.4 Identify and prioritize stormwater retrofits to address impaired watershed processes and reduce effective impervious surface areas based on the findings of the Watershed Plan.
- ES 21.5 Explore the feasibility of building and maintaining centralized stormwater facilities in Management Groups 2B and 2C in the urban growth area to offset onsite detention requirements.
- ES 21.6 Identify and target grant monies and other funding sources for restoration that addresses protection and restoration of watershed processes in Management Groups 1, 2A, and 2B. Consult the Duvall Shoreline Master Program Restoration Plan to identify restoration priorities in Management Group 1.
- ES 21.7 Work with private property owners to voluntarily establish conservation easements on lands with intact forest cover or high value natural resources, especially land that is prioritized for protection or restoration by existing City plans (for example, Duvall’s Shoreline Master Program Restoration Plan) in Management Groups 1, 2A, and 2B.

GOAL ES 22: Preserve and enhance Duvall’s tree canopy cover through education and outreach, partnerships, and pragmatic implementation strategies.

Policies

- ES 22.1 Create an urban forestry plan that documents existing conditions, identifies incentives and programs, and recommends revisions to code requirements to protect and increase forest cover.



ES 22.2 Partner with nonprofit organizations to promote a voluntary tree planting program that provides Duvall’s residents and businesses with opportunities to plant trees in the street right-of-way planter strip and on private property. Outreach and education should be a component of this program.



Photo ES-6. View of forested hillside

ES 22.3 Information about King County’s Public Benefit Rating System, a tax reduction program, should be shared with Duvall property owners located in Management Groups 2A, 2B, and 2C to encourage conservation of forested properties.

ES 22.4 Promote conservation of healthy, native forests in large tracts as part of new subdivision development in Management Groups 2A, 2B, and 2C.

ES 22.5 Amend the significant tree requirements to increase the percentage of trees preserved at the time properties develop and to require preservation of stands of trees. Trees to be saved should be in locations and of a species type to allow maximum opportunity for retention.

ES 22.6 Expand tree mitigation standards in Chapter 14.40 of the Duvall Municipal Code to include standards on tree type, location, and monitoring.

ES 22.7 Create a landmark heritage tree program that establishes criteria for nominating and recognizing trees of exceptional value.

GOAL ES 23: Improve city-wide stormwater systems to maintain and enhance water flow and water quality processes through implementation of low impact development techniques.

Policies

ES 23.1 Improve stormwater management based on the findings of the Watershed Plan by expanding low impact development requirements, creating incentives, and establishing green infrastructure standards for public roadways in the Duvall Municipal Code.

ES 23.2 Encourage property owners to use low impact development best management practices for improved stormwater systems by establishing voluntary programs, and partnering with not-for-profit organizations and governmental agencies.

ES 23.3 Create an educational outreach program that includes workshops, informational handouts, and links to additional resources on amended soils, rain gardens, native



landscaping and rainwater harvesting, landscaping management best practices, and environmental stewardship for property owners.

GOAL ES 24: Improve long-term management of sensitive areas by updating standards that address watershed processes into the City’s Sensitive Areas Ordinance.

Policies

- ES 24.1 Identify, designate, and protect habitat corridors between streams, wetlands, and geologic hazard areas within city limits, including linkages to areas outside of city limits.
- ES 24.2 Restrict wetland and stream buffer reduction allowances in the Duvall Municipal Code for Management Groups 1 and 2.
- ES 24.3 Increase regulatory protections for depressional wetlands in Management Groups 1 and 2.
- ES 24.4 Incorporate standards in the Sensitive Areas Ordinance that limit modifications to wetland and stream buffers that would result in tree loss.

GOAL ES 25: Avoid mass clearing and grading associated with new developments that result in large amounts of tree loss and changes in topography.

Policies

- ES 25.1 Strengthen the limitations on clearing mature or native vegetation in Management Groups 1 and 2 as new development occurs by more closely integrating open space subdivision standards with sensitive area standards.
- ES 25.2 Limit extensive grading and retaining walls for large subdivisions in Management Groups 1 and 2.

8.2.3 SHORELINE MANAGEMENT

The goals and policies identified below are included in the City of Duvall’s Shoreline Master Program, adopted in 2015. The Shoreline Master Program is a planning document that applies only to the Snoqualmie River and its floodplain and associated wetlands.

8.2.3.1 Shoreline Goals

Goal ES 26 (Economic Development): Promote healthy, orderly economic growth by encouraging economic activities that will be an asset to the local economy, which result in commercial uses that are compatible with the intent of the Act and the City, and which maintain the shoreline ecological functions.

Goal ES 27 (Public Access / Recreation): Provide opportunities for new and enhanced physical and visual public access to and water-oriented recreational opportunities within the City’s shorelines when such access and/or recreation can be reasonably accommodated without human health or safety risks, without adverse effects on shoreline functions, and consistent with private property rights.



Goal ES 28 (Shoreline Use): Ensure that the land use patterns in the shorelines protect the existing character of the City and protect existing shoreline environments, habitats, and ecological functions.

Goal ES 29 (Conservation and Restoration): Preserve and protect ecological functions and processes necessary to maintain shoreline natural resources, protect public health and safety, and preserve beneficial uses of the shoreline; restore and enhance identified degraded ecological functions and processes over time.

Goal ES 30 (Archaeological, Historical, Cultural, Scientific and Educational Resources): Identify, protect, preserve and restore important archeological, historic, cultural sites located in shoreline areas for educational and scientific values and enjoyment of the general public.

Goal ES 31 (Flood Hazard Management): Protect shoreline resources and shoreline development and ensure public safety through land use controls and implementation of federal, state and local flood hazard programs.

8.2.3.2 General Shoreline Use Policies

SHORELINE USE

- ES 31.1 Water-dependent uses that preserve shoreline ecological functions and processes are preferred shoreline uses. Secondary preference is given to water-related and water-enjoyment uses, and to those uses that enhance public access to the shoreline or include elements of shoreline restoration.
- ES 31.2 The design, density and location of all allowed uses and developments should reflect physical and natural features of the shoreline and should assure no net loss of ecological functions by avoiding and minimizing adverse effects on shoreline ecology.
- ES 31.3 Uses and development which include restoration of shoreline areas that have been degraded as a result of past activities is highly encouraged.

MAINTENANCE OF EXISTING PUBLIC RECREATION AND UTILITY USES AND STRUCTURES

- ES 31.4 Normal and routine maintenance activities for public recreation and utility uses and structures should not qualify as development and should not require a shoreline substantial development permit whenever such normal and routine maintenance is exempt from requiring a shoreline substantial development permit compliant with Section 7.3 of this Program and WAC 173-27-040 (List of Exemptions).
- ES 31.5 Normal and routine maintenance activities should be completed consistent with the policies and standards of this Program.

ARCHEOLOGICAL, HISTORICAL AND CULTURAL RESOURCES

- ES 31.6 The location of cultural and archeological sites should not be disclosed to the general public, consistent with applicable state and federal laws.



- ES 31.7 Development on sites having or adjacent to historical, cultural and archeological resources should avoid and minimize impacts to the resource. The City should endeavor to involve tribal governments and the State Department of Archaeology and Historic Preservation in the review of development projects that could adversely affect such resources.
- ES 31.8 The City should encourage educational projects and programs that foster a greater appreciation of the importance of shoreline management, local history, and environmental conservation.

ENVIRONMENTAL PROTECTION AND SENSITIVE AREAS

- ES 31.9 The City should preserve, enhance, and/or protect sensitive areas in shoreline jurisdiction for their ecological functions and values, as well as their aesthetic, scenic, and educational qualities.
- ES 31.10 Development should provide a level of protection to sensitive areas within the shoreline that achieves no net loss of ecological functions, with project specific and cumulative impacts considered in assessing the potential for net loss of ecological functions.
- ES 31.11 This program should ensure that the City's shoreline ecological functions are maintained or improved in the long term through effective implementation of the City's Sensitive Areas Code.
- ES 31.12 Proponents of development should require mitigation proportionate and related to the expected impacts of the proposed development.

FLOOD HAZARD REDUCTION

- ES 31.13 Flood protection should be managed in accordance with the City's floodplains regulations, Stormwater Management and Erosion Control regulations, and the National Flood Insurance Program.
- ES 31.14 The City should participate in regional approaches to flood management issues within the Snoqualmie Watershed, coordinating with the Federal Emergency Management Agency, the State of Washington, King County, and other entities involved in reducing flood hazards.
- ES 31.15 Consistent with the City's floodplain regulations, DMC Title 14, the City should discourage development in floodplains and channel migration zones associated with the City's shorelines that would individually or cumulatively result in an increased risk of flood damage, channel erosion hazards, or further limit channel migration.
- ES 31.16 Non-structural flood hazard reduction measures should be given preference over structural measures. Non-structural measures include setbacks, land use controls prohibiting or limiting development in historically flooded area, removal or relocation of structures in flood-prone areas, or bioengineering measures. Structural flood hazard reduction measures should be avoided whenever possible, and when necessary should



be conducted in a manner that assures no net loss of ecological functions and ecosystem-wide processes.

ES 31.17 The City should not allow new uses, the creation of new lots, or the construction of new developments where the development or use would further require structural flood hazard reduction measures in the reasonably foreseeable future.

PUBLIC ACCESS

ES 31.18 The City should expand the amount and diversity of shoreline public access opportunities consistent with the character and ecological functions of the shoreline, private property rights and public safety. Specifically, expand a network of walking and biking trails along the Snoqualmie River throughout shoreline jurisdiction and maintain and improve existing water-dependent shoreline access opportunities in the North McCormick Park Public Recreation and Taylor’s Landing Public Recreation environments.

ES 31.19 The City should ensure that public access improvements and amenities (such as viewpoints, trails, etc.) be designed to provide for public safety, to respect individual privacy, and to avoid or minimize visual impacts from neighboring properties.

ES 31.20 The City should ensure that public access is provided as part of any development project by a public entity except when such access is shown to be inappropriate due to reasons of safety, security, or adverse impacts to shoreline functions and processes.

ES 31.21 The City should encourage commercial, multi-family residential, and mixed-use developments to provide public physical or visual access to the shoreline as a condition of approval for development within the City’s shoreline. Public access should be commensurate with the impacts of such development and the corresponding benefit, and should be balanced with the need to protect ecological functions and preserve the rights of private property owners.

SHORELINE VEGETATION CONSERVATION

ES 31.22 All new shoreline development and/or uses should retain existing native shoreline buffer vegetation, with the overall purpose of protecting and maintaining functions and processes. Important functions of shoreline buffer



Photo ES-7. Entrance to McCormick Park



vegetation include: stabilizing banks and attenuating erosion, providing shade to maintain cool temperatures, removing sediments and excessive nutrients, providing habitat for terrestrial and aquatic wildlife, and providing woody debris and other organic material inputs.

- ES 31.23 Vegetation conservation and management in shoreline areas should include removal of non-native invasive plant species and noxious weeds as needed to facilitate establishment of stable native plant communities.
- ES 31.24 Woody debris should be left in stream corridors to enhance wildlife habitat and shoreline ecological functions, except where it threatens personal safety or public infrastructure such as bridge pilings, roads or flood control structures.
- ES 31.25 Native shoreline vegetation should be integrated with bioengineering to stabilize streambanks and minimize erosion.
- ES 31.26 Vegetation clearing should be limited to the minimum necessary to accommodate shoreline uses/development.

WATER QUALITY

- ES 31.27 Stormwater should be managed consistent with DMC 9.06, the City's stormwater management and erosion control regulations and the Comprehensive Plan.
- ES 31.28 Promote the use of low impact development techniques through incentives, permit requirements, and adopted City plans and policies.
- ES 31.29 Effective erosion/sedimentation controls for construction in shoreline areas should be required.
- ES 31.30 The City should discourage the use of fertilizers and herbicides adjacent to shorelines.

RESTORATION

- ES 31.31 The City should encourage and facilitate cooperative restoration and enhancement programs between local, state and federal public agencies, tribes, non-profit organizations, and landowners.
- ES 31.32 The City should implement approved restoration plans to facilitate the restoration of impaired ecological functions through a variety of techniques, including seeking restoration partners, incentives for projects that incorporate restoration components, and securing available restoration grants and funding.
- ES 31.33 The City should establish a public outreach and education program for property owners adjacent to the shoreline to promote shoreline-friendly practices.



VIEWS AND AESTHETICS

ES 31.34 Shoreline uses and development should be designed and maintained to minimize obstructions of the public's views of the water, including considerations of scale, arrangement, and modulation of site buildings and elements.

8.2.3.3 Shoreline Modification Policies

SHORELINE STABILIZATION

ES 31.35 New permanent shoreline stabilization structures should be prohibited except in cases where an existing structure or public use is in imminent danger from water induced erosion and where associated with public recreational access facilities.

ES 31.36 Where allowed, stabilization measures should use non-structural shoreline stabilization or biostabilization techniques.

ES 31.37 Proposals to repair existing shoreline stabilization structures should include measures to enhance existing conditions for fish and wildlife, shoreline vegetation, water quality, and sediment transport.

ES 31.38 Unless permitted by this Program as water-oriented, all new shoreline uses and developments should be located and designed to prevent the need for structural shoreline stabilization (bulkheads, riprap, etc.). The City should not allow new non water-oriented uses, the creation of new lots or the construction of new non water-oriented development where it would be reasonably foreseeable that the development or use would require structural bank stabilization.

FILL, EXCAVATION, DITCHING, CLEARING AND GRADING

ES 31.39 Fill, excavation, ditching, clearing and grading in shoreline jurisdiction should be allowed only in association with a permitted use and where allowed should be the minimum necessary to accommodate the proposed use.

ES 31.40 Shoreline fill, excavation, ditching, clearing and grading should be designed and located so there will be no significant degradation of water quality, no alteration of surface water drainage, flood water storage, or conveyance capacity and no further limitation to channel migration which would pose a hazard to adjacent property or natural resources.

DREDGING AND DREDGE MATERIAL DISPOSAL

ES 31.41 Dredging and dredge material disposal should be prohibited except when associated with an approved and adopted watershed management plan, surface water management plan, restoration plan, and/or flood hazard reduction plan.

IN-STREAM STRUCTURES

ES 31.42 In-stream structures should only be allowed for the purpose of environmental restoration and should provide for the protection and preservation of ecological functions and processes such as fish habitat.



ES 31.43 Existing in-stream structures which are failing, unnecessary, harmful, or ineffective should be removed, and shoreline ecological functions and processes should be restored using non-structural methods.

ES 31.44 Natural in-stream features such as large woody debris, snags, uprooted trees or stumps should be left in place unless it can be demonstrated that they are causing bank erosion, higher flood stages or safety hazards.

8.2.3.4 Use Specific Policies

BOATING FACILITIES

ES 31.45 New public hand-launch boat launch ramps should be permitted in the Duvall shoreline. If allowed, such facilities should be designed to accommodate public access and enjoyment of the shoreline location. Depending on the scale of the facility, public access should include walkways, viewpoints, and other recreational uses.

ES 31.46 Trailer-launch boat launch ramp should be maintained as a permitted use in the Duvall shoreline at Taylor's Landing. If redevelopment of the Taylor's Landing boat launch is proposed and approved, such facilities should be designed to accommodate public access and enjoyment of the shoreline location. Depending on the scale of the facility, public access should include walkways, viewpoints, and other recreational uses.

ES 31.47 Marinas, docks, piers, wet boat storage and private boat launch ramps should be prohibited within Duvall shoreline jurisdiction due to the specific nature and configuration of the Snoqualmie River shoreline in the City.

ES 31.48 Locate, design, and operate public boat launch ramps to avoid adverse proximity impacts to adjacent land uses such as noise, light and glare, aesthetic impacts, and impacts to public visual access.

ES 31.49 Dry boat storage should not be considered a water-oriented use and should only be allowed within the shoreline environment when approved through a conditional use permit, and only when providing public storage in the North McCormick Park shoreline environment for hand launch-able boats.

COMMERCIAL

ES 31.50 Commercial development and use should be prohibited except within the Riverside Village environment, and within the South McCormick Park Passive Recreation and



Photo ES-8. Taylor's Landing boat launch



Conservancy and North McCormick Park Public Recreation environments when associated with commercial uses fronting Main Street.

- ES 31.51 Where permitted, the City should give first preference to water-dependent commercial uses over non-water-dependent commercial uses (where appropriate); and give second preference to water-related and water-enjoyment commercial.
- ES 31.52 Commercial development should be designed and located to prevent net loss of shoreline ecological functions and should not have adverse impacts on other shoreline uses, public access or recreation.

INDUSTRIAL

- ES 31.53 Industrial development and use should be prohibited except when associated with industrial uses fronting Main Street within the South McCormick Park Passive Recreation and Conservancy environment.
- ES 31.54 Industrial development should be designed and located to prevent net loss of shoreline ecological functions and should not have adverse impacts on other shoreline uses, public access or recreation.

RECREATION

- ES 31.55 The City should provide diverse water-oriented recreation opportunities that are convenient and adequate for the community and that preserve shoreline resources and do not result in a net loss of ecological functions.
- ES 31.56 The City should plan for shoreline recreation facilities to serve projected growth and level of service standards, in accordance with the Comprehensive Plan.
- ES 31.57 Recreational uses in shoreline areas should be located where the uses would not result in adverse effects on shoreline functions and processes, and/or neighboring uses.
- ES 31.58 The City should encourage cooperation among public agencies, Tribes, non-profit groups and private landowners and developers to increase and diversify recreational opportunities.

RESIDENTIAL

- ES 31.59 Existing single-family residences and their appurtenant structures should be permitted to continue use in the RV environment; and regulated in all other environments consistent with DMC Title 14 (Unified Development Regulations).
- ES 31.60 Residential development should be designed to preserve existing shoreline vegetation, control erosion, protect water quality using best management practices, and to use low impact development techniques where appropriate.



TRANSPORTATION AND PARKING

- ES 31.61 Transportation facilities, including new facilities and repair and improvement of existing facilities should be located, designed, constructed and maintained to have minimum impacts on shoreline resources and ensure no net loss of shoreline ecological functions.
- ES 31.62 New transportation facilities should be located outside of shoreline jurisdiction unless there is no reasonably feasible alternative alignment or location or they are required to access a permitted use and then, they should be the minimum width possible.
- ES 31.63 New transportation facilities should be located and designed to minimize the need for shoreline protection measures, modifications to natural drainage systems, and crossing waterways.
- ES 31.64 Shoreline restoration and public access should be considered with planning and funding of transportation projects.
- ES 31.65 Parking is not a preferred shoreline use and should be allowed only to support a use authorized under this Program; parking supporting a use authorized under this Program should be sited outside of Shoreline Jurisdiction or as far landward from the OHWM of the Snoqualmie River as is feasible.

UTILITIES

- ES 31.66 The design and location of utility facilities should provide for no net loss of shoreline ecological functions.
- ES 31.67 New utility production and processing facilities, such as power plants and sewage treatment plants or parts of such facilities that are non-water oriented should not be located in shoreline areas unless there is no feasible alternative location.
- ES 31.68 Utility transmission facilities should be located outside of shoreline areas, to the maximum extent feasible.
- ES 31.69 Utility installation or maintenance projects in shorelines should restore areas to pre-project configuration, replant with native species and provide maintenance care until the newly planted vegetation is established.
- ES 31.70 Maintenance, repair, and reconstruction of existing utility infrastructure should be allowed when consistent with best management practices to minimize impacts to ecological functions and restore areas of temporary impact.



8.3 Environment and Sustainability Analysis

8.3.1 SUSTAINABILITY

8.3.1.1 Existing Conditions

In order to transform the city into a sustainable environment, a firm knowledge of the current setting will provide an invaluable baseline to measure progress and determine strengths and weaknesses of the existing environment. The following topics outline the existing conditions for Duvall, and reflect the current sustainable environment. The data and detailed analysis supporting this section of the Element can be found in the existing conditions report prepared as part of the 2015 Comprehensive Plan Update.

Socio-Cultural Context: The socio-cultural context of Duvall addresses age, ethnicity, housing tenure, educational attainment, and social services. Community culture and social dynamics can play a pivotal role in the health of a community, based on social bonds, cultural understanding, and community strength. The 2010 population of Duvall was 6,695 residents. Approximately 33.8 percent of Duvall’s population consists of children under the age of 18, while only 4.5 percent includes older adults over the age of 65. Racial and ethnic minorities make up 10.3 percent of Duvall’s population, and 5 percent of the population is low income. Approximately 9.8 percent of the population is considered to be potentially isolated due to speaking a language other than English, while 0.7 percent is potentially isolated due to having no vehicles available. Of the 2,157 housing units, only 14.7 percent are renter occupied.

Community Health Status: The community health status provides current information on obesity, insurance coverage, diseases, mortality rates, physical activity, and health habits. In the Snoqualmie Valley (including Duvall in addition to Carnation and several unincorporated communities), general health status is very good relative to the rest of King County. Exceptions include excessive alcohol consumption (20 percent of Snoqualmie Valley residents), high blood cholesterol (43 percent), and asthma (9 percent). The Snoqualmie Valley is also above average among King County communities for falls, with 11.2 mortality incidents per 100,000 people. Approximately 93.5 percent of Duvall residents have health insurance coverage. Average emergency response times are 3.5 to 6 minutes (including travel time) for EMS and fire in Duvall. From 2007 through 2014, there were a total of 278 reported auto accidents on public roads within Duvall, an average of just over 37.5 per year. There were only three car accidents involving pedestrians and only two involving bicycles.

Built Environment: The existing built environment includes information on population density, land use, urban infill, park level of service, housing, homelessness, walkability, and circulation. The built environment of a city can determine accessibility to services, jobs, and commercial land uses, and can hinder or help residents live active lifestyles. The majority of Duvall is designated residential in the City’s Comprehensive Plan. Mixed use, commercial, and light industrial areas are mainly concentrated along Main Street, NE Big Rock Road, and NE 143rd Place, while public facilities are dispersed throughout the city. The majority of houses in Duvall are single-family residential, generally built 14 to 24 years ago, and owner-occupied. Residents and workers can use two bus routes running through the City boundaries. The most used mode of transportation employed in the city is the



personal motor vehicle utilized for commuting to work, with 76.8 percent of residents driving alone. Approximately 3.8 percent of residents commute to work via public transportation.

Economic Prosperity and Access to Goods and Services: Duvall's unemployment rate in 2012 was 5.4 percent, lower than King County's average of 7.3 percent. However, access to jobs could be improved in Duvall because most people must leave the city to get to their jobs, and most are driving alone. Approximately 33 percent of households that own their home and 30 percent that rent their home are considered cost-burdened, which means that they pay more than 30 percent of their income towards their mortgage or rent. There is very limited access to amenities and services for residential neighborhoods in the southeast part of the city. Access to healthy foods is provided by the Duvall Farmers Market and 3 supermarket groceries that provide fresh produce. Access to fast foods is present, with 4 fast food restaurants and 1 convenience store.

Sustainable Natural Environment: The existing natural environment of Duvall includes air quality, water quality, land cover, habitat, and hazardous materials. Air quality in Duvall is generally consistent with other areas across the Puget Sound region. Between 1992 and 2011, Duvall saw a 26 percent reduction in forested lands as well as a 26 percent reduction in grasslands. Over that same period, developed land expanded by 34 percent and bare land by 125 percent. Loss of important natural areas throughout Duvall has resulted in impaired physical and chemical properties of natural water bodies, including known problems with bacteria on the Snoqualmie River and temperature issues on Coe-Clemons Creek. The Snoqualmie River in the vicinity of the city supports several salmonid species, including federally listed threatened Chinook salmon, bull trout, and steelhead. Areas along the western edge of the city near the Snoqualmie River, its adjacent floodplain, and wetland and riparian zones are mapped as priority wildlife habits by Washington Fish and Wildlife Habitat. There is only one known toxic cleanup site in Duvall: a gas station site on Main Street contaminated by a leaking underground storage tank.

Climate Change: Several recent studies have concluded that rising levels of greenhouse gases in the atmosphere (carbon dioxide, methane, and nitrous oxide) have warmed the earth. These studies also conclude that increases in greenhouse gases are causing rising sea levels; melting snow and ice; and more extreme storms, rainfall, and floods. Studies completed by the University of Washington Climate Impacts Group and by King County evaluate potential impacts in the Puget Sound region and predict wetter winters, increased winter stream flows, decreased snow cover and snowpack, earlier snowmelt, and decreased summer stream flows. At the local level, increases in extreme rain events means a potential increase in Snoqualmie River flooding, flooding and erosion in smaller streams, and increased urban flooding due to undersized pipes and ditches. Reduced summer stream flows and corresponding lower groundwater elevations have the potential to affect local agriculture and river recreation. Reduced snowpack, predicted by both Climate Impacts Group and King County, has the potential to impact the City's drinking water supply. The City gets its water from Seattle Public Utilities via the Tolt River system, which relies in part on snowpack to fill the reservoir during summer months.

Through this understanding of the existing conditions in Duvall, the City has facilitated the planning process to identify needs and form policies and implementation strategies that can improve sustainability in Duvall. The existing conditions will also serve as the baseline for any implementation monitoring, and can better serve future planning processes with effective strategies for maintaining and improving a sustainable community.



8.3.1.2 Implementation and Next Steps

After establishing the policy framework for moving Duvall toward a more sustainable community, the next step the City could take would be to identify actions that implement the policies identified in this element. These actions can be developed as part of a sustainability strategy or a climate action plan. The actions would need to be implemented and tracked to ensure progress towards established goals. There are many resources the City could rely on for assistance in implementation, including the King County-Cities Climate Collaboration where 11 cities and the County have partnered to coordinate and increase the effectiveness of local government on climate and sustainability actions. This partnership is open to all King County cities. Duvall could also enlist the services of ICLEI USA to create a greenhouse gas emission inventory that identifies emissions associated with the municipal government and the Duvall community. This would establish a baseline of greenhouse gas emissions by which Duvall could work towards reducing over a certain time period. The City could also employ the STAR Community Rating System which is a national certification program that assess a community's sustainability, sets targets for moving forward, and measures progress along the way.



Photo ES-9. Snoqualmie River viewed from McCormick Park

8.3.2 ENVIRONMENTAL SETTING

8.3.2.1 Natural Environment

The City of Duvall is located on west- and north-facing hillsides in the lower Snoqualmie River valley. The centerline of the river is the approximate western boundary of the city. The northern boundary of the City extends along forested slopes near the edge of the Cherry Creek valley, a major tributary to the Snoqualmie River. Unincorporated areas of King County surround the city on all sides, with floodplain agricultural lands of the Snoqualmie River and Cherry Creek valleys to the north and west and rural residential and forested lands to the south and east.

Duvall and surrounding areas have a temperate, maritime climate. Winters are cool and wet, while there is typically a drought period in the summer and early fall. The climate is influenced by Puget Sound to the west and the Cascade Mountains to the east. Average annual precipitation ranges from approximately 30 inches near Puget Sound to 90 inches in the Cascade foothills, with the area surrounding Duvall averaging nearly 50 inches.

The Snoqualmie River watershed and the entire WRIA 7 area support a variety of fish and wildlife species. Wildlife habitat types that are common in the vicinity include freshwater aquatic areas, including lakes, streams and wetlands; riparian habitats associated with aquatic areas; lowland conifer-hardwood mixed forests; and agricultural and pasture areas. Within Duvall, riparian and floodplain areas along the Snoqualmie River are protected as City parks and open spaces. Additional



remaining natural habitats are associated with tributary stream corridors and associated wetlands, as well as steep slope forested areas occurring along the northern edge of the city.

The Snoqualmie River watershed supports Chinook, chum, coho, and pink salmon; bull trout and Dolly Varden; cutthroat, steelhead, rainbow, and brook trout; and warmwater fish such as smallmouth and largemouth bass, yellow perch, bluegill, and green sunfish (City of Duvall, 2006). All of these species use the mainstem Snoqualmie River at the city's western edge at some point in their life histories, and salmonid use is also abundant in the mainstem and tributaries of Cherry Creek. Coho and steelhead use the lower reaches of tributary streams extending into Duvall, including Cherry Creek Tributary A, Coe-Clemmons Creek, Thayer Creek, and reaches of Weiss Creek and other Cherry Creek tributaries downstream of the city.

Degradation of the natural environment is linked to changes in land use and increases in impervious surfaces and alterations to natural surface- and ground-water flow pathways associated with urban development. In Duvall, this has meant tributary streams (Thayer, Coe-Clemmons, and Cherry Creek tributaries) with deeply incised channels and bank failures caused by altered runoff patterns, as well as fill and alteration of wetlands (which serve as natural storage areas for stormwater flows) due to decreases in forest cover, increases in impervious surface and alteration of native soils. Forest cover across the city – measured at approximately 35 percent through interpretation of aerial photography – remains relatively high compared to other Puget Sound cities. Impervious surface coverage is approximately 26 across the City. As future development occurs, loss of forest cover and increases in impervious surface coverage could result in further degradation of Duvall's natural environment.

8.3.2.2 Snoqualmie River

The Snoqualmie River in Duvall is governed by Washington's Shoreline Management Act which was passed by the State Legislature in 1971 and adopted by the public in a referendum. The Act was created in response to a growing concern among residents of the state that serious and permanent damage was being done to shorelines by unplanned and uncoordinated development. The goal of the Act is "to prevent the inherent harm in an uncoordinated and piecemeal development of the state's shorelines." While protecting shoreline resources by regulating development, the Act is also intended to provide for appropriate shoreline use by encouraging land uses that enhance and conserve shoreline functions and values.

The Act has three broad policies:

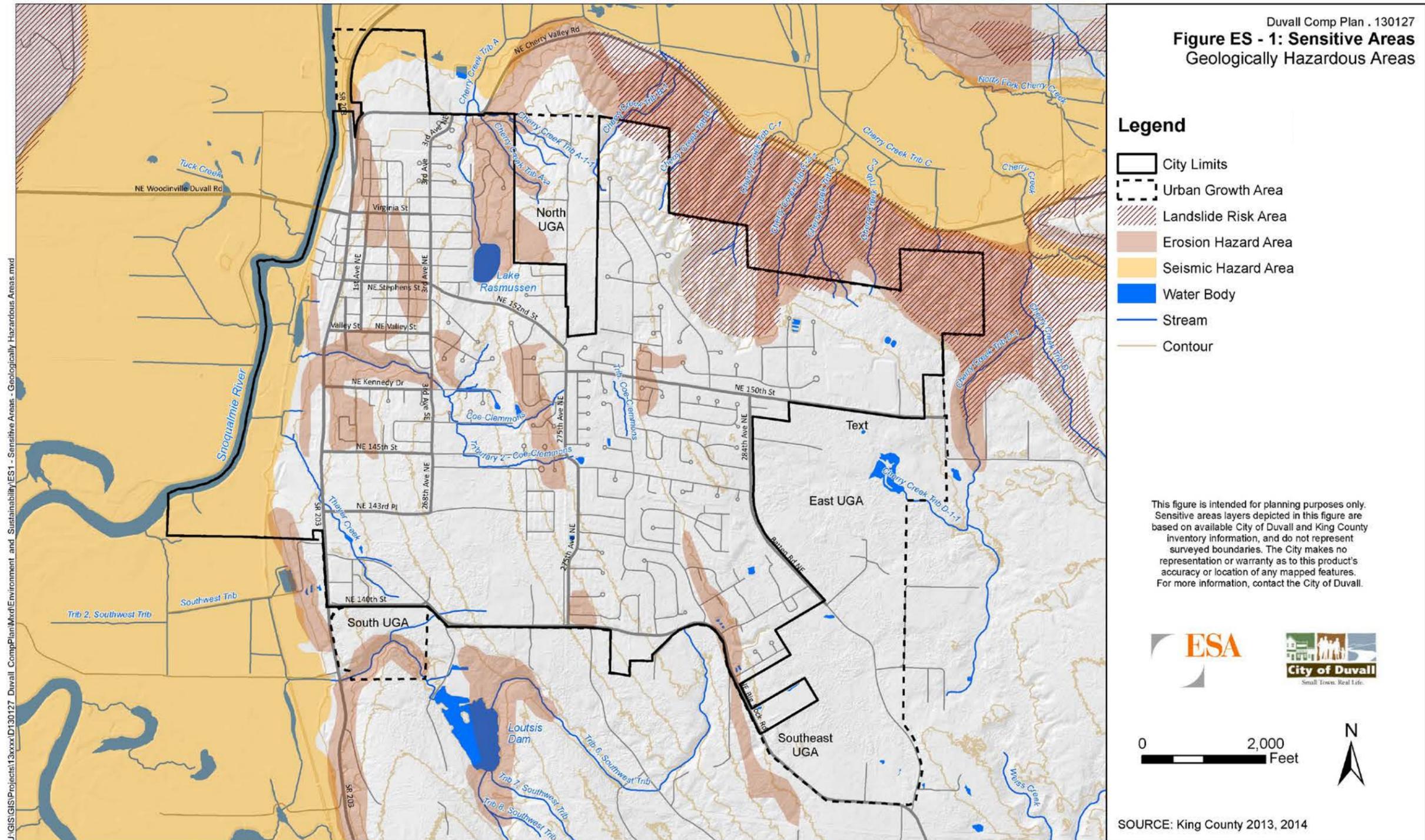
1. Encourage water-dependent and water-oriented uses: "uses shall be preferred which are consistent with control of pollution and prevention of damage to the natural environment, or are unique to or dependent upon use of the states' shorelines...."
2. Promote public access: "the public's opportunity to enjoy the physical and aesthetic qualities of natural shorelines of the state shall be preserved to the greatest extent feasible consistent with the overall best interest of the state and the people generally."
3. Protect shoreline natural resources, including "...the land and its vegetation and wildlife, and the water of the state and their aquatic life...."



The Act requires local jurisdictions like the City of Duvall to develop a Shoreline Master Program to make sure the City is adequately planning for the Snoqualmie River and implementing land use regulations in accordance with the policies adopted by the State. The City adopted a Shoreline Master Program in 1974 which was subsequently updated in 2015. The 2015 Shoreline Master Program includes the goals and policies listed in this element as well as regulations that govern land uses (e.g., parks) and modifications to the Snoqualmie River (e.g., armoring). The Duvall Shoreline Master Program only applies to the Snoqualmie River which forms the western boundary of the city and “shoreland” areas lying upland of the river as depicted on Figure ES-8. The shoreland includes the floodplain associated with the river, as well as associated wetlands.

The Shoreline Master Program also created a system of “shoreline environment designations” to group areas along the Snoqualmie River that share similar characteristics so they can be managed in a uniform and consistent manner (Figure ES-8). Shoreline environment designations function similarly to zoning overlays. That is, they do not change the underlying zoning or other applicable land use regulations, but provide an additional layer of policies and regulations that can be tailored to the designation. The following shoreline environment designations have been established in the Shoreline Master Program:

1. South McCormick Park Passive Recreation and Conservancy
2. North McCormick Public Recreation
3. Riverside Village
4. Taylor’s Landing Public Recreation
5. Aquatic



U:\GIS\Projects\13xxxx\130127 Duvall CompPlan\Mxd\Environment and Sustainability\ES1 - Sensitive Areas - Geologically Hazardous Areas.mxd

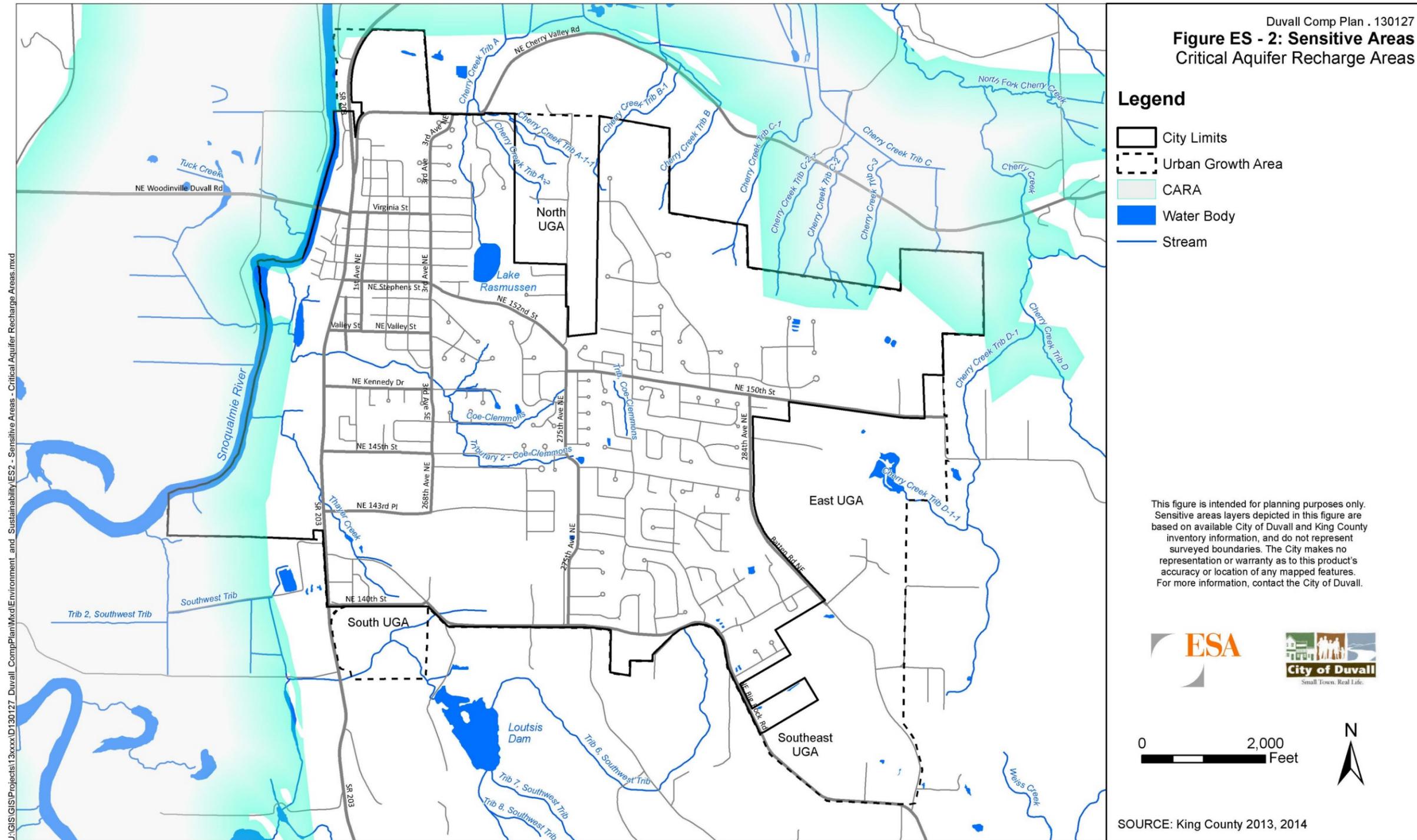
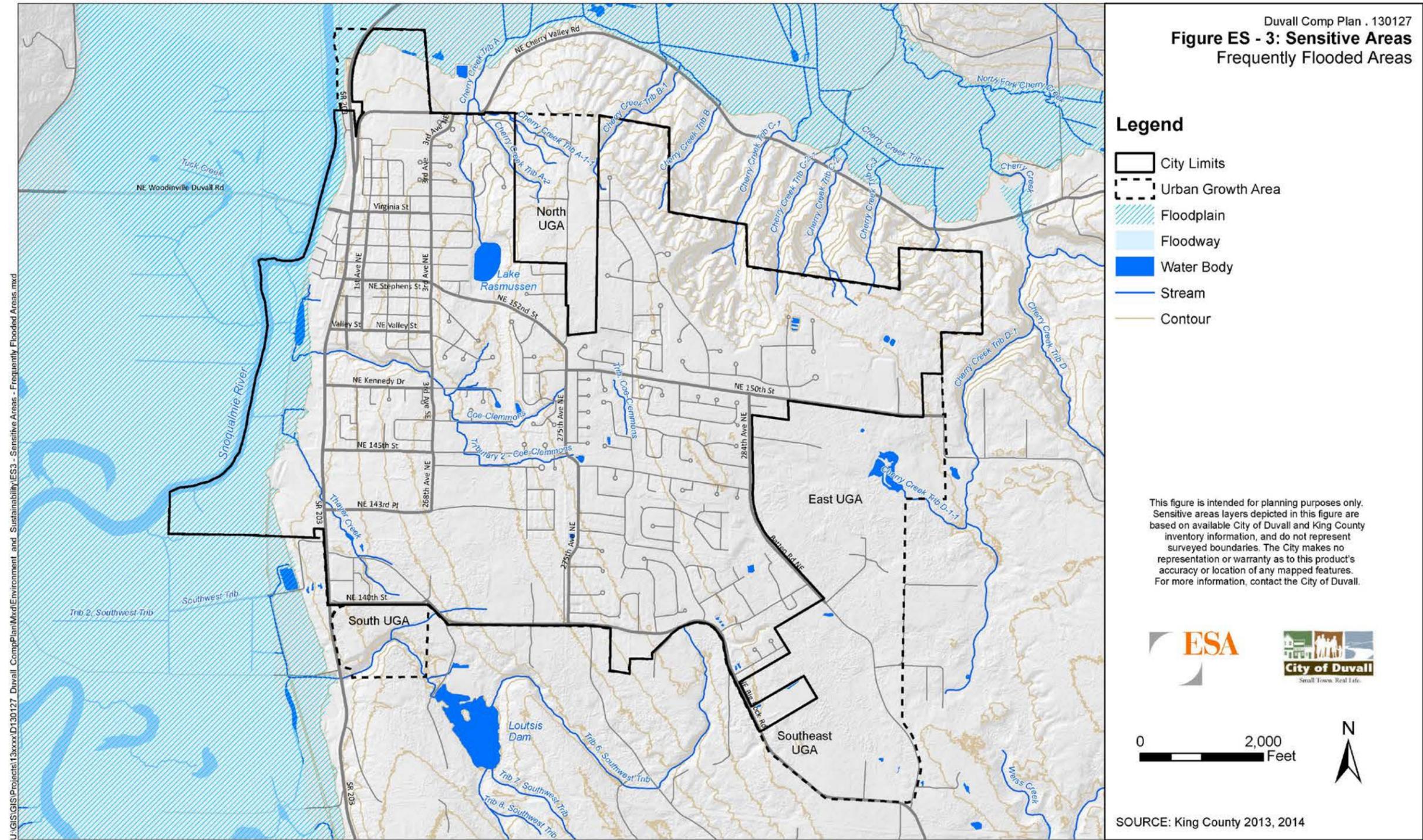


Figure ES - 3: Sensitive Areas
Frequently Flooded Areas



U:\GIS\Projects\130127 Duvall CompPlan\Mxd\Environment and Sustainability\ES3 - Sensitive Areas - Frequently Flooded Areas.mxd

**Figure ES - 4: Sensitive Areas
Wetlands**

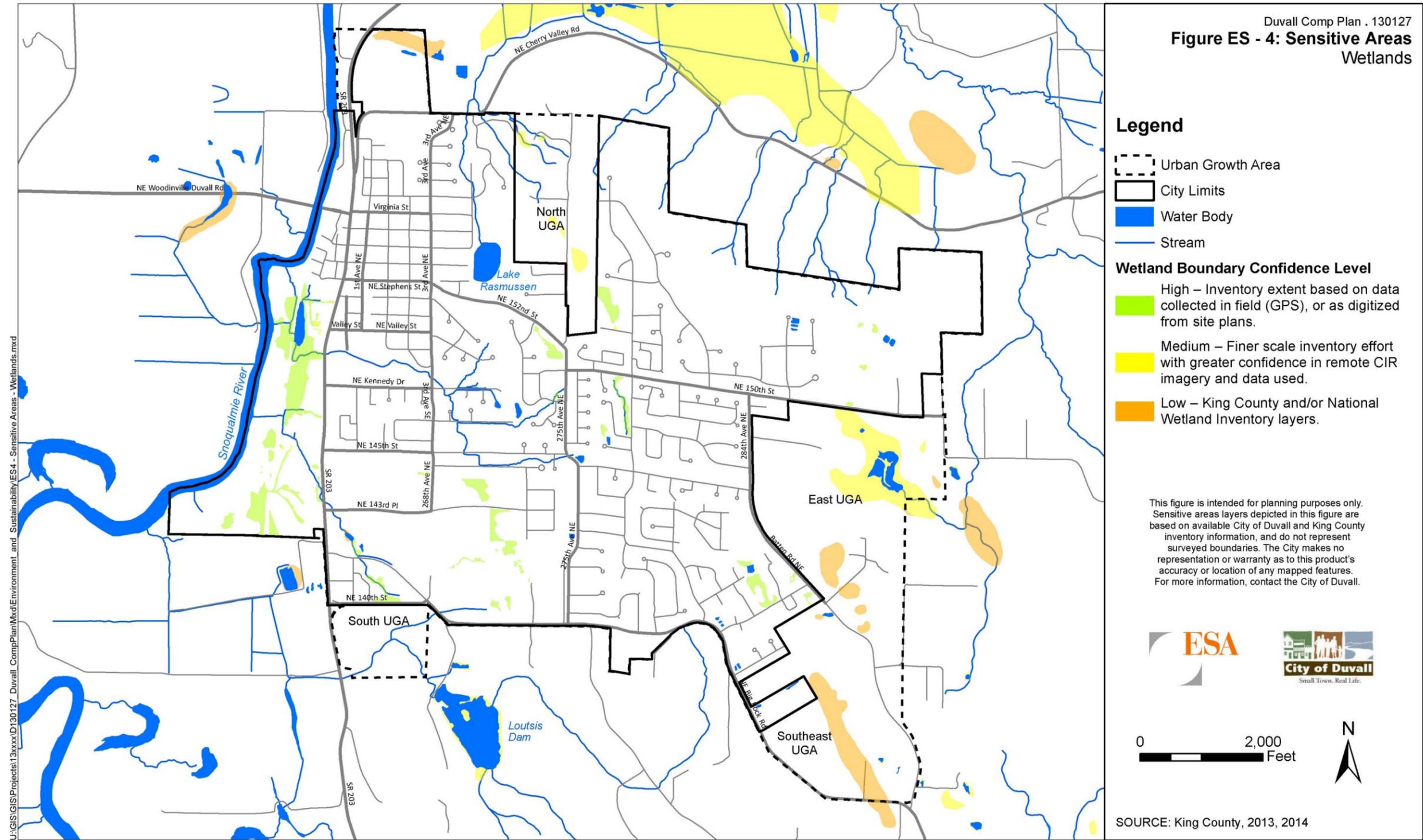


Figure ES - 5: Sensitive Areas Streams

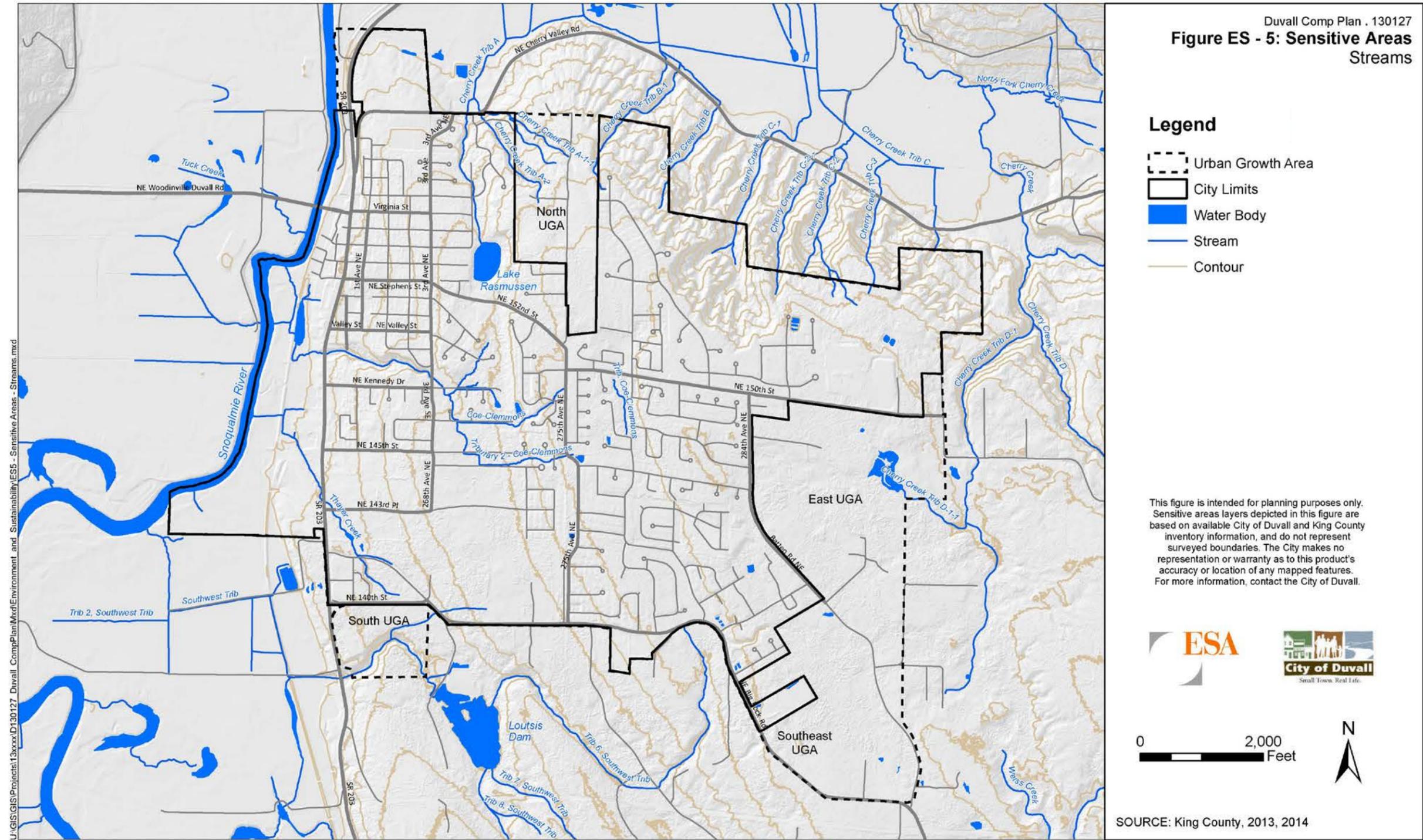
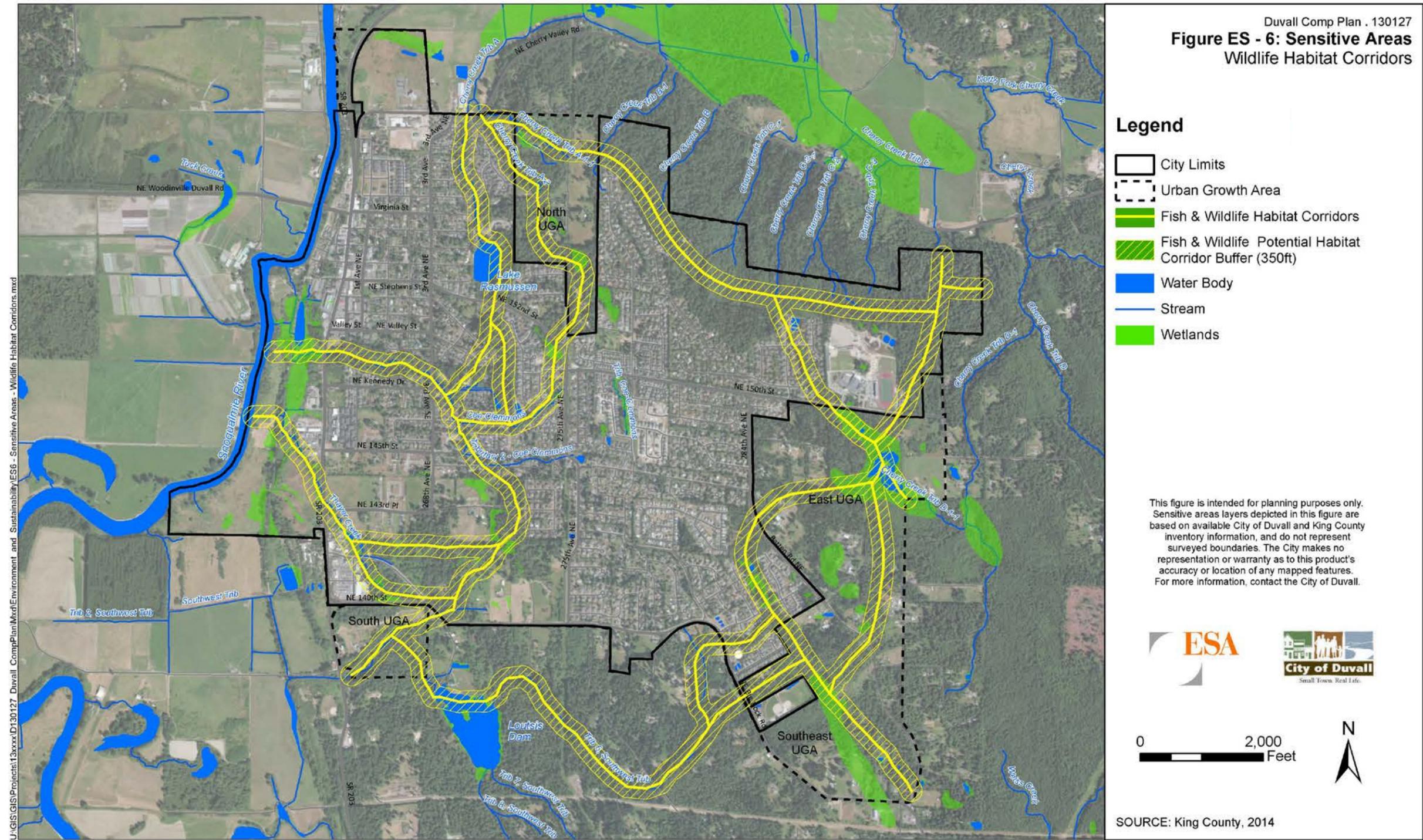
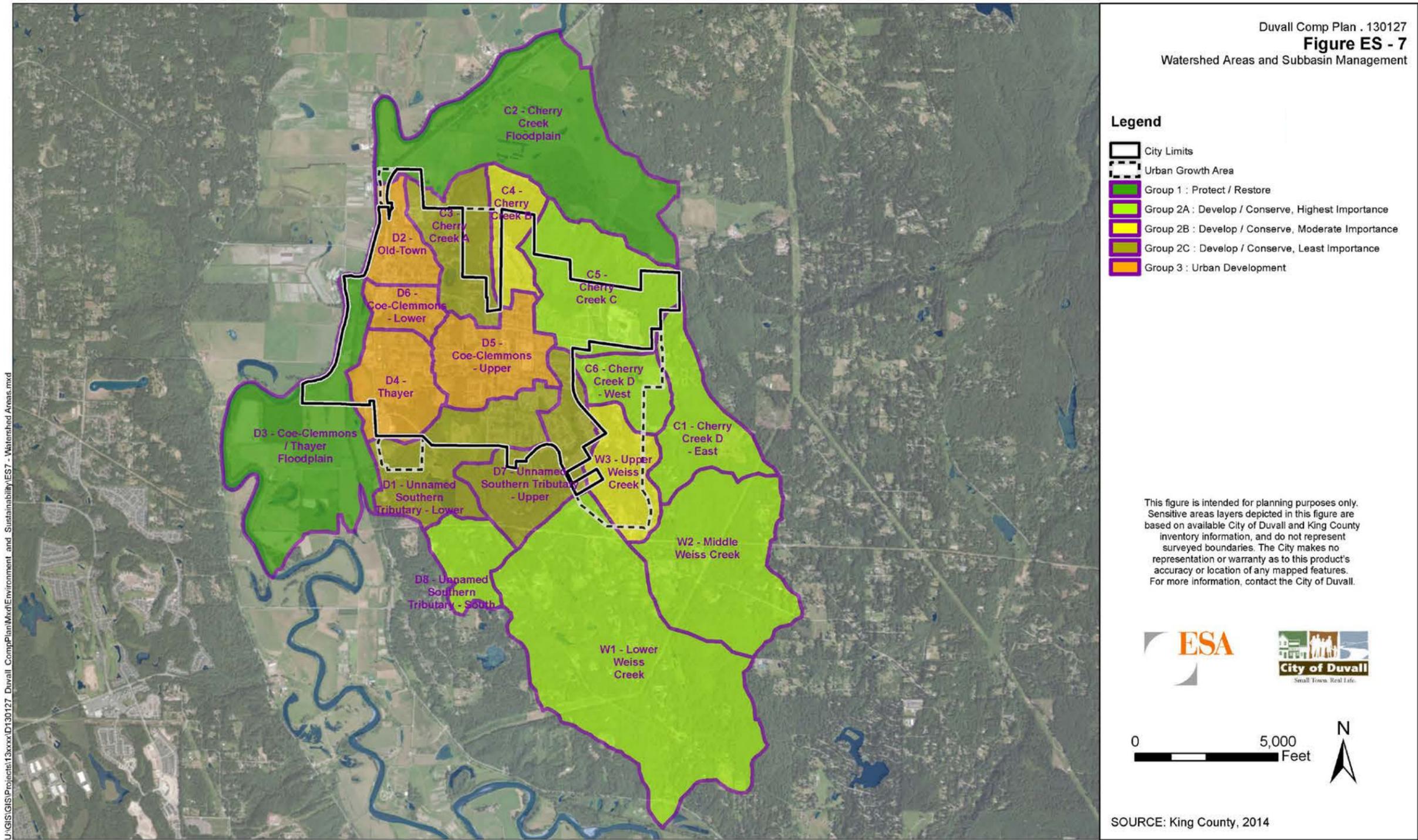


Figure ES - 6: Sensitive Areas
Wildlife Habitat Corridors



Duvall Comp Plan . 130127
Figure ES - 7
 Watershed Areas and Subbasin Management



U:\GIS\Projects\130127 Duvall CompPlan\Mxd\Environment and Sustainability\ES7 - Watershed Areas.mxd

