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**ORDINANCE NO. 817**

AN ORDINANCE OF THE CITY OF CARNATION, WASHINGTON, AMENDING THE CARNATION COMPREHENSIVE PLAN; CLARIFYING THE GOALS AND UPDATING AND ESTABLISHING NEW LEVEL OF SERVICE STANDARDS IN CHAPTER 6 PARKS AND RECREATION ELEMENT; UPDATING INFORMATION REGARDING THE CITY'S WATER UTILITY AND OTHER UTILITY REFERENCES IN CHAPTER 8 UTILITIES ELEMENT; UPDATING AND REORGANIZING THE CITY'S CAPITAL FACILITY INVENTORY IN CHAPTER 9 CAPITAL FACILITIES ELEMENT; SETTING FORTH LEGISLATIVE FINDINGS; PROVIDING FOR SEVERABILITY; AND ESTABLISHING AN EFFECTIVE DATE.

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WHEREAS, pursuant to Chapter 36.70A RCW, the City of Carnation has adopted a Comprehensive Plan for the purpose of guiding and informing future growth, development, and infrastructure planning within the City; and

WHEREAS, the City desires to amend Chapter 6 Parks and Recreation Element, Chapter 8 Utilities Element, and Chapter 9 Capital Facilities Element of the Comprehensive Plan for purposes of updating and revising various goals, policies, provisions, inventories and references therein, including the updated household and population projections contained in the City's 2011 Land Use Element update and the level of service criteria for park and recreation facilities recently developed by the Washington State Recreation and Conservation Office; NOW, THEREFORE,

THE CITY COUNCIL OF THE CITY OF CARNATION, WASHINGTON, DO  
ORDAIN AS FOLLOWS:

Section 1. Findings. The City Council hereby adopts the above recitals as findings in support of the Comprehensive Plan amendments set forth in this ordinance. The City Council further adopts by reference the findings of the Planning Board dated August 29, 2012, together with the following:

A. The City is authorized by state law, including but not limited to Chapter 36.70A RCW, to adopt and periodically amend a local comprehensive plan.

B. The Planning Board conducted a public hearing on the substance of this ordinance on August 28, 2012, and recommended adoption by the City Council. The City Council held a public hearing on this ordinance on October 2, 2012, which was continued to October 16, 2012.

C. The Comprehensive Plan amendments set forth in this ordinance have been processed and considered by the City in material compliance with all applicable procedural requirements, including but not limited to requirements related to public notice and comment.

D. All relevant requirements of SEPA have been satisfied with respect to this ordinance.

E. The City Council has carefully considered, and the Comprehensive Plan amendments set forth in this ordinance satisfy, the review criteria codified at CMC 15.100.030(E).

F. The Comprehensive Plan amendments set forth in this ordinance will advance the public health, safety, and welfare.

G. The Comprehensive Plan amendments set forth in this ordinance have been considered by the City Council concurrently to enable the cumulative effect of these amendments to be ascertained.

Section 2. Amendment of Comprehensive Plan Chapter 6. Chapter 6 Parks and Recreation Element of the Carnation Comprehensive Plan is hereby amended to provide in its entirety as contained in Exhibit A, attached hereto and incorporated herein by this reference as if set forth in full.

Section 3. Amendment of Comprehensive Plan Chapter 8. Chapter 8 Utilities Element of the Carnation Comprehensive Plan is hereby amended to provide in its entirety as contained in Exhibit B, attached hereto and incorporated herein by this reference as if set forth in full.

Section 4. Amendment of Comprehensive Plan Chapter 9. Chapter 9 Capital Facilities Element of the Carnation Comprehensive Plan is hereby amended to provide in its entirety as contained in Exhibit C, attached hereto and incorporated herein by this reference as if set forth in full.

Section 5. Copy to Commerce. Pursuant to RCW 36.70A.106, the Planning Director is hereby authorized and directed to provide a copy of this ordinance to the Washington Department of Commerce within ten (10) days of adoption.

Section 6. Severability. If any section, sentence, clause, or phrase of this ordinance should be held to be invalid or unconstitutional by a court of competent jurisdiction, such invalidity or unconstitutionality shall not affect the validity or constitutionality of any other section, sentence, clause, or phrase of this ordinance.

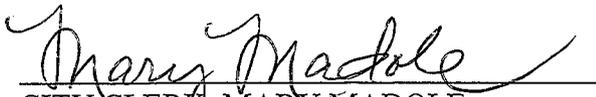
Section 7. Effective Date. This ordinance or a summary thereof consisting of the title shall be published in the official newspaper of the City, and shall take effect and be in full force five (5) days after publication.

APPROVED by the Carnation City Council this 16th day of October, 2012.

CITY OF CARNATION

  
MAYOR, JIM BERGER

ATTEST/AUTHENTICATED:

  
CITY CLERK, MARY MADOLE

FILED WITH THE CITY CLERK: ..... 09/26/2012  
PASSED BY THE CITY COUNCIL: .... 10/16/2012  
PUBLISHED: ..... 10/24/2012  
EFFECTIVE DATE:..... 10/29/2012  
ORDINANCE NO. .... 817

**EXHIBIT A**

## **CHAPTER 6 – PARKS AND RECREATION ELEMENT**

### **I. INTRODUCTION**

Carnation is a small city in a rich agricultural valley surrounded by forests, pastoral fields, rivers and mountains. Open space and recreational opportunities are abundant within and adjacent to the city limits. Carnation's character is derived from a variety of assets including the familiarity and care of community that comes with a small city, a verdant natural and historic landscape which includes two rivers that flow near the city limits, nearby forests, views of the neighboring Cascade foothills and a considerable amount of farmland near the city and within its Urban Growth Boundary. State Route 203, which runs through the center of the City, has increasing traffic flows every year, with significant noise and congestion that affects the community. The separation created by this corridor inhibits access to trails and recreation services for City of Carnation residents.

#### **Purpose and outline of Element**

The Parks and Recreation Element is designed to guide the development of the City of Carnation's future investments in parks, trails and open space as Carnation grows over the next twenty years. The Element seeks to implement the goals and objectives of the Parks Master Plan that was developed in 2009 in order to insure that park facilities are integrated into the new neighborhoods that will be created by development. A Parks and Recreation Element adopted in the Comprehensive Plan in accordance with the Growth Management Act allows the City legal standing to impose a Parks and Recreation Impact fee as part of the development process, as well as the ability to preserve land needed for parks and trails.

The Parks Element is organized as follows: an Introductory section, which contains information on the City as a whole, on the regulatory aspects of parks planning, and on the public participation that was incorporated into the Parks Element; an inventory of the existing parks and trails facilities owned by the City and by other entities, organized according to a classification of park facilities used to describe national parkland levels of service; an analysis of future needs for parks and recreation based on levels of service for park and recreation opportunities that is tied to both stated desires of the community as well as population forecasts for the City. The parks inventory is then examined in light of this level of service analysis and a Capital Improvements Plan is presented which is designed to address the deficiencies in the level of service that will result from new growth. The last section contains the goals and policies used to guide the Element which were developed from the public participation efforts.

## **Regulatory considerations**

In accordance with Washington State's Growth Management Act (GMA) (RCW 36.70A), local jurisdictions are required to include a parks and recreation element in their comprehensive plans. Comprehensive Plans must meet the following Goal of the GMA:

*"Encourage the retention of open space and development of recreational opportunities, conserve fish and wildlife habitat, increase access to natural resource lands and water, and develop parks and recreation facilities."*

The GMA requires that a parks and recreation element implement and be consistent with the parks and recreation facilities identified in the Capital Facilities Element. The element must also include three components:

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

The City of Carnation adopted a Parks and Recreation Element as part of its Comprehensive Plan Update adopted in 2005. Subsequent annual amendments were made to the Comprehensive Plan, and in 2011 the City began a multi-year Update process with Land Use Element, future Land Use and Transportation Element Updates. An annual amendment was last made to the Parks and Recreation Element in 2009 in order to incorporate the Parks Master Plan that was developed using a grant from the Washington State Department of Commerce

This Update of the Parks Element is based on the new population projections derived from the Update of the Land Use Element as well as public input as described below. In addition, the Carnation community has successfully undertaken several improvements to parks and recreation facilities since 2009; these are reflected in the Inventory section. The Update also reflects new guidance on determining parks levels of service developed by the State of Washington Recreation and Conservation Office (RCO).

In addition to its requirements under the GMA, the City of Carnation is also subject to the requirements of the Countywide Planning Policies (CPPs) for King County as well as the Multi-county Planning Policies (MPPs) developed by the Puget Sound Regional Council (PSRC) and published in VISION 2040. Both the CPPs and MPPs require jurisdictions to identify, establish and protect recreational, open space and critical environmental areas. The CPPs encourage cities within King County to establish policies and programs that contribute to the protection and stewardship of open space lands and corridors within their Urban Growth Areas. Policy MPP-En-8 requires local governments within the four-county PSRC jurisdiction to "Identify, preserve and enhance significant regional open space networks and linkages across jurisdictional

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boundaries". Carnation's Parks Element incorporates these policies in Framework Goal B, and in the Parks Improvement Plan, which calls for the City to work cooperatively with King County to expand trails and trail linkages along the Tolt and Snoqualmie Rivers.

Finally, the Parks and Recreation Element must meet the State of Washington Recreation and Conservation Office (RCO) requirements in order for the City to be eligible for RCO funding. The RCO oversees and provides funding for a variety of open space, habitat and recreation efforts, and oversees the activities of five boards:

1. Recreation and Conservation Funding Board (RCFB)
2. Salmon Recovery Funding Board (SRFB)
3. Forum on Monitoring Salmon Recovery and Watershed Health
4. Washington Biodiversity Council
5. Invasive Species Council

RCO programs are a major source of funding and technical assistance to communities to assist them in providing recreation opportunities, habitat enhancement, and open space preservation.

### **Public Process and Coordination with other Providers of Recreation Opportunities**

As required by the GMA, an extensive public participation process was incorporated into the development of the Parks Element Update. The process included an Open House held in March of 2012. Participants were given an opportunity to mark up aerial maps of Valley Memorial, Loutsis, Hockert, River's Edge and West Side Park to show desired improvements, and to write out comments on specific parks or more general comments on the City's trails, parks and recreation needs. The meeting was well attended, with 15 members of the public. In addition to the standard notice for meetings, specific invitations were sent to Parks "stakeholders", including local parks groups and people who participated in the development of the Parks Master Plan in 2009. The stakeholders were also invited to attend a Planning Board Special Meeting on June 18<sup>th</sup> where the proposed Parks Improvement Plan was presented for public input. In addition to the public input sought during the drafting of the Parks Element, the public were also invited to two Public Hearings, one held by the Planning board prior to their recommendation to the Council, and one held by the City Council prior to adoption.

Since King County is a significant public recreation and open space landowner in the Carnation area, we have coordinated this plan with King County land managers and planners. Non-motorized trail connections between the city and county parks, riverfront access and cooperative recreation planning were discussed.

### **Quadrants of the City**

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At slightly over one square mile in size, much of the City of Carnation is a great example of a walkable community with compact development and a pedestrian scale. However, the north-south state highway corridor (SR203) which bisects the city creates a barrier during high traffic portions of the day. Entwistle Street, which is the main east-west arterial, also bisects the city, resulting in relatively distinct Northwest, Southwest, Northeast and Southeast quadrants. Most residents live in the Northwest, Northeast, and Southeast zones. The Southwest zone has more commercial than residential development, but is adjacent to the extensive King County regional parklands. As many residents take advantage of the city's walkable scale, busy roadways tend to act as de facto barriers to park and recreation opportunities. In order to better understand Carnation's park, open space and recreation needs, these facilities should be assessed in terms of their locations within the four quadrants of the town.

The Northwest quadrant is bounded by the city limits on the north and west, by Entwistle on the south, and by SR203 on the east. In the Northwest quadrant, Carnation's oldest residential neighborhood has an early 1900's character. West Side, an undeveloped pocket park, is located in this quadrant. Further north, a large block of agricultural land currently produces fruits and vegetables. This area is within the City's Potential Annexation Area (PAA), and this area will be zoned for residential and mixed use development upon annexation. At the northern extent of the PAA, single family UR-7.5 zoning will provide in-fill housing opportunities for new residents, but no city parks exist in this neighborhood either. The northwestern corner of this neighborhood is also constrained by the Snoqualmie River floodway.

The Southwest quadrant is bounded by Entwistle on the north, the city limits on the south and west, and SR203 on the east. This neighborhood is the smallest quadrant with the most commercial development and the least residential areas. No city parks exist in this neighborhood, although a regional King County facility, Tolt McDonald Park, is located partially within and bordering this quadrant. In 2011, local citizens worked with the City to establish an off-leash dog park on the City-owned parcel located south of the Wastewater Treatment Plan.

The Northeast quadrant is bounded by SR203 on the west, the city limits on the north and east, and Entwistle on the south. The 32 mile Snoqualmie Valley trail divides the newer residential area to the east from older residential area to the west. This sector is primarily residential. The Northeast quadrant currently has a mix of housing developments, including a large portion of the original 1913 plat of the City, a mobile home park, an older subdivision with relatively small lots, and several small subdivisions that are more recently developed and have larger lots. Hockert Park is located in this quadrant.

The Southeast quadrant is bounded by Entwistle on the north, the Tolt River and city limits on the south and east, and SR203 on the west. The Snoqualmie Valley trail divides the newer residential area east from the older residential area to the west. This area has two significant suburban developments (River's Edge and Swiftwater) that

contain larger lots and new homes, as well as older homes between the highway and the Snoqualmie Valley Trail. The Southeast quadrant contains many of the developed parks within city limits, such as Valley Memorial and Loutsis Park, as well as River's Edge Park, a portion of the Snoqualmie Valley trail, and portions of Tolt McDonald Park.

## **II: PARKS INVENTORY**

Parks standards such as those developed by the National Recreation and Park Association have typically relied on the ratio of acres of developed parks per population for five different types of parks:

1. Mini-parks
2. Neighborhood Parks
3. Community Parks
4. Special Use Park
5. Linear Parks

The first portion of the inventory of parks facilities available to City of Carnation residents presented in this section is organized according to these categories, including city-owned parks and those owned by other public entities.

However, recent work done by the State of Washington Recreation and Conservation Office (RCO) has resulted in a new set of tools to evaluate parks and recreation levels of service (LOS), based on recreation function rather than classification of parks. To support Carnation's use of these new tools for evaluating LOS for parks, the inventory is also presented of the various types of recreational opportunities that serve the range of the community's needs, whether owned and operated by the City or by other public entities.

### **INVENTORY BY TYPES OF PARKS**

#### **Mini-park**

Mini-parks are generally small (less than one acre) and characterized by passive recreation or specialized facilities that serve a concentrated or limited population or specific group, such as children or senior citizens. Mini-parks are sometimes called "pocket parks". In general, mini-parks are designed to serve residents within a quarter mile radius. Especially where these parks provide facilities for young children, safe access is an important issue for mini-parks. The majority of the city is within one quarter mile of a mini-park, although some of the City's mini-parks are undeveloped.

Hockert Park. City-owned mini parks include Hockert Park, a small (0.2 acre) park located in the NE quadrant between the commercial area and the older residential neighborhood. A well-loved and much used centrally located park, also known as the

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Yellow Park for its yellow play equipment, Hockert Park has play equipment for younger children, including a play structure with slides, a merry-go-round, swing set and climbing bars. While this play equipment is very well used by the community, much of it is in poor repair and does not meet current standards for play equipment. Other facilities at Hockert Park include picnic tables and benches. The neighborhoods within a quarter mile radius of Hockert Park include most of the original plat of the Tolt Townsite, most of Regal Glen, and a small portion each of the Cascade View and Carnation Meadows neighborhoods. Hockert Park is very centrally located within the City, and many families with young children enjoy Hockert Park. However, SR203 creates a barrier to access to Hockert Park for families west of SR203.

River's Edge Park is located in the SE quadrant within the Rivers' Edge neighborhood. River's Edge Park is 0.35 acres in size, and located at the very northeast of the River's Edge neighborhood. Most of River's Edge Park is open space and there is a picnic area with tables and grills. Neighborhoods within a quarter mile of this park include the River's Edge community and the parcels located west of River's Edge, the City's eastern Potential Annexation Area and portions of King County. As this park does not have many facilities, it does not get a great deal of use. Should this park be developed, families within the quarter mile should be able to access this park with few barriers for pedestrians or bicyclists.

West Side Park, which is currently undeveloped, is the City's only park west of SR203, and is located in the NW quadrant. West Side Park is 0.56 acres in size. Neighborhoods within a quarter mile radius of West Side Park include the original plat west of SR203, a small portion of the Potential Annexation Area north of the City, and some King County residents. As these areas are all west of SR203, there are few barriers to pedestrian or bicycle access to West Side Park from the adjoining neighborhoods.

There are no mini-parks owned by other entities that serve City residents, although facilities owned by the Riverview School District and the Swiftwater Homeowner's Association also provide children's play equipment, and children's play equipment is also located in Tolt McDonald Park.

### **Neighborhood Park**

Neighborhood Parks are designed to serve the nearby residential population or employment base; the service area typically includes adjoining neighborhoods within a half mile. Generally several acres in size, they often include areas for active recreational activities, such as ball fields and courts, as well as passive recreation areas. In addition to play apparatus for pre-school and school age children, facilities are likely to include open lawn and paved court areas, shelters, wading pools, outdoor ice rinks, and some off-street parking. Trees, open fields, and undeveloped natural areas are also desirable components of this type of park. Ideally a Neighborhood Park should be suitable for intense development and easily accessible to the neighborhood.

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population that it serves. If possible, Neighborhood Parks should be geographically centered within the neighborhood and safe walking and bike access should be provided. Such parks may be developed as a school- park facility.

The service area for neighborhood parks is generally 1/4 to 1/2 mile radius to serve a population of 1,000 to 5,000 persons. The desirable size is considered 5 to 10 acres. The standard for this type of park facility is generally 1 to 2 acres per 1,000 people.

The City has two parks that fit at least some of the definition of a Neighborhood Park, Valley Memorial Park and Loutsis Park.

Valley Memorial Park ("Memorial" or "Skatebowl" Park), which is located in the Southeast quadrant, is 7 acres in size. Memorial Park provides recreation for a variety of users, including a skatebowl, tennis courts, picnic area with grills, BMX Track and also a World War II Memorial. There is an off-street parking lot which is in poor shape with many potholes. The City was able to construct the skatebowl with funds from a grant received in 2004. While the location of Memorial Park is not central within the City, the types of recreation provided and the location next to the Tolt Middle School make Memorial Park a significant facility to much of the population within the City.

Recently a citizens group, the Friends of Valley Memorial Park, undertook extensive clean up of this park and raised funds to put a in children's play structure. Future plans for the Friends include a covered picnic area. In addition to the skate bowl, tennis courts, BMX track the and new play structure, much of Valley Memorial is well-treed open space with a trail through it. RCO standards typically cite a half mile as the service area for Neighborhood Parks. Most of the existing City is located within a half mile of Valley Memorial Park; with the exception of River's Edge, some portions of Swiftwater Carnation Meadows, and the Brumbaugh neighborhoods. Pedestrian and bicycle access to Memorial Park are excellent for residents east of SR203, but the state highway does create a barrier to access for residents west of SR203. This is somewhat ameliorated by the new signal at Entwistle and SR203.

Loutsis Park is the other City-owned park that, to some extent, fits the definition of a Neighborhood Park. Located centrally to the City and adjacent to the Snoqualmie Valley Trail, Loutsis Park is within 1/2 mile of most of the City's population with the exception of the River's Edge neighborhood. Loutsis Park is very heavily treed, and there are trails through the trees providing passive recreation. An off-street parking lot provides parking both for the park and for the Snoqualmie Valley Trail. The City's well-head is located near the parking lot in the northerly section of Loutsis Park. A 100-foot sanitary control area is required around the well-head, which must be considered when improvements are planned for Loutsis Park.

While the location and size (Loutsis Park is 6 acres) match the definition of a Neighborhood Park, Loutsis Park does not currently have the range of opportunities for active recreation that are generally associated with a Neighborhood Park. However, a

Disc Golf course was developed at Loutsis Park recently, which brings many people to Carnation. Other than the Disc Golf, Loutsis Park primarily provides passive recreation.

There are no neighborhood parks owned by other entities that serve City residents.

### **Community Park**

Community Parks are designed to serve the surrounding community. Such parks are often larger in size and often consist of significant natural features, such as large tracts of open space or natural areas, and areas of diverse environmental quality. Community parks may contain special amenities attractive to visitors throughout the area, including intense recreational facilities such as athletic complexes and large swimming pools. Community Parks may include an area of natural quality for outdoor recreation, such as walking, viewing, sitting, and picnicking, and may include bodies of water. Depending on the site and community need, Community Parks may provide a combination of passive and active recreational opportunities and may also contain special amenities attractive to visitors throughout the area. Desirable facilities in Community Parks include those listed above in the section on Neighborhood Parks, along with swimming facilities, lighted ball fields, and tennis courts, a community center, and adequate off-street parking. It is important that Community Parks be located on or near major thoroughfares, and also be easily accessible by foot.

Community Parks typically have a service area consisting of several neighborhoods, and a 1 to 2 mile radius. The desirable size is over 10 acres, with 15 to 40 acres being most common. The National Standard for acres per 1,000 people is generally 5 to 8 acres.

While it would appear that Carnation lacks a Community park, it is worth noting that Tolt McDonald Park, a Regional park owned by King County, is located adjacent to the City and provides much of the function of a Community Park. Tolt McDonald Park is over 500 acres in size, with approximately 50 acres located within the city's boundaries and another 88 acres located immediately adjacent to the City. Tolt McDonald offers a wide variety of active and passive recreation, including ball fields, play equipment, picnic shelters, as well as hiking, mountain biking, camping, river access and fishing, and many Carnation residents as well as visitors take advantage of these recreation opportunities.

In general, to be counted as a park, a facility needs to meet the following criteria:

1. Is this land a dedicated park?
2. Is this land a developed park, or developable?
3. Can the parkland provide active recreation?
4. Can the city control the use, scheduling, level of maintenance of the recreational land or facility?

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Tolt McDonald does meet the first three criteria, and does function both as a Community Park for the City, as well as a Regional Park for households outside the City. While the City does not control the use or scheduling at Tolt McDonald Park, the recreational opportunities it affords city residents do meet many of the functions of a Community Park. See discussion of Levels of Service in Section III below.

**Special Use Park**

Special use parks are devoted to specialized or single purpose activities, such as golf courses, arenas, plazas, squares, boulevards, etc.

Tolt Commons is a Special Use Park owned by the City. Located in the Northeast quadrant, within the downtown area, Tolt Commons is a small parcel (.08 acres) landscaped in xeric (low water use) plants, with a pathway and benches. Another city owned parcel located on Bird Street in the Northeast Quadrant contains a newly constructed picnic shelter that will be used for the Carnation Farmer's Market as well as other activities.

There are no Special Use Parks owned by other entities that serve City residents.

**Linear Parks**

Linear Parks are developed for different modes of recreational transportation such as hiking, biking, horseback riding, etc.

The Tolt River Trail along the river levee south of the Swiftwater neighborhood in the SW quadrant is an example of a linear park. The King County owned Snoqualmie Valley Trail is a significant linear park that serves not only the Carnation area but the entire Snoqualmie Valley. Once a railroad track for the Milwaukee railroad, the trail is now a popular regional facility that is much used by runners, hikers, bikers and equestrians.

**Other recreation opportunities in the community**

**Publicly Owned Park Land.** Facilities owned by the, Riverview School District and King County offer area residents sports fields, bicycling trails, walking trails, playgrounds, campgrounds, and picnic sites. There is public access to both the Tolt and Snoqualmie Rivers as well as Lake Langlois offering substantial opportunity for swimming, boating and fishing.

King County owns much of the open space and parklands accessible to Carnation residents, such as Tolt McDonald Park (see description of Tolt McDonald Park above).

The Riverview School District and the King County Parks Department have entered into a variety of fee based, cooperative agreements with youth organizations for use of park

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and school facilities within Carnation. There is a charge for the use of some of these facilities.

At present, the City operates no recreation programs. However, it does provide limited support to the King County Library and non-profit groups including the Sno-Valley Senior Center and Friends of Youth. Other recreation programs are sponsored through youth sports organizations.

In addition to these non-city owned parks and programs, indoor community gathering places include the Senior Center, churches, school facilities and the King County Library System.

**Private & Non-Profit Recreation.** There are privately held farms within and adjacent to the city that offer You-pick opportunities, family activities, a petting zoo, amusement rides, additional picnicking and fresh, locally grown produce. In addition, there are three private youth camps within a few miles of town which take good advantage of the area lakes, rivers and forests.

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**Table P-1**  
**City Owned Parks and Recreational Facilities**

Park facility	Owner	Gross acres	Developed acres	Undeveloped acres	Open space	Features	Classification	Comments/needs
Hockert Park	City	0.20	0.20	0		Children's Play Equipment	Mini-Park	Popular 2-5 yr. old play area  Not ADA or safety compliant  Needs play equipment for toddlers
Valley Memorial Park	City	7.15	3	4.15		2 Tennis Courts, Picnic Area, Skateboard bowl, BMX Track, Children's Play Equipment, World War II Valley Memorial	Neighborhood Park	Playground not ADA or safety compliant. Parking area potholed and not ADA. Improvements needed to trail access, paths, BMX track, and play areas/structures.
Loutsis Park	City	6.10	1	5.10		Open Fields, Forested Area, Direct Access to Sno Valley Trail	Neighborhood Park	Wooded area needs forest management.
West Side Park	City	0.56	0	0.56		Undeveloped	Mini Park	Needs Picnic tables, signage, landscaping improvements, play

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Park facility	Owner	Gross acres	Developed acres	Undeveloped acres	Open space	Features	Classification	Comments/needs
								equipment
Rivers Edge Park	City	0.35	0.15	0.2		Picnic Area	Mini Park	New picnic tables, signage, landscaping improvements, play equipment needed
Farmer's Market Site	City	0.17	0	0.17		Undeveloped	Special use	
Tolt Commons	City	0.08	0.08	0		Landscaping, benches, info. about xeric gardens and water conservation	Special Use	Needs follow-up maintenance.
Tolt River Levee Trail	City	1.43	1.43			existing crushed rock trail along Tolt River	Linear park	
Carnation Meadows	City	1.63			1.63	Undeveloped, Open Space, Recreation Area/Facility	Mini Park	Steep forested hillside
Evacuation Hill	City	20.4			20.4	Evacuation Trail through property with Conservation Easement	Open Space	City has TDR's to sell in return from Conservation Easement from KC
Swiftwater Open Space	City	0.06			0.06	Open Space, Undeveloped	Open Space	

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Park facility	Owner	Gross acres	Developed acres	Undeveloped acres	Open space	Features	Classification	Comments/needs
along the Tolt River								
Total Acreage		38.13	5.85	10.18	22.09			
Level of Service: Ac/1000 pop.		20 ac/1000	3.07 ac/1000			NRPA Standard = 10 acres of developed parkland per 1000		Demonstrates sufficient current supply of total parkland, deficient supply of developed parks

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**Table 2 Non-City owned Parks and Recreational Facilities Within the Carnation Area**

<b>PARK FACILITY</b>	<b>OWNERSHIP</b>	<b>ACREAGE</b>	<b>FEATURES</b>	<b>CLASSIFICATION</b>	<b>COMMENTS/NEEDS</b>
Tolt Middle School	Riverview School District	19	Football Field, Track, Baseball Field, Softball Fields, Soccer Fields, Indoor Facilities	Public School Facilities	Field upgrades underway
Carnation Elementary School	Riverview School District	5	Multi-use Field, Baseball diamond, Toddlers & Youth Play Equipment, 1 full & ½ size basketball court, outdoor shelter, Indoor Facilities	Public School Facilities	
King County Library System	County		Library Facility	Library	New library building completed 2009
Snoqualmie River Boat Launch	State		Boat Launching, Public Fishing	Boat Launch	
Lake Langlois Boat Launch	State		Boat Launch, Public Fishing	Boat Launch	
Mariners Field	County	3.5	Baseball Field	Regional Park	
Tolt MacDonald Park	County	48.8 within City limits  500 acres overall	Campsites, Soccer Field, Baseball Field, Softball Field, Picnic Shelter, River Access, Wetland & Wildlife, Hiking & Mountain Biking Trails, Suspension	Regional Park	

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			Bridge, Public Fishing		
Snoqualmie Valley Trail	County		Walking, bicycling, Equestrian, Wetlands & Wildlife	Linear Park	
Swiftwater Open Space	Home Owners Assoc	1.5	Potential trail connections	Open Space, Undeveloped, Future Connection to River	Future development of parcel to the north may provide opportunity for trail connection
Tolt River Beach site	Seattle City Light	20.38	Riparian/wetland site along Tolt River	River access, beach site	Very constrained for development potential

## **INVENTORY BY RECREATION OPPORTUNITY**

In 2010, the Washington State Recreation and Conservation Office (RCO) published a new Level of Service (LOS) tool for local communities to use in developing parks and recreation plans as an alternative to the acres per 1,000 population standard (see Section III below for more discussion of Levels of Service). This new tool looks at quantity, quality and accessibility of recreation opportunities and places an emphasis on recreation needs that are specific to the local jurisdiction. To support the City's use of this new tool for parks planning, an inventory is presented on types of recreation needs specific to Carnation.

### **Population and Categories of Recreation**

The Parks Element provides the planning context for future parks improvements to serve the existing city residents as well as new residents expected over the next twenty years. Carnation's small-town scale and beautiful setting make it a great place for families with children, and the 2010 Census indicates that 45% of Carnation's households include children less than 18 years of age. Senior citizens are another important component of Carnation's population; households with individuals 65 years of age and over constitute 13.9 percent of Carnation's households. Future growth patterns of the City as determined by the Future Land Use Map will provide continued opportunities for both elders and families with children to live in and enjoy Carnation. As the baby boomers continue to age, seniors will be a growing segment of the population, and the City's amenities and walkability will be attractive to seniors.

The new Level of Service standards provide for a more in-depth evaluation of different recreation functions that are specific to the different segments of the community. Under this method of evaluating levels of service, the demographic make-up of Carnation's households and the range of activities that the community supports form the basis for the categories of recreation to be evaluated. For example, families with elementary school and younger children benefit from play structures, swing sets, etc., and ideally these are both within walking distance (one-quarter mile) and are safely accessible by foot or bicycle. Many older children participate in organized sporting activities such as little league and soccer; play fields and places to practice will be important to serve these needs. Recreation opportunities geared to teens include the skatebowl and BMX track. Many teens and adults as well enjoy a variety of specialized recreation that the city offers or could offer, including tennis, disc golf, basketball, etc. Picnic areas can be enjoyed by all ages, and provide great places for families and friends to gather. Overhead shelters at picnic areas and grills are amenities that enhance enjoyment and usefulness of these areas. Finally, trails that provide opportunities for walking, biking and equestrians are a valued amenity in the community and provide opportunities to all segments of the population. Taken together, these recreation opportunities are essential to quality of life and a healthy community, and for purposes of this analysis, are classified into the following types of recreation:

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1. Children's play structures
2. Sports fields including baseball, soccer, football, etc.
3. Specialized recreation, including tennis, skatebowl, BMX Tracks, etc.
4. Picnic areas, including grills and/or covered structures
5. Trails, natural areas and open space

Children's play structures

Whether in a city-owned park or located in a facility owned and operated by others, play structures provide recreation for families with young children within close proximity. Generally a quarter mile is assumed to be a reasonable walking distance. There are five play structures within City limits, two of which are within city-owned parks (Hockert Park and Memorial Park). The remaining three are located in King County's Tolt McDonald Park near the ball-fields, at the Carnation Elementary School and in the Swiftwater neighborhood. (This play structure is owned and maintained by the Homeowner's Association for the use of Swiftwater residents and their guests.) Most residents of the city are within a quarter mile of a play structure, with the exception of the River's Edge neighborhood, portions of Carnation Meadows and Brumbaugh neighborhoods, and the location of future development in the northeast of the City. The play structure at Hockert Park which is centrally located and very popular is in poor condition and out of date. The play structure at Valley Memorial was recently added by the Friends of Memorial Park. The play structures not owned by the City appear to be in good shape.

Sports fields including baseball, soccer, football, etc.

There are a total of nine ball-fields within Carnation, three located at Tolt Middle School, one at Carnation Elementary School and five located in Tolt McDonald Park. Of these nine fields, five are baseball diamonds, one is a football field which can also be used for field hockey, and the remaining are open fields which can be used for soccer or for practice. Ball-fields are generally used by organized sports such as Little League and by older kids, and they do not tend to serve specific neighborhoods. All of the ball-fields are located west of the Snoqualmie Valley Trail.

Specialized recreation, such as Tennis, skatebowl, BMX Tracks and other activities

Carnation offers a variety of specialized recreation, much of it centered on activities that are enjoyed by teenagers and adults alike. Carnation's teen centered recreation opportunities include a skatebowl and BMX track, both of which are also located within Valley Memorial Park. There are two tennis courts also located in Valley Memorial Park. There is a disc golf course set up at Loutsis Park, an off-leash dog park on city-owned property south of the Wastewater Treatment Plant, and Tolt McDonald Park includes extensive off-road bicycling opportunities that draw both local and visiting off-road bicycle enthusiasts.

Picnic areas, especially those with grills and/or covered structures

There are seven places with picnic tables within or close by the City, all but one of which are located west of the Snoqualmie Valley Trail. Most of these only include picnic tables, with just a few of these offering nearby grills (at River's Edge Park and Valley Memorial). At this time none are protected by a structure, although the Friends of Memorial Park have plans to build a covered structure for picnic tables in Memorial Park, and the recently completed Community Shelter on city-owned property on Bird Street could be used for this purpose.

Trails, natural areas and open space

Carnation residents through-out the City are within close proximity (half mile or less) to trails and natural areas. The Snoqualmie Valley Trail bisects the City, and there are trails along the Tolt River on the City's southern boundary which connects to a trail along the Snoqualmie River in Tolt McDonald Park. Northeast of the City is the Evacuation Trail in Lot 'W', a city-owned parcel just outside city limits. Carnation has many natural areas in open space or park designations, along both rivers, on the hillside along the city's eastern boundary including Lot 'W', as well as in City parks (Loutsis and Memorial Parks both have treed areas with trails through them). The trails are especially popular and well-used by local and visiting pedestrians and bicyclists, and even equestrians. While the trail system forms a loop through-out the City, there are some missing segments in the trail system: Entwistle/NE 45<sup>th</sup> Street between Swiftwater and River's Edge; along SR203 between the Tolt Levee Trail and just south of NE 40<sup>th</sup>; and along the Tolt Levee Trail in King County. Where these missing links are within King County, the City must look for opportunities to work with the County. Other links to trails that are outside the City would also require cooperation with King County, for example, a trail along the Snoqualmie River in city limits could be linked to the north to access the recreation area at Chinook Bend.

**III. DETERMINING FUTURE PARKS NEEDS**

The Washington State Growth Management Act requires plans to forecast future needs for capital facilities, including parks. To this end, a guideline must be developed for the level of service a community desires and can be reasonably expected to fund.

**National Recreation and Park Association Standards.**

The National Recreation and Park Association provides service standards for each type of park. This set of standards has traditionally been used to evaluate whether the existing supply of recreational facilities and land is adequate to meet the demands of the residents of Carnation. Figure P-3 describes the park categories, and the recommended park standards per 1,000 population.

**Table P-3**

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**Park Categories and Service Standards**

CATEGORY	DESCRIPTION	SERVICE AREA	DESIRABLE SIZE	SERVICE STANDARD
<b>Mini-Park</b>	A mini-park is characterized by passive recreation or specialized facilities that serve a concentrated or limited population or specific group, such as children or senior citizens	Approximately 1/4 mile radius	No minimum to approximately one acre	Approximately 0.5 acres per 1,000 population
<b>Neighborhood Park.</b>	Neighborhood parks are designed to serve nearby residential population or employment base. They often include areas for active recreational activities, such as ball fields and courts, as well as passive recreation areas.	Approximately 1/4 - 1/2 mile radius	2 - 7 acres	1 to 2 acres per 1,000 population
<b>Community Park</b>	Community parks are designed to serve the surrounding community. Community parks may contain special amenities attractive to visitors throughout the area. Such parks often consist of significant natural features, such as large tracts of open space or natural areas.	Approximately 1 - 2 mile radius	15 acres	8 acres per 1,000 population
<b>Special Use Park</b>	Special use parks are devoted to specialized or single purpose activities, such as golf courses, arenas, plazas, squares, boulevards, and parkways.	No applicable standard	Variable	No applicable standard
<b>Linear Park</b>	Linear Parks are developed for varying modes of recreational transportation such as hiking, biking, cross-country skiing, horseback riding, etc.	No applicable standard	Sufficient width to provide maximum use and protect the resource	No applicable standard

Another standard for parks facilities is often expressed as a ratio of total parklands to 1,000 people. The National Recreation and Park Association standard is 6 to 10 acres of developed parklands per 1,000.

As the National Recreation and Park Association standards (National Standards) is given in acres of improved parklands per 1,000, jurisdictions can choose the amount of parklands that they wish to provide for their current and projected populations. As described above, to be counted as parklands, properties must meet the following criteria:

1. Is this land a dedicated park?
2. Is this land a developed park, or developable?
3. Can the parkland provide active recreation?
4. Can the city control the use, scheduling, level of maintenance of the recreational land or facility?

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While Tolt McDonald Park clearly meets the first 3 criteria, there is some debate as to whether it can be counted as it is owned and operated by King County and is not under city control. However, the County has worked collaboratively with the City on parks planning, and much of Tolt McDonald Park's recreation development is well-established. Given these circumstances, it is credible to count at least the portion of Tolt McDonald Park that is within City limits as part of the park acreage that serves the City's population. While Tolt McDonald Park is a regional park, it makes most sense to count the 48.8 acres that are within City limits as a Community Park. These acres can be counted as developed (useful) parklands as they include established ball fields, a play structure, park offices, parking, etc. as well as access along the Snoqualmie and Tolt Rivers.

Figure P-4 below shows the number of acres of park land per 1,000 population within the planning area for the years 2012, 2018 and 2031 using the 10 acres of developed parklands per 1,000 standard. The existing and forecasted populations for 2012 population and 2031 respectively are based on the Land use Element updated in 2011. The 2012 population is 1,786 (source: 2010 US Census) and the forecasted build-out population for 2031 is 4,222. An interim year of 2018 is used for planning purposes, with an estimated population of 3,500. The needs for parklands for the existing and projected population were compared to the existing park acreage, including parklands owned by the city in 2012 along with the portion of Tolt McDonald Park that is within City jurisdiction, in order to determine the surplus or deficit of parklands for each type of park

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**Table P-4  
Carnation Recreational Land Needs  
Years 2012-2031**

	Mini-Park	Neighborhood Parks	Community Park	Total Acres	Acres per 2012 Pop	2012 Surplus/ Deficit	Acres per 2018 Pop	2018 Surplus / Deficit	Acres per 2031 Pop	2031 Surplus/ Deficit
Total Acres	2.74	13.25	48.8	64.79	36	26	19	9	15	5
Developed	0.34	4.00	48.8	53.14	30	20	15	5	12	2
Undeveloped	2.40	14.36	0	16.76						

As can be seen from Table P-4, based on this standard, the City has adequate parklands to meet the standard of 10 acres of developed parkland per 1,000 population, through build-out of the City projected to occur by 2031.

**Level of Service Recommendation from the Washington Recreation and Conservation Office**

The Washington Recreation and Conservation Office (RCO) has developed a new tool for parks and recreation planning to replace the “one size fits all” standard of park acreage per population. The level of service for parks and recreation is measured based on three categories of criteria: 1) quantity (number of parks and recreation facilities compared with the population served), 2) quality of recreation facilities, measured both by an agency assessment and by public satisfaction with the facilities, and 3) distribution and access, which looks at the ability of people to access park and recreation facilities by foot, bicycle or public transit. How local jurisdictions apply these criteria is flexible.

To help determine Carnation’s parks and recreation needs, the following recreation types were evaluated:

- Children’s play structures
- Sports fields including baseball, soccer, football, etc.
- Specialized recreation such as Tennis, skatebowl, BMX Tracks, etc.
- Picnic areas
- Trails, natural areas and open space

Children’s play structures

Carnation’s population includes many families with young children, and access to a play structure within a quarter mile is a typical standard for this type of facility. Carnation’s five play structures are within a quarter mile of most residential areas, with the

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exception of the eastern and northeastern portions of the City, such as River's Edge and portions of the Brumbaugh and Carnation Meadow's neighborhoods.

Quantity – there are adequate numbers to serve most of the city's population except for the eastern (River's Edge) and northeastern (Brumbaugh, portions of Carnation Meadows, and potential new development) neighborhoods. However, larger backyards and privately owned play structures in the eastern portion of the City may be an adequate substitution. Future development of the Potential Annexation Area (PAA) to the north would also be further than a quarter mile from any existing play structures.

Quality – Hockert Park has play equipment that is out of date and in very poor condition, according to both City staff and public input. The play structure at Memorial Park is new. Comments at the Open House from the public included the need for play equipment designed for toddlers and younger children. Most of the other play structures within the City appear to be in good repair.

Distribution and access – Hockert Park which is the most centrally located and most widely used of these facilities is easily accessed by pedestrians or bicyclists originating east of SR203, primarily due to the low average daily traffic on local streets. However, SR203 creates a barrier for pedestrians, especially with young children, impedes access for families who live to the west of the highway. Access across SR203 has recently improved with completion of the new signal at Entwistle and the lighted crosswalk at Morrison, but is still not optimal. While there is one play structure west of SR203 located in Tolt McDonald Park, it is further than a quarter mile from most of the residents west of SR203. Development of West Side Park to provide play structures would ameliorate this deficiency as West Side Park is very accessible for most residents west of SR203.

The eastern and northeastern neighborhoods of the City are underserved for this type of recreation. However, in general these neighborhoods have larger backyards, and many families have their own play structures. Public outreach to these neighborhoods would help determine local needs for more play structures in River's Edge Park or in a new mini-park.

Summary of needs for play structures:

- Replace play equipment at Hockert Park
- More play equipment designed for younger children at Hockert and Memorial Parks
- Develop West Side Park with a play structure
- Provide for a pocket park with play equipment in the PAA west of SR203
- Provide for a pocket park with play equipment at River's Edge Park and/or a new park in the northeast of the City.

Sports fields

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None of the ball-fields that serve the City's residents are provided by the City, but are owned and operated by King County (Tolt McDonald Park) or by the Riverview School District. Primarily used by organized leagues, ball-fields are accessible on an as available basis for residents.

Quantity – The nine ballfields appear to meet most needs for the community, although a local soccer association is working on a feasibility study to develop soccer fields on city-owned property south of the wastewater treatment plant.

Quality – The fields at Tolt McDonald Park have been well maintained, and the School District has recently improved the ball-fields at Tolt Middle School. In general, the ballfields used by City residents are in good repair.

Distribution and Access – Pedestrian and bicycle access to the ball-fields at Tolt Middle School are adequate via the sidewalks along SR203. Pedestrian access to Carnation Elementary School is provided by local streets, some of which have sidewalks. Improved access to Carnation Elementary School via Spilman Avenue is addressed in the City's Six-Year Transportation Plan (STIP). Pedestrian and bicycle access to the fields at Tolt McDonald are not as good, and the City will need to address these shortfalls by improving pedestrian access along SR203 between NE 40<sup>th</sup> and the new trail at Tolt McDonald park, and by improvements to NE 40<sup>th</sup>.

There are currently no ball-fields east of the Snoqualmie Trail. There have been some suggestions of adding waffle ball, kickball or soccer goals to River's Edge Park.

**Summary of needs for ball-fields**

- Work with organized leagues to examine possible new ball-fields on city-owned property
- Reach out to the River's Edge community to determine if a small ballfield would be desirable at River's Edge Park.

Specialized recreation such as tennis, skatebowl, BMX tracks, etc.

Carnation residents can enjoy a variety of recreational opportunities, including tennis courts, skatebowl, and a BMX Track at Valley Memorial, Disc golf at Loutsis Park, an off-leash dog-park on city-owned land, and off-road trails for bicyclists at Tolt McDonald Park.

Quantity – While there are a good variety of recreation opportunities already present, several more ideas have been suggested by the public, including:

- A basketball court at Valley Memorial park

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- Fitness track at Loutsis Park
- Horseshoes
- Climbing wall

Quality – The tennis courts in Memorial Park are in poor shape and need re-finishing. Another comment was to add a deck and rails to enhance the skatebowl.

Distribution and Access – Most of these special recreational activities are accessible to pedestrians and bicyclists, although the entrance to Valley Memorial Park off of SR203 is small and difficult to find. Residents west of SR203 have the barrier of the state highway to access many of these facilities.

Summary of needs for recreation opportunities:

- Repair tennis courts in Memorial Park
- Add a half basketball court in Memorial Park
- Add a Fitness Course to Loutsis Park
- Improvements to Skatebowl

Picnic areas

Picnic tables are located in various parks, but as there is only one east of the Snoqualmie Valley Trail at River's Edge Park. In addition to picnic tables, grills and an overhead structure make these facilities most useful.

Quantity – While there are picnic tables in many areas, it was felt that more picnic tables centrally located in the Bird Street/Hockert Park area would be welcome as well as also west of SR203.

Quality – Adding grills and especially overhead structures in various places would make these amenities more useful. The Friends of Valley Memorial Park are planning to build a shelter for the picnic tables, and a shelter for the picnic tables was also suggested for River's Edge Park.

Distribution and Access – Most of these amenities are accessible to pedestrians and bicyclists, although the entrance to Valley Memorial Park off of SR203 is small and difficult to find.

Summary of Needs for Picnic areas:

- Build shelter for picnic tables in Memorial park
- Add picnic tables and barbecue to Community Shelter on Bird Street
- Provide a shelter for the picnic tables in River's Edge park

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- Add another picnic table at Hockert Park
- Provide picnic table(s) with shelter and grills at West Side Park

Trails, natural areas and open space

Carnation residents enjoy excellent regional and local trails and open space. Most residents are within close proximity (half mile) of trails and/or open space.

Quantity – Between the Snoqualmie Valley Trail, the trails along the Tolt River and some portions of the Snoqualmie River, as well as Evacuation Trail, and the trails and open space within Loutsis Park and Valley Memorial Park, Carnation residents are well-served by trails and open space.

Quality – Most of the trails are well-maintained. Pedestrian improvements as part of City street improvements would help improve the overall quality of pedestrian environment in the City. Improvements are also needed to complete the missing links as described below. The trails within City parks are in some cases not well developed or could be improved.

Distribution and Access – As noted above, most City residents are within walking distance of the City's looped trail system and/or open space. Access improvements to the trails for equestrians have also been requested.

Summary of needs for Trails, natural areas and open space:

- Create a paved trail in the eastern treed portion of Valley Memorial park. The trail should be ADA compliant and designed for stroller and tricycles, with benches at strategic locations.
- Develop a pedestrian pathway along Entwistle/NE 45<sup>th</sup> Street between River's Edge and 329<sup>th</sup> Ave NE
- Improve the pedestrian access along the western side of SR203 between NE 40<sup>th</sup> Street and the pathway in Tolt McDonald Park in front of Mariner's Field.
- Work with King County to close the gap in access along the Tolt Levee
- Work with King County to complete a trail system along the Snoqualmie River to link to the Chinook Bend natural area.
- Signage to show horse trailer parking along Milwaukee would also improve access to the trails for equestrians.

#### **IV PARKS CAPITAL IMPROVEMENT PLAN (CIP)**

A Parks Capital Improvements Program (CIP), is shown in Table P-5 and was developed based on input from the public regarding what recreational and parks facilities the community members want, coupled with the levels of service deficiencies that were in evidence based on the RCO Standards and the inventory of parks. The

CIP provides preliminary costs of needed parks improvements to provide adequate parklands and facilities to serve the City's projected growth of the next twenty years.

### **Summary of Needs by Park Type**

General descriptions are provided of required improvements for each type of park facility that would be necessary to meet the parks and recreation needs to serve future development, as determined in the above Level of Service analysis.

#### **Mini-parks**

**FRED HOCKERT PARK:** Hockert Park is in the center of town, adjacent to the Farmer's Market and near Tolt Commons, and is the most popular play area in the City. The play equipment is in poor condition and requires replacement. The site also needs play equipment that is specifically designed for toddlers as the City's demographic profile shows a significant presence of families with young children. The playground is not currently ADA or safety compliant, which will require replacement of the surfacing and the creation of ADA compliant access ramps as well as changes in fall zones and the dimensions between structures and hard surfaces. While Hockert Park is located within the Northeast Quadrant, its central location maximizes access for the community as a whole. However, SR203 provides a significant barrier to pedestrians, especially for families with small children, which makes the requirement for a mini-park to serve the western quadrants more important.

Planned improvements:

- New play structures
- Toddler play structure
- New swing set
- New surfaces under the play structures
- Replace merry-go-round

**WEST SIDE PARK:** This small undeveloped site is ideal for a small pocket play and picnic park within the western side of the City. Minimal grading would be required on this flat site. This is the only mini-park west of SR203; play structures for toddlers would provide families with small children an opportunity for recreation without crossing SR203. As West Side Park is also close to the Senior Center, recreation opportunities attractive to seniors was also a consideration.

Planned improvements:

- fence
- small shelter with picnic tables, barbeque grill

- toddler play structure
- horseshoe play area

**RIVER'S EDGE PARK:** This mini-park primarily serves the River's Edge neighborhood. A small picnic shelter could be added to the picnic tables and grills. Planned improvements

- shelter for picnic tables
- new fence
- other as desired by the neighborhood

#### **FUTURE PARKS IN THE PAA AND NORTHEASTERN PART OF THE CITY**

These parks will become necessary as new areas of the City are developed.

Planned improvements:

- play structures
- picnic tables

#### **Neighborhood parks**

**VALLEY MEMORIAL PARK:** This 7 acre park is beautifully forested, and has a strong historic character including a memorial to veterans. Recent improvements by a citizens group, the Friends of Valley Memorial Park, include a major clean up and a new play structure. The Friends also plan to build a shelter over the picnic tables. Further improvements include re-surfacing the tennis courts, adding a basketball court, adding some improvements to the skatebowl, adding play structures for toddlers, adding a swing set, providing a more formal treatment of the Memorial, with a paved area and landscaping, and improving the access way and reconfiguring and paving the parking lot. Plans for the treed area to the south include some selective clearing of trees and adding a 5' asphalt pathway with pull-outs and benches. The loop would be ADA compliant and would be easily used by families with strollers and kids on tricycles.

Planned improvements:

- Shelter for picnic tables
- Re-finish tennis courts
- Add a basketball court
- Toddler structure

- Looped trail
- Reconfigure and pave parking lot
- Skatebowl improvements

**LOUTSIS PARK:** Loutsis Park will require substantial thinning of the trees, as well as improvements to the parking area and landscaping along the western boundary to provide better screening for abutting residences. A fitness Course could be added along the Snoqualmie Trail.

Planned improvements:

- Pave parking lot
- Landscaping along western property line
- Fitness course

### **Special Use Parks**

**CARNATION MARKET SQUARE:** The City has partnered with the USDA and the Sno-Valley Tilth to develop the city-owned 7,500 square foot parcel at the corner of Bird Street and Stossel Avenue for a Community shelter. The project allows the Farmer's Market to extend later into the fall and perhaps be used in the winter. The shelter is open to the public on non-market days and could provide picnic and outdoor cooking opportunities.

**TOLT COMMONS.** Renovation of this small public garden across the street from City Hall was done by volunteers in the spring of 2008. Further planting improvements should be implemented. The plantings for this park should continue to model water wise gardening by using xeriscape.

With important community facilities anchoring it (the Senior Center at one end and Hockert Park at the other) Bird Street has been identified as a possible location for town center type facilities. The Farmer's Market, July 4<sup>th</sup> celebration and Christmas in Carnation make use of Bird Street as the City's festival location. As several properties along Bird Street are vacant, land acquisition in the area would be possible to support the town center concept.

Planned improvements:

- Add picnic tables and grill at Community Shelter
- Acquire land along Bird Street between Tolt Commons and the Community Shelter

### **Linear Parks and Trail System**

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**TOLT RIVER LEVEE TRAIL.** Carnation has an opportunity to create an outstanding river trail with a continuous connected trail along King County parklands to the Snoqualmie River and all along the City UGA and connecting to the Entwistle trail on the east. Acquisition or an easement crossing 2 private parcels of land (where the levee is currently gated) would be required. It is noted that the current landowner's are not interested in selling or allowing an easement for public access, but public access across this blockage has been supported by the public and the City should work cooperatively with King County towards completing this trail.

**SNOQUALMIE RIVER TRAILS.** The existing King County parks provide great trails that should be better connected to the City's existing and proposed non motorized trail system. Recently the City completed the connection to the public pathway along the northern boundary of the wastewater treatment plant. This existing trail meets a recently completed trail on property owned by the City of Carnation that connects to Tolt McDonald Park.

**Planned Trail improvements:**

- Pedestrian pathway on Entwistle/NE 45<sup>th</sup>
- Sidewalk on SR203 south of NE 40<sup>th</sup>
- Signage
- Bicycle parking
- Work with King County to complete access along the Rivers

**Table P-5  
Capital Improvements Plan**

	2012 Cost Estimates	Phase 1 2012-2018	Phase 2 2019- 2025	Phase 3 2026- 2031
<b>Hockert Park</b>				
Replace play structure	\$150,000	\$163,500		
Toddler structure	\$20,000	\$21,800		
New swing set	\$10,000	\$10,900		
New Climbing structure	\$6,000	\$6,540		
Merry go round	\$10,000		\$13,000	
Add a picnic table	\$3,000		\$3,900	
	<b>\$199,000</b>			
<b>Valley Memorial Park</b>				
Re-finish tennis/basketball courts	\$20,000	\$21,800		
Picnic structure	\$64,000	\$69,760		
Looped trail	\$37,500	\$40,875		
Basketball hoop	\$3,000	\$3,270		
Toddler structure	\$20,000	\$21,800		

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	2012 Cost Estimates	Phase 1 2012-2018	Phase 2 2019- 2025	Phase 3 2026- 2031
Reconfigure/pave parking lot 18 spaces	\$40,600		\$52,780	
Skatebowl improvements	\$40,000		\$52,000	
BMX viewing/picnic area	\$4,000	\$4,360		
	<b>\$229,100</b>			
<b>Tolt Commons/Community Shelter</b>				
Picnic tables	\$6,000	\$6,540		
Grills	\$2,000	\$2,180		
Land acquisition between Commons + Shelter	\$56,250	\$61,313		
Land acquisition between Commons + Shelter	\$118,875		\$154,538	
	<b>\$183,125</b>			
<b>River's Edge Park</b>				
New Fence	\$10,000		\$13,000	
Other improvements desired by neighborhood	\$50,000		\$65,000	
	<b>\$60,000</b>			
<b>Loutsis Park</b>				
Landscape screen along western boundary	\$15,000	\$16,350		
Fitness course	\$40,000		\$52,000	
Pave parking lot	\$44,000		\$57,200	
	<b>\$99,000</b>		\$109,200	
<b>West Side Park</b>				
Site work	\$10,000		\$13,000	
Fence:	\$12,160		\$15,808	
Play structure(s)	\$50,000		\$65,000	
Picnic table	\$3,000			\$4,440
Grill	\$1,000			\$1,480
Open sided structure	\$16,000			\$23,680
	<b>\$92,160</b>			
<b>Trails system</b>				
Pathway on Entwistle/NE 45th				
Sidewalk on SR203 west side s. of NE 40th	\$20,000	\$21,800		
Work with King County on Tolt Levee Trail				
Work with King County on Snoqualmie River Trail				
Signage	\$50,000	\$54,500		
Bicycle racks 10 in CBD/SC zones	\$12,000	\$13,080		
	<b>\$82,000</b>			
<b>New Mini-parks</b>				
	<b>\$300,000</b>			
In PAA west of SR203	\$150,000			\$222,000
Northeastern development	\$150,000			\$222,000
<b>Total in 2012 Dollars</b>	<b>\$1,244,385</b>	<b>Phase 1</b>	<b>Phase 2</b>	<b>Phase 3</b>
<b>Totals</b>	<b>\$1,680,393</b>	<b>\$540,368</b>	<b>\$666,426</b>	<b>\$473,600</b>

## **FUNDING OPTIONS**

City of Carnation revenue is obtained from a combination of taxes, license and permit fees, state and federal grants, user service charges, fines and forfeits, miscellaneous interest earnings and sales, and pass-through federal revenue sharing monies. 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 imposes a park impact fee of a specified dollar amount on residential developers for each residential unit constructed.

### **Potential Revenue Sources**

Some of the potential funding sources for new park and recreation development in Carnation may include the following:

Park Impact Fees – Park impact fees are typically collected when a new residential development is constructed (to provide for recreational opportunities for new residents of the development). The City of Carnation imposes an impact fee for each new residential unit built in the city. Impact fees may be spent only on system improvements needed to serve new growth and development.

User/Concession Fees – User fees (e.g., daily, league, seasonal, annual, and/or resident fees, among others) are typically charged for use of park and recreation facilities. Concession fees are collected from private businesses (concessionaires) who operate recreation-support services (e.g., food/beverage stands, equipment rentals, etc.) at park and recreation facilities. User and/or concession fees may be used to purchase land, develop, operate, and maintain facilities.

Special Use Agreements — Special use agreements are encouraged such as property agreements that could be used instead of property purchases to secure public use rights for land or property at no cost or for a nominal fee. This is particularly beneficial where public use is of benefit to the private landowner. Some forms of special use agreements can provide favorable tax benefits if the use agreement can be shown to have an assigned value.

Public-Private Partnerships – Public-private partnerships are typically defined as cooperative ventures between the public and private sectors (e.g., corporations, non-profit organizations, citizen groups, etc.). For park and recreation departments, public-private partnerships may include corporate sponsorships, staffing, and/or facility management, among others.

Public/Private Service Contracts Private market skills and capital may be employed in a variety of ways including the use of public/privates service contracts where a private party can be contracted to operate and maintain a facilitate for a fixed fee cost. Service

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contracts can be very efficient where the activities are small, scattered in location, seasonal, expert or experimental. Service contracts are also relatively easy to initiate or terminate if the area demand fails to provide sufficient use or revenue to justify continued operation. Service contracts may be flexible and can include agreements with the school district or local user groups who can or would be interested in sustaining the activity on a subsidized or sweat-equity basis in exchange for the facility.

Public/Private Concessions – Cities may lease a portion of a site or facility to a private party in exchange for a fixed fee or a percentage of gross receipts. The private operator assumes operation and maintenance responsibilities and costs in exchange for a profit. A city's portion of the profits may be used to help pay facility development costs at the same of for similar facility developments. Concessions can save the City considerable monies where the activities are specialized, seasonal, experimental or unproven. Concessions can be easily initiated, provide direct user benefit/cost reimbursements and relieve the city of a capital risk should market or user interest fail to materialize to a least break-even levels.

Public/Private Joint Development Ventures – Cities may enter into an agreement with a private or public developer to jointly own or lease land for an extended period of time to allow the development, operation and maintenance of a major recreational facility or activity in exchange for a fixed lease cost or a percentage of gross receipts. A developer would assume development and operations and maintenance responsibilities and related costs and all of the market risk in exchange for a market opportunity providing a profitable return, which may or may not otherwise be available. A city would realize the desired development of a facility, which may or may not be realized otherwise, in exchange for a low minimum capital return and little or no capital-risk.

Joint development agreements represent an ultimate benefit/cost resolution which may also provide public revenue which a city could use for other development opportunities.

Land Leases – There are instances where an activity is so specialized in appeal, or has a service area so broad in scope, that it cannot be equitably financed using general public funds. Specialized user groups may be provided options for developing and/or maintaining specific recreation facilities in ways that provide an equitable distribution of public and private costs. User groups or clubs may assume the responsibility for the development and/or operation and maintenance of a facility. User groups or clubs may provide volunteer help. Land lease agreements may also be used to accommodate organized athletics such as soccer, baseball, football, softball and rugby; or unique, specialized facilities like horse stables or equestrian centers.

Taxation –

*Special Improvement Districts (SID) Park District* – Funds for these districts may be generated through property tax assessments and/or financed through bonds. These

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funds may be used for specific projects or improvements to parkland. This type of district is often created as part of a subdivision process.

*General Obligation Bonds* – General obligation bonds may be used to generate funds for use in acquiring land, improving/enhancing existing facilities, and developing new park facilities. Bonds often enable a city to utilize local funds to match state and federal grant funding and are one of the most common funding sources for new and/or improved park and recreation facilities.

Sales Tax – Funds from increased sales and local option taxes can be used to fund park and recreation improvements and for land acquisition.

Real Estate Excise Tax (REET) – The State of Washington is authorized to levy a real estate excise tax on all sales of real estate, measured by the full selling price, including the amount of any liens, mortgages and other debts given to secure the purchase at a rate of 1.28 percent (RCW 82.45.060). A locally-imposed tax may also be authorized. All cities may levy a quarter percent tax (described as "the first quarter percent of the real estate excise tax" or "REET 1") (RCW 82.46.010). Cities that are conducting planning under GMA also have the authority to levy a second quarter percent tax (known as "REET 2") (RCW 82.46.035(2)).

Grants – There are some park and recreation-specific grant opportunities available to local communities. However, funding for these grants changes on an annual basis, based on state and federal budgets. Most grants require a local funding match. In Washington, many grants are administered by the RCO.

Donations - Donations to municipalities may provide tax deductions equivalent to 501(c)3 corporations. Life estates and reverse mortgages are examples of other donation strategies that may help fund park and recreation facilities.

### **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. For example, specific funding strategies may include:

Park and Recreation Program Services - Individual user fees and charges should generally be used to help finance recreation programs or services to the maximum extent practicable to provide cost/benefit equities and efficiencies. General funds may be used to help cover situations where fees cannot be readily collected, as in most special events; or where fees do not cover all operating costs of a program or service.

Facility Operation, Maintenance and Minor Construction - General funds should typically be used to help fund the operations and maintenance costs for park facilities and

recreation activities that cannot be financed by user fees and charges, or be financed with other funding methods. General funds are flexible and can be adjusted to meet annual programming variations or priorities.

Facility Development - Capital improvements, including property acquisition, can be funded through the general fund, real estate excise taxes, park impact fees, or other funding sources as discussed above.

## **IV. GOALS AND POLICIES**

### **FRAMEWORK GOALS**

In discussions with the community, City Council and the Park Board at several meetings, the following broad themes were described as priorities to guide this plan:

- A. Promote community interaction by supporting gathering places, open spaces, and parks and recreation.
- B. Expand trail linkages to further connect neighborhoods to regional public open spaces, farms, rivers and lakes.
- C. Explore creation of a Park & Recreation District with neighboring municipalities to enable funding mechanisms for park, trail and open space system enhancement.

### **GOAL P1**

**Assure that park and recreation land and improvements are provided to accommodate the demand of the future**

- Policy P1.1 The City will protect and conserve its existing park lands to assure that there is an adequate supply of park and recreation facilities to meet current and future park needs.
- Policy P1.2 The City will continue to implement a park impact fee ordinance. Emphasis should be placed on payment in lieu of receipt of undeveloped land.
- Policy P1.3 The City will apply for appropriate, available grants to develop needed park, recreational and trail facilities, and park programs.
- Policy P1.4 The City will endeavor to develop multi-use parks to serve a broad range of interests and demands.
- Policy P1.5 The City will continue cooperation with King County and other public and private entities to encourage and promote the development of needed park facilities and open space. The City will work to secure cooperative

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agreements with King County if they elect to surplus major regional facilities or real property.

- Policy P1.6 The City shall facilitate and encourage public input for park development.
- Policy P1.7 The City shall pursue a network of paths, trails, and sidewalks to connect public spaces.
- Policy P1.8 To meet the needs for current and future residents, emphasize the need to develop existing undeveloped parkland rather than obtaining new small parcels, unless these are used appropriately for pocket parks to serve new or underserved residential areas.

**GOAL P2**

**To assure that parks are adequately maintained and operated to meet the interests and needs of Carnation residents.**

- Policy P2.1 The City will endeavor to maintain the City's park system to assure that parks remain clean, safe, inviting and usable.
- Policy P2.2 The City will encourage the use of volunteers and community support in the care and development of city parks.

**GOAL P3**

**Encourage the development of parklands that reflect and promote the vision for Carnation which values its natural environment, rural heritage and sense of community.**

- Policy P3.1 Encourage the use of design and landscaping that mimics the historic natural environment, and utilizes Best Conservation Practices (BMPs).
- Policy P3.2 Promote a strong sense of community through the development of pedestrian trails and paths that link neighborhoods to each other and to parks and open spaces.
- Policy P3.3 Offer a destination for visitors to Carnation to bike, walk and enjoy a respite from more urbanized areas.
- Policy P3.4 Pursue funding to acquire additional land for civic functions especially along Bird Street.
- Policy P3.5 Establish gateways into town at south (Tolt River Bridge) and north edge of UGA.

Policy P3.6 Pursue enhanced public access from neighborhoods to existing parks, especially the Tolt MacDonald Park, the Snoqualmie Valley Trail, and Tolt and Snoqualmie Rivers.

Policy P3.7 Seek partnerships to develop other recreation opportunities, possibly at the City owned parcel south of the new sewer plant.

### **ACTION POLICIES**

Policy PA.1 Review and modify the park & recreation mitigation program as necessary to comply with state law.

Policy PA.2 Establish parks and recreational level of service guidelines based on total population, usage patterns, growth predictions and population densities.

Policy PA.3 Update fees or charges for specialized services or programs and/or certain facilities on an annual basis.

Policy PA.4 Develop maintenance guidelines for use as a planning and budgetary tool to efficiently allocate resources (both labor and equipment).

Policy PA.5 Work with local citizen groups that have come together to improve Carnation's parks. Encourage the private sector and semi-public organizations to increase their expenditures for public recreation facilities and opportunities in Carnation.

Policy PA.6 Continue efforts to fund renovation and development of existing parkland.

EXHIBIT B

CHAPTER 8 – UTILITIES ELEMENT

I. INTRODUCTION

The Growth Management Act requires each city to develop a Utilities Element as part of the comprehensive planning process. Specifically, this Element must address the general location, proposed location, and capacity of all existing and proposed utilities, including but not limited to, electrical lines, natural gas lines, and telecommunication lines.

In addition to the minimum requirements under GMA, this Element also discusses other utilities in the City, including the city's public water, wastewater collection and treatment system and solid waste utilities, and stormwater management.

REGULATORY ENVIRONMENT - FEDERAL & STATE LAWS

**Revised Code of Washington and Washington Utilities and Transportation Commission.** Private utilities and transportation are regulated in Washington by the Washington Utilities and Transportation Commission (WUTC). The WUTC, composed of three members appointed by the governor, is empowered to regulate utilities (including but not limited to, electrical, gas, irrigation, telecommunication, and water companies). State law (WAC 480-120) regulates the rates and charges, services, facilities, and practices of utilities. Any change in customer charges or service provision policy requires WUTC approval.

**Federal Energy Regulatory Commission.** The Federal Energy Regulatory Commission (FERC) is an independent five-member commission with the U.S. Department of Energy. FERC establishes rates and charges for the interstate transportation and sale of natural gas, for the transmission and sale of electricity, and the licensing of hydroelectric power projects. In addition, the Commission establishes rates or charges for the interstate transportation of oil by pipeline.

**Natural Gas Policy Act of 1978.** The central theme of the National Gas Policy Act (NGPA) is encouragement of competition among fuels and suppliers across the country. The NGPA also contains incentives for developing new natural gas resources and a tiered pricing structure aimed at encouraging the development of nation-wide transmission pipelines.

**Northwest Power Planning Council.** The Northwest Power Planning Council (NWPPC) focuses on addressing regional energy, fish and wildlife issues. The NWPPC

has developed significant expertise in finding integrated solutions for key economic and environmental issues.

**1991 Clean Air Amendments.** The passage of the 1991 Washington State Clean Air Act indicates a state intent to promote the diversification of fuel sources for motor vehicles. This is in response to a need to both reduce atmospheric emissions and reduce the nation's reliance on gasoline for strategic reasons. This Act promotes the use of alternative fuels by requiring 30% of newly purchased state government vehicle fleets to be fueled by alternative fuel. It also studies the potential and encourages the development of natural gas vehicle refueling stations.

## **II. INVENTORY AND ANALYSIS**

This is an inventory and analysis of the following utilities: solid waste, water, wastewater, storm water, natural gas, electricity, and telecommunications.

### **SOLID WASTE**

The King County Solid Waste Management Plan was first adopted in 1975 and has been updated a number of times. The City, by state law, is either required to develop its own solid waste management plan, or to participate in a regional plan. Carnation has adopted and is party to the King County plan. The Plan guides solid waste disposal and future needs in King County.

**Landfill.** Until the late 1970's the City of Carnation operated its own municipal Landfill to serve city residents. The landfill is located approximately one mile south of the city. Beginning in 1992, the City undertook a project to officially close the landfill. This was financed through a surcharge on solid waste utility bills and a grant from the Washington Department of Ecology. The landfill site entered into a 20-year Post-Closure period in 1995. Landfill post-closure utility charges continue to be levied on property owners within the city limits to provide financial assurance for ongoing water quality monitoring and maintenance of the site. Monitoring of the closed landfill site will be an ongoing financial responsibility of the city until the end of the post closure period. The City hopes to eliminate billing of the post-closure fees as soon as possible.

The City has signed a Solid Waste Interlocal Agreement (ILA) with King County which provides for cooperative management of sold waste and allows the City's waste collector to utilize the Cedar Hills Regional Landfill. The ILA expires in 2028.

The primary planning tool for the King County solid waste system is the 20-year Comprehensive Solid Waste Management Plan. The long range goal of the King County Solid Waste Management Plan is to coordinate regional energy and resource recovery in King County. The current adopted plan was published in November 2001. A draft

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2011 Comprehensive Solid Waste Management Plan is currently under review by the Washington State Department of Ecology and the Washington Utilities and Transportation Commission.

**Solid Waste Collection.** The city's service provider for solid waste collection is responsible for the collection and disposal of Carnation's solid waste, and all customer support. The city's only involvement with solid waste collection is to monitor the contract. Waste is hauled to Houghton transfer station in Kirkland, and then transported to the King County Cedar Hills Landfill. The City's current franchise agreement with Waste Management expires in December 2012, and the City is currently in negotiations with another service provider for solid waste collection.

**Recycling.** The City's service provider also provides curbside recycling and yard/food waste collection services to the City. The City has a goal to achieve a 75% residential waste reduction and recycling rate. Carnation currently averages a 60% residential recycling rate, exclusive of special collection days, which would increase the percentage.

## **WATER**

**Introduction.** The City of Carnation owns and operates a municipal "Group A" water system with 825 service connections within the Water Service Area, which includes all of the corporate limits of the City plus portions of King County. The water system includes storage reservoirs, springs, a well and a distribution network. The water system is managed by the Carnation Public Works Department which is responsible for day to day operations and for the implementation of the Comprehensive Water System Plan. The City's Water Comprehensive Plan (Water Plan) was developed in 2008 and approved by the Department of Health and King County in 2009. The next update of the Water Comprehensive Plan must be approved on or before July 27, 2015. Detailed information about the water system and its operating and capital plans can be found in the Water Comprehensive Plan. This section includes pertinent information from the Water Plan.

**Existing Service Area and CWSP Planning Area.** The City of Carnation Planning Area lies within the critical water supply area as outlined in the East King County Coordinated Water System Plan (CWSP) which identified Carnation's water service planning area of approximately 21 square miles. The original Planning Area was approximately 4.3 square miles in size. Much of the CWSP Planning Area could not feasibly be served water from the City's water system, either because service would have to cross the Snoqualmie River or due to steep topography. The 2008 Water Plan proposed a 9.068 square mile planning area as more realistic. See figure 8-1 for the water service area proposed in the Water Plan. The State Health Department has designated the City of Carnation as the agency to provide this area with potable water. The City currently has a franchise agreement with King County to construct, operate and maintain a water system outside the current City limits. This franchise was granted

to the city in June 1984 for a period of 25 years under King County Motion No. 6022. The City is currently negotiating the renewal of the water franchise with King County.

**Adjacent Purveyors.** Carnation's service area is bordered by the Lake Marcel/Lake Joy Water District 119 to the north, Ames Lake Water District to the West, Fall City Water District 127 to the south, and the unclaimed foothills of the Cascades to the East.

**Water System Development History.** During the early development of the city, the source of water was a spring located in a 16-acre tract of the Weyerhaeuser Timber Company. Later the City purchased the original 16-acres plus an additional 64-acres from Weyerhaeuser. This 80 acre area currently constitutes the spring site and watershed. The original water distribution system was developed by extending water mains as needed to serve the City's growth. Obsolete wood stave pipes were replaced with steel and asbestos cement pipe. Continued growth required modification of the spring intake which included construction of a 3-manhole intake system at the springs to increase water capacity to 320 gallons per minute (gpm). In 1978, a new well was drilled within the city limits producing 700 GPM. In 1990, the City constructed a 238,200 gallon reservoir and installed new 12 inch mains. In 1998 the City developed two horizontal wells near the existing springs. Water system improvements in recent years have included two new reservoirs, water main replacement and efforts to improve water use efficiency.

#### **Water Source.**

The City has water rights for two sources of potable water: a spring source and a well. Currently the spring source has the capacity to supply most of the city's daily demands. The well is activated as needed for maintenance of the spring source, for peak periods, to replenish low reservoir levels or to assist in fire flows.

**The Springs:** The springs are the primary source of water supply for the City of Carnation's system throughout most of the year. The springs are situated within an 80-acre tract owned by the City located about 2.5 miles southeast of the city center. The source of the springs is water fed by an unnamed aquifer flowing through pre-Frasier deposits of sand and gravel. The water from the aquifer surfaces from the ground to form a natural spring at the location of the intake manifolds.

The springs were determined not to be under the direct influence of surface water and are not a Groundwater Under the Influence of surface water (GWI) source. Continuous sampling and testing has shown no significant occurrence of insects, micro organisms, algae, or large diameter pathogens. Also there has been no indication of rapid shifts in water characteristics such as turbidity, temperature, conductivity or PH correlating to climatological or surface water conditions.

**The Well.** The well is located in Loutsis Park near the intersection of Entwistle Street and Milwaukee Avenue and was constructed in April, 1978. The well's pump has a

rated capacity of 700 gpm at a Hydraulic Grade Level (HGL) of 227.5 feet and is activated by pressure within the system. The well pump has a rated capacity of 700 gpm at a Hydraulic Grade Line (HGL) of 227.5 feet. The well is activated by pressure within the water system.

**Source Protection.** Protection of the water source is required under WAC 246-290-135. Both of the City's water sources produce excellent quality drinking water. Both the well and springs have protection programs in place to minimize any potential contamination:

**Well Head Protection.** The well is located in Loutsis Park near the intersection of Entwistle Street and Milwaukee Avenue. The 6-acre park is owned by the City. The well site is continually monitored by the City and inspected by the Health Department for possible source contamination.

**Spring Source Protection.** The springs are located in a 51-acre tract of land owned by the City. A portion of the site, including the 200 foot protective radius surrounding the springs, is fenced to prevent intrusion from large animals and to detour people from trespassing onto this area of the site. As with the well site, the springs are continually monitored by the City and inspected by the Health Department for possible source contamination. No source of contamination is allowed to be constructed, stored, disposed of, or applied within the sanitary control area of either the well or springs.

**Watershed Control Requirements.** The source of the springs is water fed by an aquifer flowing through pre-Frasier deposits of sand and gravel. The water from the aquifer surfaces from the ground to form a natural spring. The springs are not under the direct influence of Surface Water and are not a GWI (Ground Water Under the Influence of Surface Water) source. Continuous sampling and testing has shown no significant occurrence of insects, or other macro organisms, algae, or large diameter pathogens. Also there has been no indication of rapid shifts in water characteristics such as turbidity, temperature, conductivity or PH correlating to climatological or surface water conditions. Because the source of the springs is ground water and is neither Surface Water or Ground Water Under the Influence of Surface Water (GWI), the City is not required to implement Section 4 Watershed Control Program of WAC 246-290-135.

**Water Rights.** The City of Carnation holds water rights from the Department of Ecology for both the well and the springs. The City's water right Claim is for 628 gallons per minute (gpm) and the current capacity of the springs is 380 gpm. The water right for the well is a Supplemental Permit for 800 gpm; the well has a capacity of 700 gpm. At this time the City neither purchases water from another purveyor nor wholesales water to another water purveyor.

**Storage**

The City of Carnation's water system includes three above ground tank reservoirs, one located at the spring site in the watershed and two located at the city-owned parcel on Entwistle Street. The water system is considered a multiple source system, which reduces the amount of storage required. The total volume of storage in the three reservoirs is 938,200 gallons. Filling the reservoirs is accomplished by pressure within the city's system.

***Distribution System.***

The transmission/distribution network totals 11.805 miles of piping. The water mains include newer ductile iron mains ranging from 4 inch through 12 inch and older mains ranging from 2 through 8 inch. Recent improvements to the distribution system included replacement of approximately 2,500 linear feet of transmission main from the spring site to 344<sup>th</sup> Street NE.

An in-line Pressure Reducing Valve (PRV) is located on the south side of Tolt River and set at pressure elevation 229.0 feet (69 psi). The PRV divides the system into two pressure zones. The system north of the PRV (Tolt River) operates at a pressure setting of about 66 psi or a HGL of 229 feet (U.S.G.S. Datum) while the system south of the PRV operates at a variable pressure of zero at the springs to 111 psi at the PRV. The PRV maintains the hydraulic grade line within the City at an elevation of 229 feet which is the reservoir "Full" level.

An 8-inch transmission line extends from the PRV to the Fire Station where it is connected to a 12-inch transmission line. The 12 inch transmission line runs northerly along Tolt Avenue from the Fire Station to Carnation Elementary School at the northern city limits; and along Commercial, Entwistle and NE 45th Streets from Tolt Avenue to the reservoir site at the eastern city limits.

***Water Quality & Treatment.***

The water quality within Carnation's water system is excellent from both the well and springs sources. The water from the springs source is chemically treated by a chlorinator installed on an 8-inch pipeline. The chlorination building is located downstream of the spring intake at an elevation of 333.87 feet.

The well located in Loutsis Park is a non-chlorinated water source. Since the well and springs are tied into the same piping network, the well water system has a residual chlorine content. Recent work to reduce water loss has resulted in a dramatic reduction in the water needs of the City. The well has typically been used to supplement the spring source during high water use times such as seasonal peaks; however given the

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recent reduction in water use, the well is not expected to be needed except under emergency conditions.

Testing of both sources for bacteria count is done on a monthly basis. Testing for inorganic, regulated compounds and unregulated compounds is done on a three-year basis. Lead and copper testing is also performed on a three year basis. In general, the quality of water from both the springs and the well water is excellent.

**Water System Standards.** All improvements to the water system, whether accomplished by Developer Extension Agreements, Utility Local Improvement Districts (ULID's), or other methods, are required to meet minimum design and construction standards established by the City. The standards contained in the City of Carnation "Design And Construction Standards and Specifications" manual conform to the requirements of the Washington State Department of Health, City Design Standards and American Public Works Association.

**Service Connections.**

The City serves water customers both inside and outside the City Limits and all customers are on metered services. Approximately 79% of the connections are located in the City, and the remaining 21% are located in the PAA and other parts of the City's water service area that are outside City limits. The percentage, types and category of use for these service connections are shown in Table U-1.

**Table U-1  
Water Service Connections by Account Type**

Inside City Limits = 648 accounts	Single family Residential Dwelling Accounts	539	65%
	Multi Family Accounts	21	3%
	Commercial/Business Accounts	<u>88</u>	<u>11%</u>
Outside City Limits = 177 accounts	Single family Residential Dwelling Accounts	<u>169</u>	<u>20%</u>
	Multi Family Accounts	1	<u>0%</u>
	Commercial/Business Accounts	<u>7</u>	<u>1%</u>
Total Accounts		825	(100%)

Source: City of Carnation Utility Billing System, May 2012.

**Water Demand and Water Use Efficiency**

Carnation's water distribution system is old, and up until recently, unaccounted for water was estimated to be as high as 40% within the system. Recent efforts to reduce unaccounted for water through aggressive leak detection, water main improvements and meter replacement have reduced unaccounted for water to less than 10% of the system's water use. Efforts to increase water efficiency have reduced average total

daily demand (ADD) on the system from approximately 225,000 gallons per day to approximately 168,000 gallons per day.

### ***Water System Capacity***

The source, storage, treatment and distribution system must demonstrate the capacity to serve future populations within the water service area. New improvements will be required to address any existing or projected deficiencies; these are listed in the Water Capital Improvements Plan as adopted in the Water Plan. In 2012, the City Council adopted a five-year capital improvement plan for the water system which prioritized these capital projects. This plan is described in the Capital Facilities Element.

The Water Plan projected future water use based on projected increases in new households and non-residential uses in the water service area, both within and outside of the City's Urban Growth Area (UGA). The Equivalent Residential Use (ERU) used for planning purposes in the water plan was 225 gallons per day. Since the adoption of the Water Plan, two factors have changed that may affect system demand. First, the Update of the Land Use Element adopted in 2011 included changes to the Map of Future Land Use that result in an increased forecast by approximately 50 more households. Second, a significant reduction in unaccounted for water has reduced the current demand on the system. Continued water efficiency practices such as water main replacement, leak detection and water meter replacement can be expected to result in reduced future demand on the water system.

***Source and Water Rights.*** The Supply Analysis found in Chapter 6 of the Water Plan concludes that the City's water rights and capacity of the two water sources are sufficient to serve future forecasted demand. The assumption is made that as demand grows, the supplemental well may be utilized more fully. However, given the dramatic reduction in overall water use that has recently been achieved, this may not occur as early as expected within the twenty year planning horizon.

***Storage.*** The two reservoirs that were recently completed addressed storage deficiencies that existed at the time the Water Plan was written. The addition of a reservoir at the spring site now insures continued water service to customers in the southern pressure zone in the event of disruption of the spring source. The second reservoir at the City's property on Entwistle Street improves fireflow and system redundancy. Currently the city's storage capacity is sized to meet future projected demand.

***Treatment.*** One of the system deficiencies that was identified in the Water Plan was the lack of chlorination at the well. In addition, a power outage would prevent the well pump from functioning, which reduces system reliability by taking one of the sources off-line. Future projects to add chlorination and a back-up generator at the well should address these problems.

***Distribution system.*** On-going main replacement projects are identified to continue updating and improving the water distribution system. The capital improvements plan includes water main replacements and additional isolation valves within the system to allow for repair and maintenance without disruption of service.

Overall, improvements that were recently completed and are planned will insure that the water system is adequate to serve the projected future population within the city's water service area.

## **WASTEWATER**

The City of Carnation sewer system became operational in 2008. Prior to that time, Carnation was one of the few cities that relied on private septic systems for wastewater treatment. The majority of the City's septic systems had been built long before current septic system standards were developed, and incidences of septic system failure and high bacterial counts at local swimming areas led the King County and State Departments of Health to issue Severe Health Hazard Declarations in 1987, and reiterated in 2003 and 2005. Inadequate septic systems and smaller lots had also prevented economic development and an inability to accommodate residential growth at urban densities in accordance with the Growth Management Act.

The community had several times attempted to utilize federal grants to construct public wastewater facilities, but without success. In the late 1990's, the City Council again began discussion on developing a wastewater treatment system. The City spent several years studying its options for financing and the various technologies for wastewater collection and treatment. Extensive public participation was sought during the development of a Sewer Comprehensive Plan, including a City newsletter and public meetings.

In 2002, the City signed an Inter-local Agreement with King County whereby the County's Wastewater Treatment Division would design, construct and operate a wastewater treatment plant using membrane bio-reactor (MBR) technology, and the City would design, construct and operate the collection and conveyance system. The City studied options for the collection and conveyance system, and, due to the flat topography combined with a high water table, a recommendation was made to construct a vacuum system.

- ***The Wastewater Treatment Plant*** operated by King County uses an advanced treatment technology called a membrane bioreactor or MBR. The plant produces reclaimed water that can be used safely as a drought-proof water source for wetland enhancement and other beneficial uses. Reclaimed water from the Carnation Treatment Plant is discharged to a wetland in King County's Chinook Bend Natural Area, next to the plant's river outfall site at the Carnation Farm Road Bridge.

***The collection system*** is operated by the City of Carnation Public Works Department.

The collection system consists of ten miles of sewer collection pipe that are collected into in four main trunk lines that transport effluent under vacuum pressure to the vacuum station located at 4301 Larson Avenue. Trunk Lines A through D each serve one of the four quadrants of the City that are divided by the Snoqualmie Trail along the north-south axis and Entwistle Street along the east-west axis. Trunk Lines A through D begin as 4" diameter at the furthest upstream ends and increase in size to 6, 8 and 10 inch diameter as required by the amount of flow that is introduced into the system. A fifth Trunk Line, E, is routed northward from the vacuum station and terminates at the north end of the city limits at Stewart Avenue. Trunk Line E is intended to be extended to provide service to the annexation area north of the City for future development. In the meantime, it provides sewer service for existing customers located on Stewart Avenue.

The Vacuum pump station collects the city's sewage flow and subsequently transports it to the King County Wastewater Treatment Plan that abuts it to the north. The pump station is designed for a peak flow of 975 gallons per minute (gpm). Current usage is 57.8 gpm.

***Wastewater Contributors and Characteristics.*** There are 637 sewer connections served by the City of Carnation sewer system: 541 single family customers, 21 multi-family meters (which provide service to 117 units) and 75 commercial customers. The wastewater characteristics are typical of a residential community comprised largely of residences, schools, businesses and commercial establishments. There are no industrial dischargers in the City.

### ***System Capacity.***

Both the wastewater treatment plant and the collection and conveyance systems were designed to serve the City of Carnation's forecasted growth within the Urban Growth Area. Both the treatment plant and the collection/conveyance systems are designed to accommodate increases in capacity.

## **STORMWATER**

There are two major drainage basins considered in the 2003 Stormwater Comprehensive Plan. Basin A drains to the Snoqualmie River and covers a majority of area within the city limits as well as all three Potential Annexation Areas. Basin B drains to the Tolt River and is primarily limited to a narrow strip of land south of the levee and covers only 33.1 acres within the city limits.

The City of Carnation does not have a public storm sewer system. Stormwater from impervious surfaces must be infiltrated on-site, which can sometimes be difficult to achieve given localized areas of poorly drained soils and/or seasonal high water tables. Local drainage facilities that collect and convey surface water runoff consist of open

channels and roadside ditches, wetlands, infiltration systems and detention ponds. The Snoqualmie and Tolt rivers ultimately serve as receiving waters, but there are no direct outfalls to the rivers. The existing infrastructure is generally in poor to fair condition.

## NATURAL GAS

Puget Sound Energy (PSE) supplies natural gas to six Western Washington counties: Snohomish, King, Kittitas, Pierce, Thurston, and Lewis. Puget Sound Energy provides natural gas service to more than 631,474 customers.

Natural gas is not an essential service, and, therefore, the service is not mandated. Extension of service is based on request and the results of a market analysis to determine if revenues from an extension will offset the cost of construction.

According to PSE rate department, the average house (using natural gas for both heat and hot water) consumes about 1,000 therms per year. Ten therms equals approximately one "mcf" (thousand cubic feet) of gas so 1,000 therms per house equals approximately 100,000 cubic feet of gas per household per year.

When planning the size of new gas mains, PSE uses a saturation model which assumes all new households will use natural gas since 99% of new homes constructed where builders have the choice are using natural gas. PSE forecasts customer additions using a forecast analysis calculation based on PSE's revenue report which is generated by town tax codes established in our Exception Billings Dept.

It is estimated that PSE currently serves approximately 277 customers in the Carnation area.

**Existing Distribution System.** The Pacific Northwest (Washington, Oregon, and Idaho) receives its natural gas from a wide range of sources in North America. Sixty percent (60%) of the region's natural gas supply comes from British Columbia and Alberta in the north; 40% comes from domestic sources including the San Juan Basin in New Mexico/Texas in the south. The Pacific Northwest consumes 380 billion cubic feet of natural gas per year.

Natural gas is supplied to the City of Carnation from Redmond City Gate Station. The back-bone feed is a 6" main coming from the Ames Lake area along NE Tolt Hill RD, located at southwest corner of the City. In 2009, PSE installed about 1.5 miles of 8" IP main (Notification 109027910) along Redmond- Fall City RD (from 292 AV SE northerly to SE 8 ST) to reinforcement this general area.

High pressure (HP) supply lines (measuring 16", 12", 8", 6", and 4" in diameter) transport gas from gate stations to district regulators. The pipe material is typically steel wrap (STW). No high pressure gas lines are located within the city limits of Carnation.

District regulators (DR) reduce high pressure to typical distribution operating pressures of 60 to 25 psi. Distribution pressures are typically called intermediate pressures (IP). There are no district regulators within the Carnation city limits.

Distribution mains are fed from the district regulators. These typically are 8", 6", 4", 2", and 1-1/4" diameter lines. The pipe material typically is polyethylene (PE) or steel wrapped (STW). Puget Sound Energy has approximately 6.5 miles of main serving the City of Carnation.

Individual residential service lines are fed by distribution mains and are typically 5/8" in diameter. Individual commercial and industrial service lines are typically 1-1/4" or 2" in diameter.

## **ELECTRICITY**

Puget Sound Energy supplies electrical service to more than 982,000 customers throughout Western Washington and Kittitas County. Carnation is currently supplied with enough electricity to satisfy the demand for electrical power. The transmission and distribution of electricity to Carnation and other rural communities in the Snoqualmie Valley is delivered by Puget Sound Energy (PSE) and regulated by the Washington Utilities and Transportation Commission. Currently, the substation has the capability to provide 20 MVA (units of electrical demand), and can be upgraded to 25 MVA. The current load on the substation from Carnation and the surrounding area is approximately 10 MVA. According to PSE, 1 MVA can typically provide enough electrical power for approximately 230 households, based on normal usage. Carnation anticipates less than 2 MVA of additional electrical demand upon the Tolt substation over the next 20 years. However, the Tolt Substation's service area includes residents and businesses halfway between Carnation and substations located in Duvall and Fall City, as well as those in Carnation. Additional growth in the County along with Carnation's growth may eventually necessitate construction of a new facility.

***Existing Transmission and Distribution System.*** Transmission of electrical power is supplied to the City of Carnation and the surrounding area from the Snoqualmie – Stillwater 115 kV transmission line. The 115 kV transmission line voltage is stepped down to 12.5 kV at the Tolt Substation where it is distributed to the City of Carnation and the surrounding area. The Tolt substation is located on Entwistle St in Carnation. The 12.5 kV distribution system consists of 3 circuits out of the Tolt substation. There are currently three different circuits coming out of Tolt substation. Two of them are running at about 75% their peak capacity and the third circuit is about 30% its capacity. There is room for growth on all of them.

## **TELECOMMUNICATIONS**

Carnation is served by a variety of telecommunication companies. CenturyLink provides local calling services and DSL internet service, and is able to extend lines on

demand. For calls to areas outside of the local area, residents may choose from a variety of long distance service providers. Cable television and broadband internet service is offered in Carnation through Comcast and Clearwire provides wireless telecommunications to Carnation residents.

**III. FUTURE NEEDS AND ALTERNATIVES**

- This is an inventory and analysis of the future capital needs for the following utilities: solid waste, water, wastewater, storm water, natural gas, electricity, and telecommunications.

**SOLID WASTE**

The solid waste collection and disposal system is adequate to meet Carnation's needs. The City will continue to monitor and contract with service providers throughout the planning period. King County is currently evaluating future solid waste alternatives beyond 2022. As discussed previously, the City currently contracts with Waste Management for solid waste collection but the City is about to contract with a different service providers

**WATER**

Table U-3 shows Carnation future water demands, based on Table 3.7 of the 2008 Water Comprehensive Plan. It should be noted that these demands were forecast assuming that water use efficiency goals would not be met.

**Table U-3  
Projected Average and Maximum Daily Demand  
(without Water Use Efficiency Reductions)**

	2008	2014	2018	2028
ADD <i>(average Daily Demand) (gpd)</i>	382,075	479,657	486,373	510,589
MDD <i>(Maximum Daily Demand) (gpd)</i>	955,187	1,199,142	1,215,932	1,276,472
Annual (MG)	139.5	175.1	177.5	186.4

The City Council recently passed Resolution No. 373 which adopted a five year capital improvement plan for water for the years 2012 through 2016. The Water CIP includes several projects designed to decrease water loss, including on-going commercial and residential meter replacement and water leak detection, and an assessment of the condition of steel piping to help prioritize main replacements. Other improvements such as providing additional isolation valves will facilitate repairs and maintenance of the distribution system. An upsizing of the existing pipe that crosses SR203 at Commercial Street will improve system looping and help fireflow in the commercial portions of the City. Another improvement is identified to replace failing asbestos cement (AC) water mains in Spilman Avenue in association with street improvements.

## **WASTEWATER**

The wastewater treatment plant owned and operated by King County and the collection and conveyance system owned and operated by the City of Carnation have both been sized to accommodate future build-out of the Carnation Urban Growth Area. The technologies utilized can be expanded beyond that capacity if needed. It should be noted that unlike water service that can be provided outside of the City's jurisdiction, sewer service is restricted to urban areas. There are a few exceptions to that rule. For example sewer service can be expanded outside the urban growth area to a public school system, or to a tribal reservation.

## **STORMWATER**

- At this point in time the City has no plans to develop a public storm sewer. However, a small scale community stormwater facility may be appropriate to provide for stormwater for new development within the commercial core, as this area has been found to have soils that are poorly drained.

## **NATURAL GAS**

Puget Sound Energy (PSE) maintains a minimum pressure delivery through intermediate pressure mains from a design standard of approximately 15 psi. If the pressure drops below 15 psi, there are several methods of increasing the pressure in the line, including:

- a. Looping the distribution and/or supply lines to provide an alternative route for the gas to travel to an area needing additional supply. This method often involves construction of high pressure lines, district regulators, and intermediate pressure lines.
- b. Installing lines parallel to existing lines to supplement supply of natural gas to a particular service area.
- c. Replacing existing pipelines to increase volume. (This includes efforts to replace

low pressure cast iron systems with intermediate pressure plastic systems.)

There are three types of construction for maintenance or installation of new facilities:

- a. New or replacement of existing facilities due to increase capacity requirements due to new building construction and conversion from alternate fuel.
- b. Main replacement to facilitate improved maintenance of facility.
- c. Replacement or relocation of facilities due to municipal and state projects.
- d. PSE makes an effort to coordinate construction work with municipal projects in order to minimize cost and impacts to surrounding community. Due to franchise agreements, PSE is required to relocate existing facilities which is costly and usually unplanned. Improved coordination decreases this occurrence.

The average gas customer growth rate has been around 1.5% in the last five years. PSE anticipates the growth rate in this area to be the same (1.5%) in the next five years. Based on the 1.5% growth rate, there is no expectation to do system capacity improvements in the area in the next five years. The natural gas system improvements serving the Carnation area should operate without capacity issues for the next five years. There are no major natural gas projects currently anticipated between now and the year 2014 to serve customers in the City of Carnation.

Puget Sound Energy will continue to review projects proposed by the City of Carnation and may choose to take advantage of an opportunity when projects are scheduled.

## **ELECTRICAL POWER**

The existing Snoqualmie – Stillwater 115 kV transmission line consists of small copper wire, with many of the poles nearing the end of their useful life. The future plans include replacing the older poles and the small copper wire with larger aluminum wire. This will increase both the capacity and reliability of the line. Future plans include rerouting the Snoqualmie – Stillwater 115 kV transmission line into Puget Sound Energy's planned Novelty substation. The reroute of this line would take place approximately half way between Carnation and Duvall along the existing BPA right-of-way. The line would be renamed "Snoqualmie – Novelty 115 kV" line at that time. Future plans also include an expansion of the Tolt Substation when the demand on the Tolt substation reaches approximately 16 or 17 MVA. Puget Sound Energy will increase capacity by adding a second transformer at this location

Additional property will be required to accommodate this expansion. It is currently envisioned that the existing 115 kV transmission line would not be upgraded to

230 kV.

The 12.5 kV distribution system is expanded as additional customers are added, i.e. single family residences, platted developments, commercial businesses, etc.

At the winter peak load period the Tolt substation is currently running at about half its rated capacity so there's plenty of room for growth in the area.

There are no plans at this time to expand capacity in the Carnation area. PSE is confident it has enough capacity to handle future growth rates.

PSE continually monitor outages in the area and will generate projects to improve reliability should problems arise. Currently there are no reliability issues.

## TELECOMMUNICATIONS

There are no shortages in the existing or future capacity of the telecommunication services for Carnation at this time. The existing network of telecommunication lines, including telephone, cable television, and broadband internet access has sufficient capacity to accommodate increases in development or subscription. The limitation in providing services would stem from lack of a direct hook-up from a specific residence to the television or telephone line.

### ***Under grounding Utility Wires.***

Development Regulations currently require new utilities to be placed underground with some exceptions (CMC 15.60.350). The under grounding of existing above ground utilities is difficult and costly. The cost will vary greatly depending on site specific factors. The burden of the cost falls on the utility company and on the individual property owner. The utility's cost would involve burying the utility, while the property owner would be responsible for preparing the utility system within the building for conversion, as well as bearing a portion of the cost of extending the service utility from the primary distribution line to the property.

Under grounding power line along SR203 (Tolt Avenue) is currently under discussion as part of the Tolt Avenue Streetscape Project.

## IV. GOALS AND POLICIES

### GOAL U1

**To ensure that the energy, communication, and solid waste disposal facilities and services needed to support current and future development are available when they are needed.**

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Policy U1.1 The City does not provide energy, communication or landfill disposal services. These facilities and services are currently provided by private companies and King County. To facilitate the coordination of these services, the City should discuss and exchange population forecasts, development plans and technical data with the agencies identified in this plan.

Policy U1.2 Carnation adopts the following Level of Service Standards for utility services:

- A. Collection service for garbage, recyclable materials, and yard waste shall be available to all properties within the City. Level of service provisions shall be included in franchise/license agreements with solid waste haulers. Cooperatively work with King County and related agencies for an adequate system of collection and disposal of hazardous wastes, and public education regarding hazardous wastes.
- B. For electrical service, coordinate land use and facility planning with Puget Sound Energy to allow for siting and construction of distribution facilities that provide sufficient amounts of electrical power with minimal periods of service interruption.
- C. For natural gas, promote the continued extension of distribution lines within the city by PSE. Coordinate land use and facility planning to allow for eventual siting and construction of natural gas distribution conduits along roadways which are undergoing construction.
- D. For telecommunications, including telephone, cellular telephone, cable television, and Internet services, advocate the development or maintenance of facilities necessary to provide services as needed to accommodate population growth and advancements in technology. Include level of service provisions in franchise/license agreements with providers of cable television services. For cellular telephone service, work with providers to enhance the range of the regional service area by encouraging the installation of a network of repeater towers in the Snoqualmie Valley.

Policy U1.3 New development shall be allowed only when and where all public utilities are adequate, and only when and where such development can be adequately served by essential public utilities without reducing level of service elsewhere.

Policy U1.4 Coordinate Carnation's Land Use Element with the facility/utility planning activities of the service providers, including Puget Sound Energy,

CenturyLink, Comcast, solid waste collection provider, the King County Solid Waste Division and city operated utilities, by ensuring that these providers of public services and private utilities use the Land Use Element of this Plan in planning future facilities. Adopt procedures for the City's review of and comment on proposed actions and policies by these public and private providers of public services.

## **GOAL U2**

**To provide an adequate and effective recycling program to serve the needs of Carnation residents, which maintains public health, environmental and land use quality.**

- Policy U2.1 The City shall strive to educate public and private sector developments about on-site recycling options, and shall encourage the use of recycled products, and support ongoing special event recycling.
- Policy U2.2 The City shall strive to decrease the amount of solid waste entering land fill sites, extend the useful life of regional landfills and transfer stations, and minimize natural resource depletion by continuing solid waste recycling programs and participating in the procurement of recycled products.

## **GOAL U3**

**To minimize impacts associated with the siting, development, and operation of utility services and facilities on adjacent properties and the natural environment.**

- Policy U3.1 Utility service providers should design utility infrastructure and facilities in a way that does not damage or destroy the functions or features of the impacted properties, by, for example, providing buffers between public and private uses.
- Policy U3.2 Electric power substations and other essential public facilities should be sited, designed, and buffered (through screening and/or landscaping) to fit in harmoniously with their surroundings. When sited within or adjacent to residential areas, special attention should be given to minimizing noise, light and glare impacts. Visual and land use impacts resulting from electrical, communication and other above ground essential public facility system upgrades shall also be mitigated.

These mitigation measures shall apply to existing facilities when substantial improvements and/or upgrading are proposed in the future.

- Policy U3.3 The City shall encourage or require implementation of resource conservation practices and best management practices during the construction, operation, and maintenance of utility structures and improvements.
- Policy U3.4 Establish a process for identifying and siting essential public facilities, such as solid waste or recycling handling facilities, waste water treatment plants and power substations. Cooperatively work with surrounding municipalities and King County during the siting and development of facilities of regional significance.
- Policy U3.5 The impacts from utility lines on the visual and physical environment should be mitigated by requiring the under grounding of utility lines to minimize clutter and the obstruction of views in new developments.
- Policy U3.6 Development Regulations will include requirements that all existing overhead utilities are to be relocated during street widening or changes in alignment and placed underground, except when enforcement would be overly burdensome due to economic or technological factors found to exist at a site; and if the terms of the franchise agreements conflict with the requirement for underground placement of utilities.
- Policy U3.7 Through the Land Use Code, the City shall ensure environmentally sensitive, safe, and reliable utility service that is aesthetically compatible with the surrounding land uses and results in reasonable economic costs.
- Policy U3.8 The City will recognize the difference between utility lines serving individual customers, distribution lines carrying power from a substation to the customer service line, and transmission lines carrying power from generating source to a substation. In recognition of these differences, the City will exempt the under grounding of utility lines over a certain voltage from any under grounding ordinance.

#### **GOAL U4**

**To provide and maintain safe, reliable and cost-effective water and wastewater systems to serve the needs of Carnation residents.**

- Policy U4.1 The City will continue to upgrade its water system to ensure efficient water use and good management of the water system, in accordance with federal and state regulations.
- Policy U4.2 The City will continue to manage and maintain its wastewater collection and conveyance system in accordance with Department of Ecology standards and regulations.

Policy U4.3 Treated effluent from any wastewater system developed within Carnation should be discharged through available environmentally safe means, including reclaimed water where feasible and appropriate. The City shall continue to work cooperatively with King County as they maintain and operate the Carnation wastewater treatment plant.

Policy U4.4 In the event the City wishes to sell surplus water to adjacent water utilities, the City shall negotiate an interlocal service agreement setting forth the terms and limitations of the sale of the surplus water.

**GOAL U5**

**Promote and achieve reasonable levels of energy conservation and conversion throughout the Carnation community.**

Policy U5.1 Encourage planning and location of future facilities to accommodate future growth and to minimize incompatibility with surrounding land uses; joint use agreements among public and private utility providers for coordinated facility planning are also encouraged. The Utilities Element would be updated at least as required by the Growth Management Act to reflect changing regulatory conditions, load forecasts, and technology in cooperation with service providers.

Policy U5.2 Conserve land, energy and natural resources by minimizing sprawl and encourage the replacement of energy and water saving appliances.

Policy U5.3 Streets, water, and sewer extensions should be designed to provide service to the maximum area possible with the least length of extension.

**GOAL U6**

**To process permits and approvals for utility facilities in a consistent, fair and timely manner and in accordance with Development Regulations and other pertinent standards and guidelines.**

Policy U6.1 The City shall promote, where feasible, the co-location of new public and private utility distribution facilities in shared trenches, and coordinate construction timing to minimize disruptions and cost.

Policy U6.2 The City will provide timely effective notice to utilities to encourage coordination of public and private utility trenching activities for new construction and maintenance and repair of existing roads.

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- Policy U6.3 The City will encourage provision of an efficient, cost effective and reliable utility service by ensuring land will be made available for the location of utility lines, including location within transportation corridors.
- Policy U6.4 The City will promote the extension of distribution lines to and within the Potential Annexation Area, and coordinate land use and facility planning to allow siting and construction of natural gas distribution lines within rights-of-way which are being dedicated or within roads which are being constructed or reconstructed.
- Policy U6.5 The City will ensure that all maintenance, repair, installation, and replacement activities by utilities are consistent with the city's critical areas ordinances.
- Policy U6.6 The City will encourage communication among the Washington Utilities and Transportation Commission (WUTC) and utilities regulated by the WUTC regarding the requirements of the Growth Management Act, especially the requirement that service be provided concurrently with or in advance of demand.
- Policy U6.7 The City shall encourage system design practices intended to minimize the number and duration of interruptions to customer service.

**GOAL U7**

**Surface water management activities should address quantity and quality of water entering the natural environment.**

- Policy U7.1 The City should minimize water quality degradation through education programs and implementation of Best Management Practices to reduce pollution entering surface waters.
- Policy U7.2 Stormwater facilities required of new development should be designed and built for low-cost, long term maintenance. Low impact stormwater facilities should be encouraged where feasible and cost-effective.

**EXHIBIT C**

**CHAPTER 9 – CAPITAL FACILITIES ELEMENT**

**I. INTRODUCTION**

The Capital Facilities Element has been developed in accordance with Section 36.70A of the Growth Management Act to address the financing of Capital Facilities in the City of Carnation Urban Growth Area (UGA). It represents the community's policy plan for the financing of the public facilities for the next 20 years, and includes a six-year financing plan for Capital Facilities from 2012 to 2018. The policies and objectives in this plan will be used to guide public decisions on the use of capital funds. They will also indirectly guide private development decisions by providing a strategy of planned public capital expenditures.

The Element has also been developed in accordance with the King County County-wide Planning Policies, and has been integrated with all other planning elements to ensure consistency throughout the Comprehensive Plan. The Element specifically evaluates the city's fiscal capability to provide the public facilities necessary to support the other Comprehensive Plan elements. The Capital Facilities Element includes:

- Inventory and Analysis
- Future Needs and Alternatives
- Six-Year Capital Improvement Plan
- Monitoring and Evaluation
- Goals and Policies

**LEVEL OF SERVICE (LOS) STANDARDS**

Where LOS standards are established, they are also discussed in the subject element of this Comprehensive Plan (e.g. Transportation, Parks, etc.) A detailed listing of those standards is provided in those chapters.

**MAJOR CAPITAL FACILITIES CONSIDERATIONS AND GOALS**

The Capital Facilities Element is the mechanism the City uses to coordinate its physical and fiscal planning. This planning effort requires ongoing communication between various disciplines, including engineering, finance, and planning. The Comprehensive Plan is realistic and achievable as a result of integrating the concerns of various local administrators and coordinating all of the Comprehensive Plan Elements.

The Capital Facilities Element promotes efficiency by requiring the City to prioritize capital improvements for a longer period of time than the single budget year.

Long-range financial planning presents the opportunity to schedule projects so that the various steps in development logically follow one another, with regard to relative urgency, economic desirability, and community benefit. In addition, the identification of adequate funding sources results in the prioritization of needs, and allows the trade off between projects to be evaluated explicitly.

## II. INVENTORY AND ANALYSIS

The inventory presented in this Element provides information useful to the planning process as well as summarizing new capital improvement projects for the growth projected from 2012 and beyond, and major repair, renovation, or replacement of existing facilities.

### EXISTING CAPITAL FACILITIES

This section includes a brief summary of existing city facilities. Additional information can be in each respective Comprehensive Plan Element under which the facility would be considered.

**City Hall and Police Station.** The facilities for general government and police consist of a 6700 square-foot two-story City Hall building located at 4621 Tolt Avenue. The building is comprised of three separate attached structures, built in different decades. General government is administered from the ground floor, which underwent partial interior renovation and finish work in 2001 and 2002. The general government facility provides meeting space, office space, and ADA accessible public spaces. Office space consists of a front office with capacity for three employees, and four private offices. City Hall office space is currently at maximum capacity.

**Public Works Maintenance Shop.** A 5,000 square foot public works maintenance building was constructed in 1995, and is located at NE 45<sup>th</sup> and 330th Avenue NE. The building consists of two heated bays, three storage bays, and office/parts area. This facility should be adequate to meet public works maintenance needs throughout the planning period.

**Water System.** Principal water facilities include a spring fed water supply supplemented by a groundwater well located in Loutsis Park, and three above-ground storage reservoirs providing a total of 938,000 gallons. The city water distribution mains consist of pipes ranging in size from 2" to 12". The quality of the water provided by the City is good. The capacity is adequate to serve current needs, and the City anticipates having enough capacity to serve the projected population. The City last updated the

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Water Comprehensive Plan which was approved in July of 2009 by the State of Washington Departments of Health and Ecology and King County. The next update must be approved on or before July 27, 2015.

Provision of water to future development not only depends on capacity, but also on design considerations. See the Utilities Element for more information on the water system.

**Sanitary Sewer System.** The City has an operational public sewer system. The City constructed and operates the collection system, and King County provides wastewater treatment at a facility located at 4405 Larson Street. The outfall is approximately one mile to the north of the City at Chinook Bend, where it is used for enhancement of a wetland.

**Stormwater.** The stormwater drainage system consists of two major drainage basins draining to the Tolt and Snoqualmie Rivers. The majority of the city's planning area drains to the Snoqualmie River, with only approximately 33.1 acres draining to the Tolt River.

The City of Carnation does not have a public storm sewer system. Stormwater from impervious surfaces must be infiltrated on-site, which can sometimes be difficult to achieve given localized areas of poorly drained soils and/or seasonal high water tables. Local drainage facilities that collect and convey surface water runoff consist of open channels and roadside ditches, wetlands, infiltration systems and detention ponds. The Snoqualmie and Tolt rivers ultimately serve as receiving waters, but there are no direct outfalls to the rivers. The existing infrastructure is generally in poor to fair condition.

**Solid Waste Disposal.** Garbage collection is mandatory throughout the City of Carnation. Curbside recycling and yard waste collection is also available to all residents. The City previously operated a landfill which stopped receiving refuse in 1990, and entered a post-closure period in 1995. See the Utilities Element for additional information.

**Transportation Facilities.** City streets consist of various street pavement, alleys, sidewalks, street lighting, signals and surface water drainage facilities. The City street network consists of 5 miles of paved streets, and 1.55 miles of alleys. Approximately 1 mile of the paved street system features sidewalks either on one side or both. The remaining streets have gravel shoulders. A traffic signal was recently completed at the intersection of SR 203 and Entwistle; prior to completion of the signalization project, this intersection had been the City's only failure of its LOS standard. Transportation throughout the rest of the City is adequate to meet LOS standards through the planning period if the Transportation Improvement Plan identified in Chapter 7 and in this Element are implemented. See the Transportation Element for more information.

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**Parks and Recreation Facilities.** City park land consists of three developed city parks: Valley Memorial Park, Hockert Park, and Loutsis Park. In addition, a picnic facility is located at Rivers Edge Park.

Valley Memorial Park features two tennis courts, children's playground equipment, a skateboard bowl, BMX track, open space, and picnic areas. Hockert Park is a mini-park featuring a children's play structure and other playground equipment. Loutsis Park consists of open spaces and dense, poorly spaced conifer trees. It also houses the city's well-site. Additionally, the City and a few Homeowners Associations own several acres of land which have been dedicated as open space. Park and recreation facilities that are enjoyed by Carnation residents and visitors but not owned by the City include Tolt McDonald Park, which is a 500 acre regional park located partially within and adjacent to the City, as well as facilities owned and operated by the Riverview School District, King County Library System, Senior Center, etc.

The City has adequate park and recreation land to satisfy current demand although some of its park facilities are in poor condition with out of date equipment and some of its park lands are undeveloped or under developed. More information about park and recreation facilities and needs are listed in the Park and Recreation Element.

**Library.** The City of Carnation is part of the King County Library System (KCLS) which operates a 5,000 sq. ft. library on Tolt Avenue. Property owners pay a property tax assessment for operations and maintenance of the library plus levy assessments for any voter approved library bond levies.

**Cemetery.** The City operates a 2.1-acre cemetery located at 5110 Carnation-Duvall Road. The Carnation Cemetery consists of two sections, the north section which was founded by the Masonic Cemetery Association in 1905, and the south section which was founded by the Tolt Lodge International Order of Odd Fellows (IOOF) in 1906. The cemetery was deeded to the City in 1993.

**Emergency Preparedness Evacuation Site.** In 2001 with funds provided by Seattle Public Utilities and the King County Council the City purchased Tolt Highlands Lot 'W' from Weyerhaeuser, a 20.4-acre site adjacent to the north-eastern portion of the city limits. The site was purchased for the purpose of providing an elevated evacuation site for the community in the event of catastrophic failure of the Tolt Dam. In 2005, a pedestrian trail was constructed that serves as the evacuation route in the event of a dam failure. In addition to the pedestrian trail, the parcel can also be accessed by vehicles from Tolt Highlands Drive. The site includes an abandoned gravel pit. Three large metal storage containers which are owned by Riverview School District and house emergency preparedness supplies are presently located at the gravel pit. In 2004, the City and American Red Cross entered into an agreement and the Red Cross paid for and constructed the first King County Disaster Relief Shelter, which is located at the gravel pit.

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In addition to its function as an evacuation site, Lot 'W' can also be used for limited passive recreation.

**Medical, Emergency, and Fire Protection Facilities.** The City of Carnation has annexed to both the Snoqualmie Valley Hospital District and Fire District #10. Fire District #10 entered into a joint operation inter-local agreement with Fire District #38 and the cities of Issaquah, North Bend and Sammamish in 1999.

This agreement formed a new agency called Eastside Fire and Rescue. The total Fire District service area, including Carnation, is 165 square miles. The Carnation fire station is located at 3600 Tolt Avenue and is operational 24 hours a day, seven days a week. The Station is adequate to meet current and future needs through the planning period. Staff and equipment at the Carnation Fire Station consists of twelve career firefighters, ten reserve firefighters, two fire engines, one aid car, and one tender. The average response time within the Carnation city limits is approximately two minutes. The fire district has three major sources of funding -- property tax revenues, a share of the King County Emergency Management Services (EMS) funding, and fees charged for services.

**Public Education Facilities.** Riverview School District No. 407 serves the lower Snoqualmie Valley area, particularly Carnation and Duvall. The District annually issues a Capital Facilities Plan that describes the facilities needed to accommodate projected student enrollment over the following six year period. The Riverview School District's 2012 Capital Facilities Plan is hereby adopted by reference.

The District has four elementary schools (Carnation, Cherry Valley, Stillwater Elementary and the Eagle Rock Multi-Age Program), one middle school (Tolt) in Carnation, and one senior high school (Cedarcrest) in Duvall. An inventory of existing school facilities, including locations and capacities of those facilities at various grade levels, is provided below:

**Table CF-1  
Riverview School District Public School Facility Inventory**

FACILITY	LOCATION	BUILDING AREA (sf)	PERMANENT STUDENT CAPACITY
Carnation Elementary (K-5)	4950 Tolt Avenue, Carnation	50,567	444
Stillwater Elementary (K-5)	11530 320th Avenue N.E.,	49,588	492
Cherry Valley Elementary (K-5)	26701 N.E. Cherry Valley Road, Duvall	56,252	504
Multi-Age Program (K-5)	29300 NE 150th Street, Duvall	0 (@CHS site)	0 (96 Interim Capacity)

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FACILITY	LOCATION	BUILDING AREA (sf)	PERMANENT STUDENT CAPACITY
SUBTOTAL (K-5)			1,440
Tolt Middle School (6-8)	3740 Tolt Avenue, Carnation	85,157	720
Cedarcrest High School (9-12)	29000 NE 150 <sup>th</sup> Street, Duvall	108,946	972
Riverview Learning Center	32240 NE 50th Street, Carnation	14,545	168

Source: Riverview School District 2012 Capital Facilities Plan, Table 4.1

**Table CF-2  
Riverview School District Projected School Enrollment, – 2012-13-2017-18**

Grade Level	2011-12 Actual	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
K-5	1,512	1,511	1525	1524	1542	1542	1572
6-8	771	783	787	792	789	818	803
9-12	934	936	959	1010	1024	1025	1048
Total	3,217	3,230	3,271	3,326	3,355	3,385	3,423

Source: Riverview School District 2012 Capital Facilities Plan, Table 5.1.

There are four elementary schools in the district with a combined permanent capacity for 1,440 students (see Table CF-1 above). Tolt Middle School has permanent capacity for 720 students and serves the entire District. Cedarcrest High School has permanent capacity for 972 students, and is projected to exceed capacity in 2014. The District is planning to augment capacity at the high school by using existing portables rather than constructing a new high school. The District recently completed a new Alternative Learning Campus adjacent to the Carnation Elementary School.

**Financing School Facilities.** Voter approved bonds are typically used to fund construction of new schools and other capital improvement projects. In addition, the Riverview School District has an interlocal agreement with the cities of Duvall

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and Carnation as well as King County for the implementation of a school impact fee. This permits the district to use the impact fee proceeds to partially fund needed Capital Facilities to house and accommodate new students generated by residential development. Capital projects may also be funded through voter approved property tax levies, and state financial assistance from the Common School Construction Fund.

**CAPITAL FACILITIES PROGRAM**

Capital Facilities are characterized by long useful life, and substantial cost. Capital Facilities Programs include the plan for financing these facilities but do not include the cost of operation or maintenance. The Capital Facilities Program includes facilities that are provided by the City of Carnation (i.e., city streets, parks, city hall, utilities, etc.) and facilities that are provided by other entities (i.e., state roads, public schools, County parks, utilities, etc.). These facilities require a policy for long-term financing rather than the annual budget cycle. Once future capital facility requirements are determined, the six-year Capital Facilities Plan will assist with annual budget decisions to incrementally fund these facilities. The six-year Capital Facilities Plan is not a substitute, but a budgetary tool, for making budgetary decisions.

The Capital Facilities Program within this element is a six year financing plan for capital expenditures. Because most Carnation projects are dependent of various grants, which may or may not be available or awarded, it is not realistic to put a year to the project. Thus, facilities may be listed by priority, with high priority projects being those to be undertaken first whenever possible, preferably the next budget year.

The capital project list sets forth each capital project which the City plans to undertake and presents estimates of the resources needed to finance the project. The Capital Facilities Program reflects the goals, objectives, and implementation strategy of the Capital Facilities Element. The top priorities of the Capital Facilities Program will be converted to the annual capital budget whenever possible, while the remaining projects will be considered for future years. The Capital Facilities Program is a rolling plan that is periodically revised and extended to reflect changing circumstances.

The list of improvements contained in this Element has been limited to these major projects. Smaller scale improvements are addressed in the annual budget of the City as they occur over time. A capital project may include design, engineering efforts, permitting, environmental analysis, land acquisition, construction, major maintenance, site improvements, energy conservation projects, landscaping, initial furnishings, and equipment.

## **FINANCIAL INVENTORY AND ANALYSIS**

The City has employed State authorized financing mechanisms to fund city services and capital improvements, and uses the Washington State Budgeting, Accounting, and Reporting System (BARS) as prescribed by the Washington State Auditor. The City currently funds capital projects from the following funds:

- Parks Development Fund 108
- Transportation Impact Fund 109
- Capital Improvement Fund 301
- Water Capital Replacement Fund 402
- Landfill Post-Closure Financial Assurance Account 406
- Sewer Capital Improvements Fund 408

The only dedicated revenue source for the Capital Improvement Fund is the Real Estate Excise Tax. Other revenues consist of transfers from enterprise funds and other sources for capital improvements. During the 1990s and early 2000s, there was very little or no excess general revenue, after funding basic operations and maintenance activities, to transfer to the 301 Fund for capital improvements. The City's street and general government capital improvements are budgeted in this fund.

In 2004 the City conducted a water rate study and since that time, a capital replacement component has been incorporated into the water rate, providing for the availability of funds that are directly deposited into the 402 Fund for capital water system improvement projects. In addition to the capital replacement component of the utility rates, new development is charged a capital facilities charge (GFC) to connect to the water system. The GFCs for water are also deposited into the 402 Fund.

The 408 Fund is the Sewer Capital Improvement Fund. New development must pay GFCs to connect to the sewer system; the GFCs for sewer are directly deposited into the 408 Fund. In 2013, the sewer rate will also include a capital replacement component that will be deposited directly into the 408 Fund. In addition to the GFCs to connect to the City's sewer collection and conveyance system, sewer customers also pay a Capacity Charge to King County.

The Landfill Post-Closure Financial Assurance Account receives its revenues through a flat rate charged to each property for landfill post-closure monitoring and maintenance activities. Revenues in this fund are restricted to financing costs associated with the post-closure maintenance and water quality monitoring at the closed Carnation landfill.

The City of Carnation has adopted a Transportation Impact Fee (TIF) on all new development within the City and a Parks Impact Fee on new residential development.

Funds from Impact fees can be combined with other funding sources such as grants to pay for improvements to the City's transportation system and parks facilities. The transportation and parks improvements that may be funded in this way are identified in the Transportation and Parks and Recreation Elements of the Comprehensive Plan, these improvements insure that levels of service for parks and transportation will remain at acceptable levels once new development occurs. The Riverview School District also imposes a School Impact Fee on new development which is collected for the District by the City in accordance with an Inter-local Agreement.

**III. FUTURE CAPITAL NEEDS AND ALTERNATIVES**

**PROJECTION OF CAPITAL FACILITY NEEDS**

Public facility needs have been identified in the other Elements of this plan. Through the process of developing this Capital Facilities Element, the other elements have been modified to ensure their financial feasibility. The other plan elements describe the location and capacity of facilities, and analyze the need for increased capacity from 2013 and beyond. The capital improvements needed to satisfy future and existing substandard development and maintain adopted level of service standards are summarized below in Table CF-4. Policy C3.3 summarizes the current and adopted level-of-service standards. Capital improvement projects have been identified for parks and recreation, transportation, and utility facility improvements. Facilities for fire protection and schools are contained in district and agency plans. These have been coordinated with, but are independent of, the Comprehensive Plan. The Riverview School District's Capital Facilities Plan is adopted by reference in this Element.

**Prioritization of Projected Needs.** The identified capital improvement needs listed in the Table CF-4 were developed by the City staff in view of the needs identified in this Plan. The projects contained in this plan undergo review by the Planning Board, City Council, and are subjected to a public hearing. The following criteria may be used to evaluate the priority of various capital projects.

<p><b><u>Economic Considerations:</u></b>          Potential for Financing          Impact on Future Operating Budgets          Timeliness of Opportunity          Benefit to Economy and Tax Base          Grant and or Loan Availability</p> <p><b><u>Service Considerations:</u></b>          Safety, Health, and Welfare Factors          Environmental Impact          Effect on Quality of Service</p>	<p><b><u>Feasibility Considerations:</u></b>          Legal Mandates          Community Support</p> <p><b><u>Concurrency Considerations:</u></b>          Goals and Objectives in Other Elements          Linkage to Other Planned Projects          Level of Service (LOS)          Plans of Other Jurisdictions</p>
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**Revenue Sources and Cost Estimates for Projected Needs.** Cost estimates in this Element are presented in year of implementation dollars for both the Transportation Plan and Parks Plan. These cost estimates were derived from various federal, regional, local, and state documents, published cost estimates, records of past expenditures, information from private contractors, and general knowledge.

The Capital Facility Plan for the City of Carnation is based upon:

- Current Revenue Sources
- Financial Resources
- Capital Facilities Policies
- Method for Addressing Shortfalls

The City has reviewed and identified various means to finance Capital Facilities. It should be noted that financial regulations and fund availability change over time. Furthermore, changing market conditions may influence the city's choice of financing mechanisms, and the timing of specific improvements may depend upon future development patterns. The following list of sources includes major financial resources available and is not limited to those sources which are currently in use or will be used in the six-year schedule of improvements. The list of financial resources that are available to cities for capital projects includes the following:

- Local Multi-Purpose Levies
- Local Single-Purpose Levies
- Local Non-Levy Financing Mechanisms
- Federal, State, Regional, County, and Local Grants and Loans

### **Federal, State, Regional, County, and Local Grants and Loans**

The City of Carnation has used and continues to look to a variety of grants and loans to fund needed capital improvements. The following is a non-exhaustive list of grant and loan programs used by the City:

**Community Development Block Grant (CDBG):** Funds are available annually statewide through the federal Department of Housing and Urban Development for public facilities, economic development, housing, and infrastructure projects which benefit low- and moderate-income households.

**Community Economic Revitalization Board (CERB):** The state Department of Commerce provides low interest loans and occasional grants to finance infrastructure projects such as sewer, water, access roads, bridges and other facilities which support specific private developments or expansions in manufacturing and businesses that support the trading of goods and services outside of the state.

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**Public Works Trust Fund (PWTF):** The Washington State Public Works Board provides low interest loans to finance capital facility planning; emergency planning; and construction of bridges, roads, domestic water, sanitary sewer, and storm sewer.

**The Recreation and Conservation Office** (formerly the Interagency Committee for Outdoor Recreation or IAC) provides grant-in-aid funding for the acquisition, development, and renovation of outdoor recreation facilities. Park grants require a 50% local match.

**Small City Program (SCP):** The Washington State Transportation Improvement Board (TIB) administers the Small City Program. Projects are selected based on the condition of the pavement, roadway geometrics and safety.

**Transportation Improvement Board (TIB):** The state Transportation Improvement Board (TIB) provides funding for projects to alleviate and prevent traffic congestion caused by economic development or growth. Funds are awarded on an 80%/20% local matching basis. Eligible projects should be multi-agency, multi-modal, congestion and economic development related.

**Centennial Clean Water Fund:** The Department of Ecology (DOE) provides grants and loans for the design, acquisition, construction, and improvement of water pollution control facilities and related activities to meet state and federal requirements to protect water quality. Funded projects must address water quality problems related to public health and environmental degradation. The City was awarded both grants and loans to help pay for the new sewer system through the Centennial Clean Water Fund.

**State and Tribal Assistance Grants (STAG).** The State and Tribal Assistance Grant is a special appropriation in the Congressional Budget. Projects to be funded through this special appropriation may include water, wastewater and groundwater infrastructure.

**USDA Rural Development:** This federal agency provides assistance to rural areas through direct or guaranteed loans and grants. The Rural Development programs help rural communities build or improve community facilities.

**Department of Health Water Drinking Water State Revolving Fund (DWSRF):** Grants for upgrading existing water systems. The DWSRF is a federal/state partnership program whose purpose is to provide loans to public water systems for capital improvements aimed at increasing public health protection.

## **CAPITAL FACILITY STRATEGIES**

The Growth Management Act (GMA) requires that Transportation and Capital Facilities Elements of the Comprehensive Plan contain finance plans that match future transportation and other Capital Facilities needs against projected revenue capacities.

To project realistic available revenues and expected costs for Capital Facilities, the City needs to consider all current programs and policies that influence decisions about the funding mechanisms for public facilities. The most relevant of these are described below. These policies along with the goals and policies articulated in the Comprehensive Plan form the basis for the development of various funding scenarios.

### **MECHANISMS TO PROVIDE CAPITAL FACILITIES**

**Increase Local Government Appropriations.** The City will investigate the impact of increasing current revenues, including any related tax rates, and will actively seek new revenue sources. In addition, on an annual basis at the time of budget preparation and adoption, the City will review the implications of the current revenue system as a whole.

The City has developed and adopted its Six-Year Capital Improvement Program within this chapter as required by the GMA. However, many funding sources are difficult to forecast and it is understood that many of the projects require grants which may not be approved in the timeframe desired by the City. The actual year of the project would depend on need and available funding. Also, a number of long range projects have been identified for the remaining fiscal years of the Comprehensive Planning period.

**Analysis of Debt Capacity.** Generally, Washington state law permits a city to ensure a general obligation (GO) bonded debt equal to 1.5% of its property valuation without voter approval. By a 60% majority vote of its citizens, a city may assume an additional general obligation bonded debt of 1%, bringing the total for general purposes up to 2.5% of the value of taxable property. The value of taxable property is defined by law as being equal to 100% of the value of assessed valuation. For the purpose of supplying municipally-owned electric, water, or sewer service and with voter approval, a city may incur another general obligation bonded debt equal to 2.5% of the value of taxable property. With voter approval, cities may also incur an additional general obligation bonded debt equal to 2.5% of the value of taxable property for parks and open space. Thus, under state law, the maximum general obligation bonded debt which a city may incur cannot exceed 7.5% of the assessed property valuation.

Municipal revenue bonds, such as water utility bonds, are not subject to a limitation on the maximum amount of debt which can be incurred. These bonds have no effect on the city's tax revenues because they are repaid from revenues derived from the sale of service.

The "pay as you go" financing method is easy to administer and may be appropriate for certain capital projects, because the City of Carnation is experiencing slow growth and future tax receipts may be uncertain. However, the city will consider using debt financing if a significant level of growth occurs. This will shift some of the cost for Capital Facilities to future users, and the effects of inflation will allow the city to repay the debt in "cheaper" dollars.

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**User Charges and Connection Fees.** User charges are designed to recoup the costs of public facilities or services by charging those who benefit from such services. As a tool for affecting the pace and pattern of development, user fees may be designed to vary for the quantity and location of the service provided. Thus, charges could be greater for providing services further distances from urban areas.

**Mandatory Dedications or Fees in Lieu of.** The City may require, as a condition of plat approval, that subdivision developers dedicate a certain portion of the land in the development to be used for public purposes, such as roads, parks, or schools. Dedication may be made to the local government or to a private group, such as a homeowners association. The provision of public services through subdivision dedications not only makes it more feasible to serve the subdivision, but may make it more feasible to provide public facilities and services to adjacent areas. This tool may be used to direct growth into certain areas.

**Negotiated Agreement.** This is an agreement whereby a developer studies the impact of development and proposes mitigation for the city's approval. These agreements rely on the expertise of the developer to assess the impacts and costs of development. Such agreements are enforceable by the jurisdiction. The negotiated agreement may require lower administrative and enforcement costs than impact fees.

**Impact Fees.** Impact fees may be used to affect the location and timing of infill development. Infill development usually occurs in areas with excess capacity of Capital Facilities. If the local government chooses not to recoup the costs of Capital Facilities in underutilized service areas, infill development may be encouraged by the absence of impact fees on development(s) proposed within such service areas. Impact fees may be particularly useful when a community is facing rapid growth and new residents desire a higher level of service than the community has traditionally provided.

## **OBLIGATION TO PROVIDE CAPITAL FACILITIES**

**Coordination with Other Public Service Providers:** Local goals and policies as described in the other Comprehensive Plan Elements are used to guide the location and timing of development. However, many local decisions are influenced by state agencies, special service districts, and utilities that provide public facilities within the City. The planned capacity of public facilities operated by other jurisdictions must be considered when making development decisions. Coordination with other entities is essential not only for the location and timing of public services, but also in the financing of such services. Such coordination would include financing for construction and operation of such facilities as fire stations, libraries, schools, state facilities, and river levees.

The City's plan for working with the natural gas, electric, and telecommunication providers is detailed in the Utilities Element. This Element includes policies for sharing

information and a procedure for negotiating agreements for provision of new services in a timely manner.

**Level of Service (LOS) Standards:** Level of service standards are an indicator of the extent or quality of service provided by a facility related to the operational characteristics of the facility. They are a summary of existing or desired public service conditions. The process of establishing level of service standards requires the city to make quality of service decisions explicit. The types of public services for which the city has adopted level of service standards will be improved to accommodate the impacts of development and maintain existing service in a timely manner with new development.

Level of service standards will influence the timing and location of development, by clarifying which locations have excess capacity that may easily support new development, and by delaying new development until it is feasible to provide the needed public facilities. In addition, to avoid over extending public facilities, the provision of public services may be phased over time to ensure that new development and projected public revenues keep pace with public planning. The city has adopted level of service standards for a number of public services, as summarized in Policy C3.3.

**Potential Annexation Areas:** The City's Potential Annexation Areas can adequately be served by the current City services when annexed. Prior to approval of new development within these areas, the city will review the Capital Facilities and other Elements of the Comprehensive Plan to ensure the resources will be available to provide the services necessary to support such new development at adopted or specified levels of service.

#### IV. CAPITAL FACILITIES PROJECTS

Table CF-4 sets forth a six year Capital Facilities project plan, based on the capital facility needs identified in this plan. Since the Comprehensive Planning process is dynamic and ongoing, the six-year plan will be periodically reviewed and updated. Given the uncertainties of funding sources, patterns of development, etc. it is sometimes impractical to identify in the plan a specific year in which a given capital facility project will be undertaken.

There are a number of financial assumptions upon which the Capital Facilities Element is based. The assumptions about current and future conditions include the following:

- The cost of running the City government will continue to increase due to inflation, state and federal mandates, and other factors, while state and federal shared revenues will continue to decrease.
- New revenue sources will be necessary to maintain and improve city services

and facilities.

- In the General Fund, revenues are inadequate to meet operating and maintenance needs, let alone capital needs.

Significant capital investment is needed to maintain, repair, and rehabilitate the City's aging infrastructure and to accommodate future growth.

### **WATER UTILITY FACILITIES**

The Water Comprehensive Plan approved in 2009 included a Capital Improvements Program for water improvements. In 2012, the City re-evaluated the water Capital Improvements Program and adopted Resolution 373, which adopted a five year program for water improvements, for the years 2012 through 2016. Table CF-3 summarizes the Five Year Water System Capital Improvements Program adopted by Resolution 373.

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**TABLE CF-3  
Water System Improvements - 2012 through 2016**

Item # (Project Key)	Improvement Description	From	To	Old Pipe Size (inches)	New Pipe Size (inches)	Pipe Length (feet)	Project Budget (2012 Dollars)	Projected Start Year	Benefit	NOTES
1R (Key O3)	Commercial & Residential Meter Replacement						\$10,000	2012	Meter replacements provide additional revenue to City	
2R (Key O4)	Water Efficiency Investigation						\$10,000	2012	ID causes of City's extremely high water loss	Includes water use eval, meter eval, Remlinger, Girl Scouts
3R (Key O7)	Base/Wall Map Updates						\$5,000	2012	Accurate City Records	Should fund each year
4 (Key O10)	Additional Isolation Valves	Various locations					\$10,000	2012	Ability to shut off parts of water system	Some locations TBD
6 (Key N4)	SR 203 Crossing	Commercial St.	Alley J	0	12	200	\$20,000	2012/2013	Improves flow of water to parcels west of SR 203; looping	Design/Permit 2012
<b>2012</b>					<b>Total</b>		<b>\$55,000</b>			
1R (Key O3)	Commercial & Residential Meter Replacement						\$5,000	2013	0	

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**TABLE CF-3**  
**Water System Improvements - 2012 through 2016**

Item # (Project Key)	Improvement Description	From	To	Old Pipe Size (inches)	New Pipe Size (inches)	Pipe Length (feet)	Project Budget (2012 Dollars)	Projected Start Year	Benefit	NOTES
2R (Key O4)	Water Efficiency Investigation						\$5,000	2013	Reduced water loss	Follow up on water use efficiency conclusions in 2012
3R (Key O7)	Base/Wall Map Updates						\$5,000	2013	0	
4 (Key O10)	Additional Isolation Valves						\$30,000	2013	Improved System Reliability	Exact items TBD
5 (Key N4)	SR 203 Crossing	Commercial St.	Alley J	0	12	200	\$60,000	2013	Improves flow of water to parcels west of SR 203, looping	Critical looping improvement Construction in 2013
<b>2013</b>					<b>Total</b>		<b>\$105,000</b>			
1R (Key O3)	Commercial & Residential Meter Replacement						\$5,000		Meter replacements provide additional revenue to City	Should fund each year
2R (Key O4)	Water Efficiency Investigation						\$2,000		Reduced water loss	
3R (Key O7)	Base/Wall Map Updates						\$5,000		Accurate City Records	Should fund each year

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**TABLE CF-3  
Water System Improvements - 2012 through 2016**

Item # (Project Key)	Improvement Description	From	To	Old Pipe Size (inches)	New Pipe Size (inches)	Pipe Length (feet)	Project Budget (2012 Dollars)	Projected Start Year	Benefit	NOTES
4 (Key O10)	Additional Isolation Valves						\$10,000		Improved System Reliability	Exact items TBD
5 (Key S7)	Steel Pipe Condition Assessment						\$10,000	2014	Assist in prioritization/timing of steel pipe replacement	Initial assessment of pipe condition to assist in prioritization/timing - actual budget pending
6 (Key S6)	Guardrail to protect pipe	Exposed transmissi on pipe with no guardrail		12		20	\$10,000	2014	Reduces risk of car breaking pipe	Work with WSDOT to install guardrail to protect pipe (pipe spans ditch near Earth to Earth)
<b>2014</b>					<b>Total</b>		<b>\$42,000</b>			
1R (Key O3)	Commercial & Residential Meter Replacement						\$5,000		Meter replacements provide additional revenue to City	
2R (Key O4)	Water Efficiency Investigation						\$2,000		Reduced water loss	
3R (Key O7)	Base/Wall Map Updates						\$5,000		Accurate City Records	Should fund each year

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**TABLE CF-3**  
**Water System Improvements - 2012 through 2016**

Item # (Project Key)	Improvement Description	From	To	Old Pipe Size (inches)	New Pipe Size (inches)	Pipe Length (feet)	Project Budget (2012 Dollars)	Projected Start Year	Benefit	NOTES
4 (Key O10)	Additional Isolation Valves						\$10,000		Improved System Reliability	Exact items TBD
5 (Key R1)	Spilman Avenue Replacement	Entwistle St.	Morrison St.	6	8	1,100	\$50,000	2015	Failing AC main replaced prior to/simultaneous to road project	Design for water and road improvement
6 (Key O6)	2016 Water Comprehensive Plan*						\$55,000	2015	Required by DOH every 6 yrs - system planning	Start in 2015, complete in 2016
<b>2015</b>					<b>Total</b>		<b>\$127,000</b>			
1R (Key O3)	Commercial & Residential Meter Replacement						\$5,000		Meter replacements provide additional revenue to City	
2R (Key O4)	Water Efficiency Investigation						\$2,000		Reduced water loss	
3R (Key O7)	Base/Wall Map Updates						\$5,000		Accurate City Records	Should fund each year
4 (Key O10)	Additional Isolation Valves						\$5,000		Improved System Reliability	Exact items TBD

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**TABLE CF-3**  
**Water System Improvements - 2012 through 2016**

Item # (Project Key)	Improvement Description	From	To	Old Pipe Size (inches)	New Pipe Size (inches)	Pipe Length (feet)	Project Budget (2012 Dollars)	Projected Start Year	Benefit	NOTES
5a (Key R1a)	Spilman Avenue Replacement*	Entwistle St.	Morrison St.	6	8	1,100	\$230,000	2016	Failing AC main replaced prior to/simultaneous to road project	High Priority - AC - water construction portion only excludes street improvement (*assumed to be grant funded primarily)
5b (Key R1b)	Alley E	Spilman and Alley E		2" (jumper connection)				2016	Improper connection eliminated	Find 2" diam. connection & eliminate. Combine w/ Spilman project
6 (Key O6)	2016 Water Comprehensive Plan*						\$50,000	2016	Required by DOH every 6 yrs - system planning	Start in 2015, complete in 2016
<b>2016</b>					<b>Total</b>		<b>\$297,000</b>			
<b>2012 - 2016 TOTALS</b>							<b>\$626,000</b>			

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**SEWER UTILITY FACILITIES**

As the City's sewer collection and conveyance system was very recently built, there is no Capital Improvements Program developed for it as this time. The City should consider creating a program for the sewer system in the near future.

**TRANSPORTATION FACILITIES**

The Transportation Element was updated in 2011. The twenty year Transportation Improvement Program (TIP) is presented in Table T-5 below.

**Table T-5: Proposed Transportation Improvement Program**

<b>Improvement Project</b>	<b>Implementation Year</b>	<b>Grant Share (75%)</b>	<b>Grant Type</b>	<b>Impact Fees (25%)</b>	<b>Total in 2007 dollars</b>	<b>Total in Year of Implementation dollars</b>
Larson Avenue Connector	2012	1,146,4544	TIB-SC/ STP	382,151	1,314,000	\$1,528,605
SR-203/Blanche Street Signal	2013	525,000	TIB-SC	175,000	550,000	\$ 700,000
SR-203/Morrison Street Signal	2015	562,500	TIB-SC	187,500	550,000	\$ 750,000
Milwaukee Avenue Connector	2017	1,640,925	TIB-SC/ STP	546,975	1,683,000	\$2,187,900
316 <sup>th</sup> Avenue Connector	2018	2,020,200	TIB-SC/ STP	673,400	1,924,000	\$2,693,600
20-Year Totals		5,895,079		1,965,026	5,821,000	\$ 7,860,105

**PARKS FACILITIES**

In 2012, an Update of the City's Parks and Recreation Element was undertaken, based on input from the community. The capital improvements plan for parks is found in Table P-5 of the Parks Element which is included below.

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**Table P-5**  
**Capital Improvements Plan**

	2012 Cost Estimates	Phase 1 2012-2018	Phase 2 2019- 2025	Phase 3 2026- 2031
<b>Hockert Park</b>				
Replace play structure	\$150,000	\$163,500		
Toddler structure	\$20,000	\$21,800		
New swing set	\$10,000	\$10,900		
New Climbing structure	\$6,000	\$6,540		
Merry go round	\$10,000		\$13,000	
Add a picnic table	\$3,000		\$3,900	
	<b>\$199,000</b>			
<b>Valley Memorial Park</b>				
Re-finish tennis/basketball courts	\$20,000	\$21,800		
Picnic structure	\$64,000	\$69,760		
Looped trail	\$37,500	\$40,875		
Basketball hoop	\$3,000	\$3,270		
Toddler structure	\$20,000	\$21,800		
Reconfigure/pave parking lot 18 spaces	\$40,600		\$52,780	
Skatebowl improvements	\$40,000		\$52,000	
BMX viewing/picnic area	\$4,000	\$4,360		
	<b>\$229,100</b>			
<b>Tolt Commons/Community Shelter</b>				
Picnic tables	\$6,000	\$6,540		
Grills	\$2,000	\$2,180		
Land acquisition between Commons + Shelter	\$56,250	\$61,313		
Land acquisition between Commons + Shelter	\$118,875		\$154,538	
	<b>\$183,125</b>			
<b>River's Edge Park</b>				
New Fence	\$10,000		\$13,000	
Other improvements desired by neighborhood	\$50,000		\$65,000	
	<b>\$60,000</b>			
<b>Loutsis Park</b>				
Landscape screen along western boundary	\$15,000	\$16,350		
Fitness course	\$40,000		\$52,000	
Pave parking lot	\$44,000		\$57,200	
	<b>\$99,000</b>		\$109,200	
<b>West Side Park</b>				
Site work	\$10,000		\$13,000	
Fence:	\$12,160		\$15,808	
Play structure(s)	\$50,000		\$65,000	
Picnic table	\$3,000			\$4,440
Grill	\$1,000			\$1,480
Open sided structure	\$16,000			\$23,680
	<b>\$92,160</b>			
<b>Trails system</b>				
Pathway on Entwistle/NE 45th				

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Sidewalk on SR203 west side s. of NE 40th	\$20,000	\$21,800		
Work with King County on Tolt Levee Trail				
Work with King County on Snoqualmie River Trail				
Signage	\$50,000	\$54,500		
Bicycle racks 10 in CBD/SC zones	\$12,000	\$13,080		
	<b>\$82,000</b>			
<hr/>				
<b>New Mini-parks</b>	<b>\$300,000</b>			
In PAA west of SR203	\$150,000		\$222,000	
Northeastern development	\$150,000		\$222,000	
<hr/>				
		<b>Phase 1</b>	<b>Phase 2</b>	<b>Phase 3</b>
Total in 2012 Dollars	<b>\$1,244,385</b>			
Totals	<b>\$1,680,393</b>	<b>\$540,368</b>	<b>\$666,426</b>	<b>\$473,600</b>

**SIX YEAR CAPITAL IMPROVEMENTS PLAN**

Table CF-4 contains a summary of the City's capital improvements for water, streets and parks over the next six year period, which totals approximately \$9 million dollars. It should be noted that the year of implementation for some of the projects may not fall within the next six-year period, as these projects may be dependent upon funding availability, or in some cases, upon development that may not occur within that time period. For example, there are two transportation projects included in Table CF-4 that will be needed to serve development of the Potential Annexation Area (PAA) to the north of the City. Recent downturns in the economy have slowed development such that annexation and development of the PAA may not occur within the next six year period. Absent those projects, the total capital investment expected over the next six years is approximately \$4.1 million.

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**TABLE CF-4**  
**SIX YEAR CAPITAL IMPROVEMENTS PROGRAM**

Project	Cost Estimate (total over the 6 year period)	Funding Source(s)	Benefit/Need	
				Total Costs
<b>WATER SYSTEM IMPROVEMENTS</b>				
On-going projects to improve water system management			Annual actions designed to improve water use efficiency and management of the water utility	
Meter replacement	\$30,000	402 Fund		
Water efficiency investigations	\$21,000	402 Fund		
Map updates	\$25,000	402 Fund		
Isolation valves	\$35,000	402 Fund		
Steel pipe condition assessment	\$10,000	402 Fund		
SR203 crossing at Commercial Street	\$80,000	402 Fund	Improve water flow west of SR203	
Add guardrail to protect exposed pipe on SR203	\$10,000	402 Fund	Risk reduction	
Spilman Avenue AC water pipe Replacement	\$280,000	CDBG, 402 Fund	Replace failing AC water main	
2016 Water Comp Plan	\$105,000	402 Fund	Regulatory requirement	\$596,000
<b>TRANSPORTATION IMPROVEMENTS</b>				
Larson Avenue Connector	\$1,528,605	TIB-SC/STP, impact fees	Connect Entwistle and NE 40th to allow by-pass of SR203, serve industrial development	
SR203/Blanche St signalization	\$700,000	TIB-SC, impact fees	SR203 crossing	
SR203/Morrison St signalization	\$750,000	TIB-SC, impact fees	SR203 crossing	
Milwaukee Avenue Connector	\$2,187,900	TIB-SC/STP, impact fees or developer extensions	Connect new development in PAA to rest of the City.	
316th Avenue Connector	\$2,693,600	TIB-SC/STP, impact fees or developer extensions	Connect new development in PAA to rest of the City	\$7,860,105
<b>PARKS IMPROVEMENTS</b>				
Hockert Park	\$202,740	RCO, impact fees	Replace outdated play equipment	

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Valley Memorial Park	\$161,865	RCO, impact fees	Add trail, play equipment for younger kids	
Tolt Commons/Community Shelter	\$70,033	USDA, impact fees	Create town center	
Loutsis Park	\$16,350	RCO, impact fees	Fencing and landscape screening	
Trails system	\$89,380	RCO, impact fees	Improve connectivity, promote walking, biking, horse back riding, etc	\$540,368
<b>TOTAL</b>				<b>\$8,996,473</b>

## V. MONITORING AND EVALUATION

The Capital Facilities Element is the mechanism by which the City can stage the timing, location, projected cost, and revenue sources for the capital improvements identified for implementation. The planned expenditures and funding sources for each project from FY 2012 through FY 2018 are shown by priority. Top priority is generally given to projects which correct existing deficiencies, followed by those required for facility replacement, and those needed for future growth.

Monitoring and evaluation are essential in ensuring the effectiveness of the Capital Facilities Element. This Element will be reviewed and amended periodically to verify that fiscal resources are available to provide public facilities needed to support adopted level of service (LOS) standards and measurable objectives.

The review will include an examination of the following considerations in order to determine their continued appropriateness:

1. Any corrections, updates, and modification concerning costs; revenue sources; acceptance of any dedications which are consistent with the element; or projected dates of construction of any proposed improvements;
2. The Capital Facilities Element's continued consistency with the other elements and its support of the Land Use Element;
3. The priority assignment of existing public facility deficiencies, especially those related to health and safety;
4. The City's progress in addressing existing deficiencies;
5. The criteria used to evaluate capital improvement projects in order to ensure that projects are being ranked in their appropriate order of priority;
6. The City's effectiveness in maintaining the adopted LOS standards and achieving measurable objectives;
7. The use and effectiveness of impact fees or mandatory dedications of property which may be required of a new development in order to provide new development's *pro rata* share of Capital Facilities costs required to meet adopted LOS standards.
8. The impacts of special districts or other regional service providers on the City's ability to maintain its adopted LOS standards;

9. Efforts made to secure grants or private funds, whenever available, to finance the provision of capital improvements;
10. The criteria used to evaluate proposed plan amendments. .

## **VI. GOALS AND POLICIES**

### **GOAL CF 1**

**To assure that capital improvements necessary to carry out the Comprehensive Plan are provided when they are needed.**

- Policy CF1.1 The City shall coordinate its land use and public works planning activities with an ongoing program of long-range financial planning, in order to conserve fiscal resources available to implement the Capital Facilities plan.
- Policy CF1.2 Interlocal service agreements with water utilities serving rural and resource lands should specify limitations on the use of the surplus water consistent with Countywide planning policies. Surplus water may be sold to resolve immediate health or safety problems threatening existing residents but must not be in perpetuity unless the City can do so without risks to its current and future residents.
- Policy CF1.3 Continue to upgrade the City water system to improve water use efficiency.
- Policy CF1.4 Ensure the use of the sanitary sewer system in a manner consistent with the City's adopted Sewer Plan.
- Policy CF1.5 The City adopts the School Impact Mitigation Fee Schedule from the Riverview School District Capital Facilities Plan to enable the district to collect impact mitigation fees in accordance with the Interlocal Agreement.
- Policy CF1.6 The City will develop and adopt appropriate impact fees or related funding mechanisms to assess the developer's fair share contributions to other public facility improvements (such as parks, and streets) required to serve new development.
- Policy CF1.7 The City shall coordinate or provide needed Capital Facilities and utilities based on adopted levels-of-service and forecasted growth in accordance with the Land Use Element of this plan.

## **GOAL CF2**

**To ensure that the continued development and implementation of the Capital Facilities Plan (CFP) reflects the policy priorities of the City Council.**

Policy CF2.1 High priority of funding shall be accorded projects which are consistent with the adopted goals and policies of the City Council.

Policy CF2.2 Projects shall be funded only when incorporated into the City budget, as adopted by the City Council.

Policy CF2.3 Capital projects that are not included in the six-year Capital Facilities Plan and which are potentially inconsistent with the Comprehensive Plan shall be evaluated through the Comprehensive Planning process prior to their inclusion into the City's annual budget, unless otherwise agreed upon by the City Council.

Policy CF2.4 The six-year Capital Facilities Plan should be updated annually prior to the City budget process.

Policy CF2.5 Any city capital activity with a cost of over \$100,000 may require a financial impact analysis that contains sections dealing with sources and uses of funds, impacts on the overall city budget and on public debt, impact on taxes, impacts on users and non-users (e.g. regarding user fees, if any) and benefit-cost computations, if applicable.

Policy CF2.6 All City departments shall review changes to the CFP and shall participate in the annual review as deemed necessary by City Council and the City Manager.

Policy CF2.7 Large-scale capital improvement projects will be included in the Six-Year Schedule of Improvements of this element. Smaller capital improvements will be reviewed for inclusion in the annual budget.

Policy CF2.8 Proposed capital improvement projects will be evaluated using all the following criteria: a. whether the project is needed to correct existing deficiencies, replace needed facilities, or to provide facilities needed for future growth; b. elimination of public hazards; c. elimination of capacity deficits; d. financial feasibility; e. site needs based on projected growth patterns; f. new development and redevelopment; g. plans of state agencies; h. local budget impact; and i. location and effect upon natural and cultural resources.

### **GOAL CF 3**

**To actively influence the future character of the City by managing land use change and by developing City facilities and services in a manner that directs and controls land use patterns and intensities.**

Policy CF3.1 Development shall be allowed only when and where all public facilities are adequate and only when and where such development can be adequately served by essential public services without reducing levels of service elsewhere.

Policy CF3.2 If adequate facilities are currently unavailable and public funds are not committed to provide such facilities, developers must provide such facilities at their own expense in order to develop.

Policy CF3.3 The following level of service guidelines should be used to evaluate whether existing public facilities are adequate to accommodate the demands of new development:

- A. Water - Require that new development have adequate water supply for consumption and fire flow. Maintain the current level of service of 225 gallons per day per equivalent residential unit.
- B. Wastewater - Residential flow planning value of 70 gallons per capita per day based on using a vacuum sewer system.
- C. Solid Waste - Collection service for garbage, recyclable materials, and yard waste shall be available to all properties within the City.
- D. Police Protection - Coordinate development review and police protection facility planning to ensure that: a) adequate police protection can be provided; and b) project designs discourage criminal activity.
- E. Fire Protection - Coordinate development review and fire protection facility planning to ensure that: a) adequate fire protection and emergency medical service can be provided; and b) project designs minimize the potential for fire hazard.
- F. Public Schools - Coordinate development review and school facility planning to ensure that adequate school facilities will be available to accommodate anticipated increases in students. Adequate school facilities are considered to be permanent school buildings.
- G. Parks and Recreation - Maintain level of service standards as identified in the Parks and Recreation Element to provide adequate parks and recreation facilities to serve City residents.
- H. Transportation - Maintain the following level of service standards as identified in the Transportation Element:

State Highway Intersections:	Level of Service "D"
Arterials:	Level of Service "D"
Transit:	Level of Service "C", .76 to 1.0 passengers per seat during peak travel times.
Collectors and Local:	Design Standards

- I. Stormwater Management Systems – Stormwater shall be infiltrated on site. Development will be regulated to ensure that its post development run-off to does not exceed the redeveloped discharge volume and/or rate. Stormwater management for new development shall comply with all relevant state and federal regulations;

Policy CF3.4 A development shall not be approved if it causes the level of service on a capital facility to decline below the standards set forth in Policy 3.3, unless capital improvements or a strategy to accommodate the impacts are made concurrent with the development for the purposes of this policy. "Concurrent with the development" shall mean that improvements or strategy are in place at the time of the development or that a financial commitment is in place to complete the improvements or strategies within six years, except in the case of public schools, whereby a financial commitment to complete the improvements within three years is required.

Policy CF3.6 Provide copies of development proposals to the various providers of services, such as the school district, fire district and utility providers, for comments on the available capacity to accommodate development and any needed system improvements.

Policy CF3.7 The community impacts of new or expanded Capital Facilities should be reviewed. They should be compatible with surrounding land uses; to the extent reasonably possible for a growing rural city, such facilities should have minimum impacts on natural and historic resources or built environment, and follow strict adherence to environmental regulations.

Policy CF3.8 City plans and Development Regulations should identify and allow for the siting of essential public facilities. Cooperatively work with surrounding municipalities and King County during the siting and development of facilities of regional significance.

**GOAL CF4**

**To finance the city's needed Capital Facilities in as economic, efficient, and equitable a manner as possible.**

Policy CF4.1 Provide needed public facilities that are within the ability of the City to fund or within the City's authority to require others to provide.

Policy CF4.2 Finance the six-year Capital Improvement Program within the City's financial capacity to achieve a balance between available revenue and needed public facilities. If the projected funding is inadequate to finance needed public facilities based on forecasted growth, the City could do one or more of the following:

- Change the land use element;
- Increase the amount of revenue from existing sources;
- Adopt new sources of revenue; and/or
- Adopt a lower level of service for public facilities.

Policy CF4.3 The ongoing operation and maintenance costs of a public facility should be financially feasible prior to constructing the facility.

Policy CF4.4 Base the financing plan for public facilities on realistic estimates of current local revenues and external revenues that are reasonably anticipated to be received by the City.

Policy CF4.5 The City will support and encourage the joint development and use of cultural and community facilities with other governmental or community organizations in areas of mutual concern and benefit.