Afternoon COTW, June 28: Discussion and preliminary Council direction on Comprehensive Plan Appendices.
Evening Council Meeting, June 28: Public hearing on Comprehensive Plan Appendices.

**ATTACHMENT:**

1. Cover letter
2. Draft Planning Commission Findings

<table>
<thead>
<tr>
<th>SEPA review required?</th>
<th>( ) Yes</th>
<th>( ) NO</th>
<th>Should Clerk schedule a hearing?</th>
<th>( ) Yes</th>
<th>( ) NO</th>
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<tr>
<td>SEPA review completed?</td>
<td>( ) Yes</td>
<td>( ) NO</td>
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**SUMMARY STATEMENT OR LEGAL NOTICE LANGUAGE:** (If this item is an ordinance or requires a public hearing, you must provide the language for use in the required public notice. Be specific and cite RCW or WCC as appropriate. Be clear in explaining the intent of the action.)

Under the Growth Management Act, Whatcom County and the seven cities within the County must complete the periodic update of their comprehensive plans and review urban growth areas in 2016 (RCW 36.70A.130). The Planning and Development Services Department would like to discuss Comprehensive Plan Appendices with Council. The Appendices are:


**COMMITTEE ACTION:**

6/14/2016: Briefed and discussed
6/21/2016: Comments received; did not discuss

**COUNCIL ACTION:**


**Related County Contract #:**

<table>
<thead>
<tr>
<th>Related File Numbers:</th>
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<tr>
<td>AB2016-047</td>
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<th>Ordinance or Resolution Number:</th>
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Memorandum

TO: The Honorable Jack Louws, Whatcom County Executive
    The Honorable Whatcom County Council

FROM: Matt Aamot, Senior Planner

THROUGH: Mark Personius, Assistant Director

DATE: June 1, 2016

SUBJECT: Comp Plan Update/UGA Review – Appendices

As you know, Whatcom County has initiated a multi-year project to update the Whatcom County Comprehensive Plan and conduct the urban growth area (UGA) review, as required by the Growth Management Act. The Comprehensive Plan update and UGA review is being conducted in coordination with the seven cities in Whatcom County. It is anticipated that the Council will adopt an ordinance relating to the Comprehensive Plan update and UGA review in July 2016.

Staff would like to discuss Comprehensive Plan Appendices with the Council on June 14, 2016. The Appendices are:

- Appendix A – Glossary;
- Appendix B - List of Acronyms;
- Appendix C – GMA Goals, County-Wide Planning Policies and Visioning Value Statements;
- Appendix D – Bibliography;
- Appendix E - Whatcom County 20-Year Capital Facilities Plan;
- Appendix F – Six Year Capital Improvement Program for Whatcom County Facilities;
- Appendix G - Transportation Impact Fee Background Information (proposed for deletion);
- Appendix H - Airport Overlay Zones; and
- Appendix I – Airport FAR Part-77 Imaginary Surfaces.
The Council has requested a summary of the substantive changes made by the Planning Commission. The Planning Commission considered the Appendices on May 26, 2015. Planning Commission changes to the staff recommendations include the following:

**Appendix F (Six-Year Capital Improvement Program)** – Add the following note under the inventory of existing parks: “Pursuant to RCW 36.87.130, there are also public access properties on right-of-way ends that intersect shorelines.”

The proposed amendments to the Appendices will be posted on the County’s website at: [http://www.whatcomcounty.us/1170/Comprehensive-Plan-Updates](http://www.whatcomcounty.us/1170/Comprehensive-Plan-Updates).

Thank you for your consideration of this matter. We look forward to discussing it with you.
Regular Meeting

1 Call To Order: The meeting was called to order, by Whatcom County Planning
2 Commission Chair, Nicole Oliver, in the Whatcom County Northwest Annex at 6:30
3 p.m.

4 Roll Call
5 Present: Natalie McClendon, Jerry Vekved, Gary Honcoop, Nicole Oliver, David Hunter,
6 Kelvin Barton, Andy Rowlson, Atul Deshmune
7 Absent: Michael Knapp

10 Staff Present: Mark Personius, Matt Aamot, Gary Davis, Tyler Schroeder-Executive’s
11 Office, Mike McFarlane-Parks Department, Becky Boxx

13 Department Update
14
15 Mark updated the commission on their upcoming schedule.

17 Open Session for Public Comment
18
19 Max Perry, Whatcom County: Stated that when the Comprehensive Plan update
20 process started staff stated the plan would be streamlined, but it has actually become
21 larger.

23 Commissioner Comments
24
25 There were no commissioner comments.

27 Approval of Minutes
28
29 Commissioner Vekved corrected page 3, line 25 to read: Mr. Boggs stated reasons may
30 be the associated costs and time to do the plans. Whatcom County has interpreted that
31 new agricultural activates activities require a farm plan.
32
33 Commissioner Rowlson moved to approve the minutes as corrected. Commissioner
34 McClendon seconded. The motion carried.

36 Public Hearing
37
38 Amendments to Whatcom County Comprehensive Plan (WCCP) Appendices, which are:
39 Appendix A - Glossary, Appendix B - List of Acronyms, Appendix C - GMA Goals,
40 County-Wide Planning Policies and Visioning Value Statements, Appendix D -
41 Bibliography, Appendix E - Whatcom County 20-Year Capital Facilities Plan, Appendix F
42 - Six Year Capital Improvement Program for Whatcom County Facilities, Appendix G -
43 Transportation Impact Fee Background Information (proposed for deletion), Appendix
44 H - Airport Overlay Zones, and Appendix I - Airport FAR Part-77 Imaginary Surfaces.
45
46 Matt Aamot presented an overview of the staff report.
Appendix A – Glossary
A number of the definitions have been updated for consistency with the Growth Management Act (GMA), the state administrative codes, the zoning code and the Critical Areas Ordinance (CAO).

Appendix B – Acronyms
Some new ones were added and some were deleted.

Appendix C – Countywide Planning Policies
The current Comprehensive Plan contains the GMA Planning Goals, the Countywide Planning Policies and the Visioning Value Statements.

The Planning Commission recommended adding the GMA Planning Goals to Chapter 1 so they are being removed from this appendix.

There are no changes to the Countywide Planning Policies. The county and the cities will probably get together in the next several years to review them.

This appendix also contains the community value statements from 1994. Staff recommends removing them from the plan.

Appendix D – Bibliography
Staff is proposing to add a number of reference documents that are relevant to the Comprehensive Plan.

Appendix E & F – Capital Facilities
The GMA requires Comprehensive Plans to contain certain information relating to capital planning. These include an inventory of existing facilities, such as trails, schools, etc. It must also include a forecast of future needs. One way to forecast future needs is to utilize a level of service (LOS). The GMA requires a LOS for transportation. In the Comprehensive Plan, chapter 4, we also have LOS standards for parks, trails and fire protection. The GMA also requires that new and expanded facilities be shown, including their location and capacity, a financing plan and the land use plan and capital plan consistency.

Appendix E covers both county facilities and non-county facilities. For county facilities it references the Six Year CIP (Appendix F) and provides more generalized information for years 7-20. For non-county facilities it summarizes water, sewer, fire and school plans. The concept is to provide for adequate facilities to keep pace with growth as it occurs through the 20 year planning period. The 20 year CFP also includes a county revenue analysis that projects the potential county funding available for capital projects over the 20 year planning period.
Appendix F is the more detailed capital plan for county facilities only. It provides an inventory of existing facilities, a list of planned projects, projected costs and funding sources.

**Appendix G – Transportation Impact Fees**

The state law says that only projects that are set forth in the Comprehensive Plan are eligible for impact fees. The county put a list of transportation projects in the plan that would be eligible for impact fees if they were ever adopted. Impact fees have not been adopted so staff recommends deleting this appendix. Appendix G is proposed to be replaced with Water Resource and Salmon Recovery Programs, which is part of Chapter 11.

**Appendix H – Bellingham International Airport Overlay Zones**

There are six zones, each with different policies.

**Appendix I – Bellingham International Airport Imaginary Surfaces**

The federal governments rules establish imaginary surfaces around airports to preserve the navigable airspace. They are concerned about tall buildings or antennas creating a hazard for aircraft. There is a provision in the county zoning code prohibiting tall structures from protruding into these imaginary surfaces. The current map also shows the Blaine airport which was shut down so it is proposed to be deleted.

Staff recommended the Planning Commission approve the amendments.

The hearing was opened to the public.

There was no public testimony.

The hearing was closed.

Commissioner Barton addressed the list of parks in Appendix F. There are beach accesses in Birch Bay that are not included in the list.

Mike McFarlane stated those are not county park facilities but rather road ends, maintained by Public Works, which is why they do not show up on the list. Parks does not oversee or maintain them.

Commissioner Barton stated some of them are a requirement and they function and are signed the same as the other beach accesses. How can they be listed?

Mr. Aamot suggested adding a footnote stating there are road end public access areas.
Mr. McFarlane stated Public Works has been reluctant to list those as parks or public access because they are basically transportation routes. He had no problem with adding a footnote.

Commissioner Barton stated the community prefers they not be called road ends because there are no roads around most of them. They are just walkways to the beach from Birch Bay Drive.

Mr. McFarlane stated it is an issue in other parts of the county such as Lummi Island, Nooksack River, Lake Whatcom, etc. Another suggestion may be a paragraph that lists all of these types of accesses.

Mr. Aamot suggested Public Works could create an inventory which would not necessarily have to be in this document but available for the public.

Commissioner Oliver asked if they are referenced in the Parks and Open Space Plan.

Mr. McFarlane stated they are not because they are treated as roads.

Commissioner McClendon stated these sites are very valuable so they should not go away.

Mr. Aamot suggested a note that there are public access properties on right of way ends that intersect the shoreline. The RCW stating these areas can’t be abandoned could also be cited.

Commissioner Rowlson liked that idea because he did not want to see another list.

The commission agreed to the verbiage: Pursuant to RCW 36.87.130, there are also public access properties on right of way ends that intersect shorelines.

Commissioner Rowlson asked why the placeholder for impact fees (Appendix G) is being taken away.

Mr. Aamot stated that it has been over a decade since it was added and the county still has not adopted impact fees. As such the appendix is not serving any purpose. If the county does adopt impact fees in the future a new appendix could be added.

Commissioner Rowlson asked why there was no mention of the Lynden Airport.

Mr. Aamot stated they did not receive any maps from Lynden.

Commissioner Vekved addressed the definition of “Distribution Pipeline”. The language was changed from as amended to if amended. What is the intent?

Mr. Schroeder stated it is referring to the federal code, which if amended, this would then revert to the federal code which is referenced.
Commissioner Hunter addressed Appendix E, page 70, regarding County Road Property Tax Levy. It seems we are not spending what we could be spending because we are banking the ability to tax an additional 1% per year.

Mr. Aamot stated current councils have chosen not to draw on that banked capacity but future councils could.

Mr. Schroeder explained the taxing process and how banking works.

Commissioner Vekved addressed “Groundwaters”. What is artificially stored ground water?

Mr. Aamot stated the definition is: Water that is made available in underground storage artificially. Either intentionally or incidentally to irrigation.

Commissioner Rowlson asked where the budget figures come from.

Mr. Schroeder stated the Executive’s Office meets with the Finance Department along with other county departments to determine the budget numbers.

Commissioner Rowlson moved to recommend approval of the Comprehensive Plan Appendices as amended and the Findings of Fact and Reasons for Action. Commissioner Hunter seconded. Roll Call Vote: Ayes – Barton, Honcoop, Hunter, McClendon, Oliver, Rowlson, Vekved; Nays – 0; Abstain – Deshmane; Absent – Knapp. The motion carried.

Amendments to Whatcom County Code (WCC) Title 20 (Zoning), Title 21 (Land Division Regulations), Title 22 (Guide Meridian Improvement Plan), and the official zoning map. Title 20 amendments include amending WCC Chapter 20.36 to require reclamation plans for surface mining uses in the Rural zone, amending Chapter 20.43 revising the maximum percentage of lot area that can be removed from production of forest products in the Commercial Forestry zone, amendments to WCC Chapter 20.72, 20.80 and 20.97 and the Point Roberts Character Plan involving sign regulations in the Point Roberts Special District, amending WCC Chapter 20.82 concerning new sewer lines and amendments to WCC Chapters 20.24, 20.65, 20.66, 20.68, and 20.80.210 to update references to the Urban Fringe Subarea Plan. WCC 20.80.210 is adopted by reference in the WCCP and amendments to that section are also a WCCP amendment. The Point Roberts Character Plan is a part of the Point Roberts Subarea Plan, which is a subset of the WCCP, therefore the amendment is an amendment to the WCCP.

Gary Davis presented an overview of the staff report.

Title 20 – Zoning Code
WHATCOM COUNTY
PLANNING COMMISSION

2016
Comprehensive Plan Periodic Update
Appendices

FINDINGS OF FACT AND REASONS FOR ACTION

1. The Planning Commission held a public hearing regarding these amendments on May 26, 2016. Notification of the public hearing was published on May 13, 2016.

2. A determination of non-significance (DNS) was issued under the State Environmental Policy Act (SEPA) on May 27, 2016.

3. Notice of the proposed amendments was submitted to the Washington State Department of Commerce on April 28, 2016.

4. Pursuant to WCC 2.160.080, in order to approve the proposed comprehensive plan amendments the Planning Commission and County Council must find all of the following:
   A. The amendment conforms to the requirements of the Growth Management Act, is internally consistent with the county-wide planning policies and is consistent with any interlocal planning agreements.
   B. Further studies made or accepted by the Department of Planning and Development Services indicate changed conditions that show need for the amendment.
   C. The public interest will be served by approving the amendment. In determining whether the public interest will be served, factors including but not limited to the following shall be considered:
      1) The anticipated effect upon the rate or distribution of population growth, employment growth, development, and conversion of land as envisioned in the comprehensive plan.
      2) The anticipated effect on the ability of the county and/or other service providers, such as cities, schools, water and/or sewer purveyors, fire districts, and others as applicable, to provide adequate services and public facilities including transportation facilities.
      3) Anticipated impact upon designated agricultural, forest and mineral resource lands.
   D. The amendment does not include or facilitate spot zoning.
E. Urban growth area amendments that propose the expansion of an urban growth area boundary are required to acquire development rights from a designated TDR sending area, with certain exceptions.

5. **WCCP Appendix A - Glossary of Terms.** The proposed amendments add certain definitions from other WCCP appendices to ensure the definitions are consistent with state law, state administrative code, County codes, and pertinent technical documents.

6. **WCCP Appendix B - Acronyms.** The proposed amendments to Appendix B add several acronyms that are used repeatedly in the document but were not already included. The amendments also remove acronyms that are listed in the appendix but do not appear – or appear only once – in the WCCP document.

7. **WCCP Appendix C - Countywide Planning Policies.** Currently this appendix contains the Growth Management Act Goals, Visioning Value Statements, and the Countywide Planning Policies, with a Glossary for the latter. Appendix C will be amended to contain only the Countywide Planning Policies. The proposed WCCP Chapter 1 contains the GMA Planning Goals, along with a discussion of the goals. The community value statements were developed in 1994 to assist in creation of the original 1997 Comprehensive Plan. Today, there are many advisory committees and commissions that are specifically focused on many of these issues and concerns. These committees and commissions fill a void that was present during the comprehensive plan visioning process. These value statements will be preserved as part of the historical record of comprehensive planning in Whatcom County. The proposed amendments delete the glossary to the Countywide Planning Policies to avoid duplication with the glossary in Appendix A. Terms from this glossary that were not already in Appendix A are proposed to be moved to that appendix.

8. **WCCP Appendix D - Bibliography.** The proposed amendments to Appendix D add references to reports the County used when preparing the current periodic update.

9. **WCCP Appendix E – Whatcom County 20-Year Capital Facilities Plan and WCCP Appendix F – 6-Year Capital Improvements Program.**

B. GMA planning goal # 12 is to “Ensure that those public facilities and services necessary to support development shall be adequate to serve the development at the time the development is available for occupancy and use without decreasing current service levels below locally established minimum standards” (RCW 36.70A.020(12)).

C. The GMA, at RCW 36.70A.070(3), requires that a comprehensive plan must include a capital facilities plan element consisting of:
1) An inventory of existing capital facilities owned by public entities, showing the locations and capacities of the capital facilities.

2) A forecast of the future needs for such capital facilities.

3) The proposed locations and capacities of expanded or new capital facilities.

4) At least a six-year plan that will finance such capital facilities within projected funding capacities and clearly identifies sources of public money for such purposes.

5) A requirement to reassess the land use element if probable funding falls short of meeting existing needs and to ensure that the land use element, capital facilities plan element, and financing plan within the capital facilities plan element are coordinated and consistent.

D. The updated Whatcom County 20-Year Capital Facilities Plan (CFP) and the updated Six-Year Capital Improvement Program (CIP) for Whatcom County Facilities contain inventories of existing public facilities, a forecast of future needs, proposed expanded or new capital facilities, costs and funding sources. The existing 20-year CFP and existing Six-Year CIP will be repealed.

E. Existing Comprehensive Plan Policy 4A-4 addresses the GMA requirement to reassess the land use element if probable capital facility funding falls short.

10. **WCCP Appendix G – Transportation Impact Fee Background Information.** In 2005 the County added transportation impact fee background information to Appendix G. However, the County has not enacted impact fees. Therefore the existing appendix is not needed. The proposed amendments delete the existing Appendix G in its entirety and replace it with a description of the County’s water resource and salmon recovery programs. This new material has been reviewed as part of the Planning Commission and County Council public hearings on WCCP Chapter 11 amendments.

11. **WCCP Appendix H – Airport Overlay and WCCP Appendix I – Airport Surfaces.**

A. RCW 36.70.547 requires “Every county, city, and town in which there is located a general aviation airport that is operated for the benefit of the general public, whether publicly owned or privately owned public use, shall, through its comprehensive plan and development regulations, discourage the siting of incompatible uses adjacent to such general aviation airport. Such plans and regulations may only be adopted or amended after formal consultation with: Airport owners and managers, private airport operators, general aviation pilots, ports, and the aviation division of the department of transportation...”
B. The Whatcom County Council created an Airport/Land Use Compatibility Advisory Committee in 2003 (Resolution 2003-058).

C. The Airport/Land Use Compatibility Advisory Committee issued final recommendations in 2004.

D. The County Council adopted Comprehensive Plan amendments relating to airport/land use compatibility in 2005 (Ordinance 2005-004). This ordinance included an “Airport Overlay Zones” map (relating to land use near an airport) in Appendix H for the Bellingham International Airport. It also included “Imaginary Surfaces” maps (relating to height of structures near an airport) in Appendix I for the Bellingham International Airport and the Blaine Municipal Airport.

E. The Blaine Municipal Airport closed in 2008. Therefore, the proposed amendments delete the “Imaginary Surfaces” map for Blaine from Appendix I.

CONCLUSIONS

1. The subject amendments are consistent with and implement the GMA planning goals. The proposed amendments conform to applicable requirements of the GMA.

2. The proposed amendments satisfy the approval criteria of WCC 2.160.080.

RECOMMENDATION

Based upon the above findings and conclusions, the Whatcom County Planning Commission recommends approval of the proposed amendments to the Whatcom County Comprehensive Plan.
WHATCOM COUNTY PLANNING COMMISSION

Nicole Oliver, Chair

Becky Boxx, Secretary

Date

Date

Commissioners present at the May 26, 2016 meeting when the vote was taken: Kelvin Barton, Atul Deshmane, Gary Honcoop, David Hunter, Natalie McClendon, Nicole Oliver, Andy Rowlson, Gerald Vekved.

Vote: Ayes: 7, Nays: 0, Abstain: 1, Absent: 1. Motion carried to adopt the above amendments.
Appendix A

Glossary


Affordable housing: Residential housing that is rented or owned by a person or household whose monthly housing costs, including utilities other than telephone, do not exceed 30 percent of the household's monthly income. (WAC 365-1965-210) The definition of "affordable housing" is to be developed by individual jurisdictions as part of their Comprehensive Plan Process.

Agricultural land: Land primarily devoted to the commercial production of horticultural, viticultural, floricultural, dairy, apiary, vegetable, or animal products or of berries, grain, hay, straw, turf, seed, Christmas trees not subject to the excise tax imposed by RCW 84.33.100 through 84.33.140, fish in upland hatcheries, or livestock, and that has long-term commercial significance for agricultural production. (RCW 36.70A.030(2))

Alluvial fan: A fan-shaped deposit of sediment and organic debris formed where a stream flows or has flowed out of a mountainous upland onto a level plain or valley floor.

Annexation: The act of incorporating an area into the domain of a city.

Aquifer: A geologic formation, group of formations, or part of a formation capable of yielding a significant amount of groundwater to wells or springs. (WAC 173-160)

Built environment: Elements of the environment developed by humans, including land uses, transportation systems, and public services and utilities.

Capital Facilities Plan: A required element of the Comprehensive Plan designed to form a better match between development and provision of services. It must include an inventory of existing facilities, forecast of future needs and a six-year financing plan.

Cluster Development: Cluster Development provides the flexibility to maintain open space and plan around distinctive site features or constraints by clustering development on smaller lots than conventional development. As a result, an undeveloped tract is created, while maintaining the same overall density.

Compatible: Capable of existing together in harmony (as distinguished from "identical").

Compensation: Something given or received as an equivalent for services, debt, loss injury, etc.
Comprehensive plan: An integrated policy planning document designed to guide land use decisions, including the designation of urban growth areas, based on a consideration of land use alternatives, likely impacts, and possible mitigating measures.

Conditional use: A use permitted only after public review and approved by the Hearing Examiner, and to which special conditions may be attached by the Hearing Examiner. (Whatcom County Zoning Code 20.97.075)

Cottage industry: Small industrial, commercial, or service operations, on a parcel where the operator resides; frequently with an art or craft orientation or related to information processing or to the natural resources of the area. However, it may be of any type, so long as the scale of the operation is in keeping with the surrounding area and off-site impacts are comparable in intensity to those generated by residential uses allowed in the zone. (Whatcom County Zoning Code 20.97.087), which meets all of the criteria in Whatcom County Code 20.80.980.

County-Wide Planning Policies (CWPP): As required by GMA, the County Council and the City Councils of all the cities adopted a set of policies, which embody a vision for the future of Whatcom County. They are a framework intended to guide the development of comprehensive plans for each jurisdiction in the county.

Critical Areas: As defined by each jurisdiction, including at least the following areas and ecosystems: (a) wetlands; (b) areas with a critical recharging effect on aquifers used for potable water; (c) fish and wildlife habitat conservation areas; (d) frequently flooded areas; and (e) geologically hazardous areas.

Critical facilities: As defined in the Whatcom County Critical Areas Ordinance, means buildings and other structures that are intended to remain operational in the event of extreme environmental loading from flood, wind, snow, volcanic activities, or earthquakes pursuant to the most current International Building Code (IBC). The definition in Whatcom County’s Critical Areas Ordinance 16.16.800(19): (Ord. 97-956). These include:

a. Emergency Facilities
   i. Fire and police stations;
   ii. Tanks or other structures containing, housing or supporting water or other fire suppression materials or equipment required for the protection of essential or hazardous facilities, or special occupancy structures;
   iii. Emergency vehicle shelters and garages;
   iv. Structures and equipment in emergency preparedness centers;
   v. Stand-by power generating equipment for essential facilities;
   vi. Structures and equipment in government communication centers and other facilities required for emergency response.

b. Hazardous Facilities. Structures supporting or containing sufficient quantities of toxic or explosive substances dangerous to the safety of the general public if released.
e. Special Occupancy Structures
   i. Covered structures where primary occupancy is public assembly;
   ii. Buildings for schools, colleges, adult education or day-care centers;
   iii. Hospitals and other medical facilities;
   iv. Jails and other detention facilities.

Current-use taxation: Taxing farm and forest lands under their current use, instead of at the higher rate appropriate to lands available for development.

Density: A measure of the intensity of development, generally expressed in terms of dwelling units per acre. It can also be expressed in terms of population density (people per acre).

Density transfer: See "transfer of development rights."

Development: Any activity that requires federal, state, or local approval for the use or modification of land or its resource. These activities include, but are not limited to, subdivisions and short subdivisions, binding site plans, planned unit developments, variances, shoreline substantial development, clearing activity, excavation, embankment, fill and grade work, activity conditionally allowed, building or construction, revocable encroachment permits, and septic approval.

Distribution pipeline: Means a pipeline other than a gathering or transmission line or as defined at 49 CFR 192.3, as if amended.

Downzone: Reclassification from the current zone designation to one where the density of permitted development is lower.

Easement: The right, privilege, or interest that one party has in the land of another. (Dictionary of Real Estate Terms)

Essential State or Regional Transportation Facilities: The interstate highway system, interregional state principal arterials including ferry connections that serve state-wide travel, intercity passenger rail services, intercity high-speed ground transportation, major passenger intermodal terminals excluding all airport facilities and services, the freight railroad system, marine port facilities and services that are related solely to marine activities affecting international and interstate trade, and high-capacity transportation systems serving regions as defined in RCW 81.104.015.


FERC: Is a common abbreviation to refer to the Federal Energy Regulatory Commission.

Forest land: Land primarily devoted to growing trees for long-term commercial timber production on land that can be economically and practically managed for
such production, including Christmas trees subject to the excise tax imposed under RCW 84.33.100 through 84.33.140, and that has long-term commercial significance. In determining whether forest land is primarily devoted to growing trees for long-term commercial timber production on land that can be economically and practically managed for such production, the following factors shall be considered: (a) The proximity of the land to urban, suburban, and rural settlements; (b) surrounding parcel size and the compatibility and intensity of adjacent and nearby land uses; (c) long-term local economic conditions that affect the ability to manage for timber production; and (d) the availability of public facilities and services conducive to conversion of forest land to other uses. (RCW 36.70A.030(8))

Gathering Pipeline: Means a pipeline that transport gas from a current production facility to a transmission or main or as defined at 49 CFR 192.3, as amended.

General aviation airport: A facility where airplanes can take off and land that is publicly owned or privately owned but used by the public. It can include a terminal, hangers and refueling facilities and other accessory uses. Aircraft landing areas used solely for personal use, agricultural use, forest management, or to serve the Eliza Island community are not general aviation airports. Airports used solely for commercial service or military use are not general aviation airports.

Geographic Information System (GIS): An automated or manual system capable of organizing, storing, analyzing and retrieving geographically related (mapped) information. It is intended to support sound decision-making regarding the management of a community’s resources. Increasingly, the term is applied to computerized systems which combine digital mapping with automated land use data files.

Greenbelts/Greenways: These are undeveloped open space, natural areas, including agricultural lands, recreational lands, golf courses and other recreational uses, wildlife corridors and other similar uses.

Groundwaters: All waters that exists beneath the land surface or beneath the bed of any stream, lake or reservoir, or other body of surface water within the boundaries of this state, whatever may be the geological formation or structure in which such water stands or flows, percolates or otherwise moves. There is a recognized distinction between natural groundwater and artificially stored groundwater (RCW 90.44)

Group Home: A residence that is licensed by the state as either a boarding home or an adult family home.

Growth management: A method to guide development in order to minimize adverse environmental and fiscal impacts and to maximize the health, safety, and welfare of the community.
Growth Management Act (GMA): State law requiring jurisdictions with certain projected growth rates to prepare a comprehensive land use plan.

Impact/Mitigation fee: A payment of money imposed upon new development as a condition of approval, as defined and provided by RCW 82.02 and/or 43.21c. This fee must be used exclusively to finance improvements in capital facilities that are necessitated by the development. (CWPP)

Inclusionary Zoning: Zoning that requires developers to provide a portion of housing units in a specific project or area to meet the needs of low and moderate income people.

Incompatible: Not capable of existing together in harmony.

Incorporated area: Area inside city limits.

In-fill: The practice of using developable land that lies within a city, UGA, or developed area outside resource lands, where services are available rather than passing over such parcels in favor of land farther out or farther from available services. (CWPP)

Infrastructure: Streets, water and sewer lines, and other public facilities basic and necessary to the functioning of an urban area.

In-patient facilities: Buildings and accessory uses primarily utilized to provide health care service or medical attention, care or treatment that requires at least one overnight stay.

Interlocal agreement: An agreement intended to apply within designated Urban Growth Areas to set clear and reasonable criteria for orderly annexations, including guidelines on size and timing of annexations and urban levels of development, appropriate development standards and tax revenue sharing provisions. Participants in the agreement could include the county, any adjacent city, affected fire districts, (if applicable) and any other utility provider. (CWPP)

Level of service (LOS): An established minimum capacity of public facilities or services that must be provided per unit of demand or other appropriate measure of need. Level of service standards are synonymous with locally established minimum standards. (WAC 365-1956-210) Level of service for transportation is usually expressed as a proportion derived by comparing a roadway's current volume to its capacity. For example, the level of service of a road segment is expressed by a declining letter scale ('A' is free-flowing traffic; "F" is a traffic jam). For most other facilities, the standard is units of the facility (i.e., acres of park land, number of jail beds, square feet of office space) per 1,000 people.
Local Improvement District (LID): A defined geographical area or special district set up by ordinance to finance streets, sewers, and other public improvements that directly benefit properties in the district. The improvements are paid for by the benefited property owners over a period of time, usually 10 to 20 years.

Long-term commercial significance: Includes the growing capacity, productivity, and soil composition of the land for long-term commercial production, in consideration with the land’s proximity to population areas, and the possibility of more intense uses of the land.

(RCW 36.70A.030(10))

Low Impact Development: A stormwater and land use management strategy that strives to mimic pre-disturbance hydrologic processes of infiltration, filtration, storage, evaporation and transpiration by emphasizing conservation and use of on-site natural features, site planning, and distributed stormwater management practices that are integrated into a project design. LID strategies can be applied to new development, urban retrofits, infrastructure improvements and revitalization projects to protect aquatic resources.

Low Income Housing: The federal government defines low-income housing as housing provided for individuals earning 50% or less of the average family wage of the local jurisdiction.

Master planned resort: A self contained and fully integrated planned unit development, in a setting of significant natural amenities, with primary focus on destination resort facilities consisting of short-term visitor accommodations associated with a range of developed on-site indoor or outdoor recreational facilities. A master planned resort may include other residential uses within its boundaries, if the residential uses are integrated into and support the on-site recreational nature of the resort.

Mineral resource land: Land primarily devoted to, or with the documented presence of and/or potential for, the long-term and commercially significant extraction of minerals such as precious metals, coal, sand and gravel, etc.

Mitigation: Measures taken to avoid, minimize, or compensate for adverse environmental impacts associated with a (project or non-project) land use action.

Natural Resource Lands: Natural Resource Lands include agricultural, forestry, and mineral resource lands that are not already characterized by urban growth and that have long-term significance for the commercial production of food or other agricultural products, for the commercial production of timber, and that have long-term significance for the extraction of minerals.

New fully-contained community: A development proposed for location outside of the existing designated urban growth areas, which is characterized by urban densities, uses and services and meets the criteria of RCW 36.70A.350. (WAC 365-
1956-210) The criteria include new infrastructure, traffic demand management programs, buffers, a mix of uses, affordable housing, environmental protection, development regulations, mitigation of impacts on resource lands, and protection of critical areas.

**Non-compatible:** See "Incompatible."

**Nonconforming use:** A building or premises—land occupied by a legally established use that does not conform with the regulations of the zoning use district in which it is situated/located. (Whatcom County Zoning Code 20.97.270)

**Non-federal land:** The areas of Whatcom County not under federal management (i.e., the areas not included in the Mt. Baker National Forest or North Cascades National Park).

**One-number locator service (one-call):** Means a service through which a person can notify utilities and request field marking of underground facilities.

**Open space:** Any parcel or area of land or water not covered by structures, hard-surfacing, parking areas and other impervious surfaces except for pedestrian or bicycle pathways.

**Parcel:** With regard to the agricultural protection zone, a parcel is defined as contiguous land held in the same ownership but without regard for segregation made for tax purposes. To be contiguous the land must share a common boundary on at least one side. Land is not a contiguous parcel if bisected by a public right-of-way, a Category I stream or a Category 1 or 2 wetland, or divided as part of a subdivision or exempt land division approved pursuant to Chapter 58.17 RCW or Title 21 Whatcom County Code or created after 1959 or created as a legal lot of record.

**Plat:** A detailed drawing of a land subdivision, recorded with the county. Along with the property lines, it may include notations of easements, rights, and restrictions.

**Potable:** Potable describes water that is suitable for drinking by the public. (WAC 246-290)

**Productive:** Capable of economically producing wood fiber or food products.

**Private Utilities:** Water and/or sewer service owned and operated by an entity other than a political subdivision of the federal, state or tribal governments.

**Public Utilities:** Water and/or sewer services owned and operated by a political subdivision of federal, state or tribal governments (includes water and sewer districts and public utility districts).
Recreation Resource Management Areas: Large undeveloped parcels with unique or attractive features where public access is maintained and unique scenic areas preserved through public ownership or private easements.

Regional Transportation Planning Organization: An organization created by the Growth Management Act to coordinate regional transportation efforts and to foster cooperation among state and local jurisdictions. The Whatcom Council of Governments has been designated as the Regional Transportation Planning Organization for Whatcom County.

Resource Based Industry: A business or industry that has a direct relationship to natural resources such as agriculture, minerals, forestry, fishing and aquaculture. This type of industry is generally located in close proximity to the resource or resource land.

Restoration: Bringing back into existence the natural functions and aesthetic character of a site, including the integrity of its surficial geology, topography, soils, hydrology, and/or vegetative regime. Within the context of threatened and endangered species goals and policies, restore or restoration means an action that improves habitat of threatened and endangered species that is:
  a. Undertaken voluntarily by the landowner; or
  b. Undertaken voluntarily by the County on county property or right-of-way, in accordance with the goals and policies of the comprehensive plan; or
  c. Undertaken as a condition of a permit when the condition has been imposed pursuant to adopted regulations and there is a nexus between new development or new clearing activity and the required restoration.

Rezone: Reclassification of an area from its current zoning to a different use.

Right-of-way: A recorded right to use or travel over a specified area or strip of land. Most commonly it refers to land on which a street, sidewalk, or railroad is located. It can also be occupied by utilities, transmission lines, oil or gas pipelines, drainageways, or similar facilities, although pathways for these facilities are more commonly referred to as easements.

Rural lands: All lands which are not within an urban growth area and are not designated as natural resource lands having long-term commercial significance for production of agricultural products, timber, or the extraction of minerals. (WAC 365-1965-210)

Short-Term Planning Area: Short-Term Planning Areas are used as a tool for facilitating provision of urban levels of services and preventing sprawl.

State Environmental Policy Act (SEPA): 1971 state law paralleling the National Environmental Policy Act (NEPA), which requires state and local agencies to consider environmental impacts in the decision-making process. A determination of environmental significance must be made for all non-exempt projects or actions which require a permit, license or decision from a government agency. If the action
does not have significant adverse environmental impacts, a Declaration of Non-Significance is issued. If the action or project could have major impacts, an Environmental Impact Statement is required. SEPA requires consideration of alternatives and mitigation of environmental impacts for major public and private projects and programs.

Sprawl: Low-density development unfolding from the edges of cities and towns. It is unplanned, land-consumptive, automobile-oriented, and designed without attention to its surroundings.

Subarea: A geographic division of the county, created for planning purposes. There are ten subareas in Whatcom County.

Subdivision: Division of a lot, tract, or parcel of land into two or more lots, tracts, or parcels or other divisions of land for sale or development. (Black's Law Dictionary)

Sustainable: Sustainability is an economic state where the demands placed upon the environment by people and commerce can be met without reducing the capacity of the environment to provide for future generations. (Paul Hawken, The Ecology of Commerce)

Third-party damage: Means damage caused by a party other than the owner/operator of a utility facility or a contractor working for such owner/operator.

Title 20: Whatcom County Zoning Code.

Transfer of development rights (TDR): A program in which the unused portion of a "sending" property's zoned capacity--one of the separable rights of property--is sold to the developer of a "receiving" site, who is allowed to add the capacity to the zoned limit of that site. TDRs can be used to prevent the demolition of affordable housing units, especially in downtowns, or to protect historically significant property or open space.

Transmission pipeline: Means a natural gas or hazardous liquid pipeline that transports within a storage field, or transports from an interstate pipeline or storage facility to a distribution main or a large volume user, or operates at a hoop stress of twenty percent or more of the specified minimum yield strength or as defined at 40 CRF 192.3, as amended.

Transportation analysis zone (TAZ): Geographic area defined for transportation modeling purposes. (COG, 1996)

Unincorporated area: Area of the county outside city limits.

Urban Fringe Subarea Plan: A plan pertaining to the Bellingham Urban Growth Area and a portion of Whatcom County surrounding Bellingham. It is a plan designating the interface between urban and rural land uses. Part of the Urban
Fringe Area is included in an Urban Growth Area. Some of the area already lies within Bellingham’s Urban Service Area.

**Urban growth**: growth that makes intensive use of land for the location of buildings, structures, and impermeable surfaces to such a degree as to be incompatible with the primary use of land for the production of food, other agricultural products, or fiber, or the extraction of mineral resources, rural uses, rural development, and natural resource lands designated pursuant to RCW 36.70A.170.

**Urban growth area (UGA)**: An area designated, within which urban growth will be encouraged and outside of which growth can only occur if it is not urban in nature. Urban growth areas around cities are designated by the county in consultation with the cities; urban growth areas not associated with cities are designated by the county.

**Urban Growth Area Reserves**: These are areas that are adjacent and contiguous to Urban Growth Areas which appear to be suitable for future inclusion of the respective Urban Growth Area. These lands are held in reserve until it is demonstrated that they are needed for urban growth, and that consideration is given to ensuring adequate public facilities and services, reduction of sprawl, economic development, open space corridors and natural resource conservation.

**Urban Level of Service**: The minimum level of urban facilities and services, including sanitary sewer, water service, police protection, fire protection and emergency medical services, parks and recreation programs, solid waste management, electric service, land use controls, communication facilities and public schools, to support urban levels of development. A full range of services would add urban public transit, natural gas, storm drainage facilities, street lighting, libraries, local parks, local recreation facilities and services, and health services.

**Utility corridor**: Means an area where an existing utility transmission line is situated, which includes the right-of-way occupied by the existing line and areas immediately adjacent to such rights-of-way in which siting additional utility transmission lines could potentially be considered appropriate.

**Visioning**: A process of citizen involvement to determine values and ideals for the future of a community and to transform those values and ideals into manageable and feasible community goals. (WAC 365-1965-210)

**Water association**: A private corporation which distributes potable water to residential customers.

**Watershed**: A geographic region within which water drains into a particular river, stream or body of water.

**WUTC**: Is a common abbreviation to refer to the Washington Utilities and Transportation Commission.
**Zoning:** A measure by which the community is divided up into districts or zones. In each zone there are permitted uses and special uses, as well as regulations governing lot size, building bulk, placement, and other development standards.
Proposed Council Changes to Comprehensive Plan

Appendix A - Glossary

*Page and line numbers reflect Planning Commission Recommended Draft ([http://wa-whitcomcounty.civicplus.com/DocumentCenter/View/18677](http://wa-whitcomcounty.civicplus.com/DocumentCenter/View/18677)). To improve clarity of Councilmember requested changes, previous edits (i.e. staff and Planning Commission) are included, but not show as edits.*

1) p. A-1:  
**Aquatic:** ...[definition needed] (Brenner)

2) p. A-1:  
Cluster Development: Cluster Development provides the flexibility to maintain open space and plan around distinctive site features or constraints. By clustering development on smaller lots than conventional development, creates an undeveloped tract, while maintaining the same overall density. As a result, an undeveloped tract is created, while maintaining the same overall density. (Brenner)

3) p. A-5:  
Level of service (LOS): An established minimum capacity of public facilities or services that must be provided per unit of demand or other appropriate measure of need. Level of service standards are synonymous with locally established minimum standards. (WAC 365-196-210) Level of service for transportation is usually expressed as a proportion derived by comparing a roadway’s current volume to its capacity. For example, the level of service of a road segment is expressed by a declining letter scale ("A" is free-flowing traffic; "F" is a traffic jam). For most other facilities, the standard is units of the facility (e.g., acres of park land, number of jail beds, square feet of office space) per 1,000 people. (Brenner)

4) p. A-7:  
**Parcel:** With regard to the agricultural protection zone, a parcel is defined as contiguous land held in the same ownership but without regard for segregation made for tax purposes and located in the agricultural protection zone. To be contiguous, the land must share a common boundary on at least one side. Land is not a contiguous parcel if bisected by a public right-of-way, a Category I stream or a Category 1 or 2 wetland, or divided as part of a subdivision or exempt land division approved pursuant to Chapter 58.17 RCW or Title 21 Whatcom County Code or created after 1959 or created as a legal lot of record. (Brenner)

5) p. A-6:  
Natural Resource Lands: Natural Resource Lands including agricultural, forestry, and mineral resource lands that are not already characterized by urban growth and that have long-term significance for the commercial production of food or other agricultural products, for the commercial production of timber, and or that have long-term significance for the extraction of minerals. (Brenner)
6) p. A-7: Private Utilities: Water and/or sewer service owned and operated by an entity other than a political subdivision of the federal, state, local or tribal governments. (Brenner)

7) p. A-7: Public Utilities: Water and/or sewer services owned and operated by a political subdivision of federal, state, local or tribal governments (includes water and sewer districts and public utility districts). (Brenner)

8) p. A-11: Zoning: A measure by which the community is divided up into districts or zones. In each zone there are permitted uses and special uses, as well as regulations governing lot size, building bulk size, placement, and other development standards. (Brenner)

Items 9 through 37 concern comma use, capitalization, and other grammatical changes and may be considered in a single motion.

9) p. A-1 – A-11: Capitalize all words in defined terms (e.x., Affordable Housing, Agricultural Land) (Brenner)

10) p. A-1: Compensation: Something given or received as an equivalent for services, debt, loss, injury, etc. (Brenner)

11) p. A-2: Cottage Industry: Small industrial, commercial, or service operations, on a parcel where the operator resides, frequently with an art or craft orientation or related to information processing or to the natural resources of the area, which meets all of the criteria in Whatcom County Code 20.80.980. (Brenner)

12) p. A-2: County-Wide Planning Policies (CWPP): As required by GMA, the County Council and the City Councils of all the cities adopted a set of policies, which embody a vision for the future of Whatcom County. They are the framework intended to guide the development of comprehensive plans for each jurisdiction in the county. (Brenner)

13) p. A-2: Critical Facilities: As defined in the Whatcom County Critical Areas Ordinance, means buildings and other structures that are intended to remain operational in the event of extreme environmental loading from flood, wind, snow, volcanic activities, or earthquakes pursuant to the most current International Building Code (IBC). (Brenner)

14) p. A-3: Essential State or Regional Transportation Facilities: The interstate highway system, interregional state principal arterials including ferry connections that serve state-wide travel, intercity passenger rail services, intercity high-speed ground transportation, major passenger intermodal terminals excluding all airport facilities and services, the freight railroad system, marine port facilities and services that are related solely to marine activities affecting international and interstate trade, and high-capacity transportation systems serving regions as defined in RCW 81.104.015. (Brenner)
15) p. A-4: Gathering Pipeline: Means a pipeline that transports gas from a current production facility to a transmission or main or as defined at 49 CFR 192.3, as amended. *(Brenner)*

16) p. A-4: General **aAviation aAirport**: A facility where airplanes can take off and land that is publicly owned or privately owned but used by the public. It can include a terminal, hangers, and refueling facilities, and other accessory uses. Aircraft landing areas used solely for personal use, agricultural use, forest management, or to serve the Eliza Island community are not general aviation airports. Airports used solely for commercial service or military use are not general aviation airports. *(Brenner)*

17) p. A-4: Geographic Information System (GIS): An automated or manual system capable of organizing, storing, analyzing, and retrieving geographically related (mapped) information. It is intended to support sound decision-making regarding the management of a community’s resources. Increasingly, the term is applied to computerized systems which combine digital mapping with automated land use data files. *(Brenner)*

18) p. A-4: Greenbelts/Greenways: These are undeveloped open space, natural areas, including agricultural lands, recreational lands, golf courses and other recreational uses, wildlife corridors, and other similar uses. *(Brenner)*

19) p. A-5: Growth Management Act (GMA): State law requiring jurisdictions with certain projected growth rates to prepare a comprehensive land use plan *(RCW 36.70A)*. *(Brenner)*

20) p. A-5: In-patient Facilities: Buildings and accessory uses primarily utilized to provide health care service or medical attention, care, or treatment that requires at least one overnight stay. *(Brenner)*

21) p. A-5: Interlocal Agreement: An agreement intended to apply within designated Urban Growth Areas to set clear and reasonable criteria for orderly annexations, including guidelines on size and timing of annexations and urban levels of development, appropriate development standards, and tax revenue sharing provisions. Participants in the agreement could include the county, any adjacent city, affected fire districts, (if applicable) and any other utility provider. *(CWPP)* *(Brenner)*

22) p. A-6: Local Improvement District (LID): A defined geographical area or special district set up by ordinance to finance streets, sewers, and other public improvements that directly benefit properties in the district. The improvements are paid for by the benefited property owners over a period of time, usually 10 to 20 years. *(Brenner)*

23) p. A-6: Low Impact Development: A stormwater and land use management strategy that strives to mimic pre-disturbance hydrologic processes of infiltration, filtration, storage, evaporation, and transpiration by emphasizing conservation and use of on-site natural features, site planning, and distributed stormwater management practices that are
integrated into a project design. LID strategies can be applied to new development, urban retrofits, infrastructure improvements and revitalization projects to protect aquatic resources. (Brenner)

24) p. A-6: Master planned resort: A self contained and fully integrated planned unit development, in a setting of significant natural amenities, with primary focus on destination resort facilities, consisting of short-term visitor accommodations associated with a range of developed on-site indoor or outdoor recreational facilities. A master planned resort may include other residential uses within its boundaries, if the residential uses are integrated into and support the on-site recreational nature of the resort. (Brenner)

25) p. A-6: Mineral resource land: Land primarily devoted to, or with the documented presence of and/or potential for, the long-term and commercially significant extraction of minerals such as precious metals, coal, sand, and gravel, etc. (Brenner)

26) p. A-6 Mitigation: Measures taken to avoid, minimize, or compensate for adverse environmental impacts associated with a project or non-project land use action. (Brenner)

27) p. A-6: New fully contained community: A development proposed for location outside of the existing designated urban growth areas, which is characterized by urban densities, uses, and services and meets the criteria of RCW 36.70A.350. (WAC 365-196-210) The criteria include new infrastructure, traffic demand management programs, buffers, a mix of uses, affordable housing, environmental protection, development regulations, mitigation of impacts on resource lands, and protection of critical areas. (Brenner)

28) p. A-7: One-number locator service (one-call): Means a service through which a person can notify utilities and request field marking of underground facilities. (Brenner)

29) p. A-7: Potable: Describes water that is suitable for drinking by the public. (WAC 246-290) (Brenner)

30) p. A-7: Productive: Capable of economically producing wood, fiber, or food products. (Brenner)

31) p. A-8: State Environmental Policy Act (SEPA): 1971 state law paralleling the National Environmental Policy Act (NEPA), which requires state and local agencies to consider environmental impacts in the decision-making process. A determination of environmental significance must be made for all non-exempt projects or actions which require a permit, license, or decision from a government agency. If the action does not have significant adverse environmental impacts, a Declaration of Non-Significance is issued. If the action or project could have major impacts, an Environmental Impact Statement is required. SEPA requires consideration of alternatives and mitigation of environmental impacts for major public and private projects and programs. (Brenner)
32) p. A-9: Subdivision: Division of a lot, tract, or parcel of land into two or more lots, tracts, or parcels, or other divisions of land for sale or development. (Black's Law Dictionary) (Brenner)

33) p. A-9: Sustainable: Sustainability is an economic state where the demands placed upon the environment by people and commerce can be met without reducing the capacity of the environment to provide for future generations. (Paul Hawken, The Ecology of Commerce) (Brenner)

34) p. A-9: Urban Fringe Subarea Plan: A plan pertaining to the Bellingham Urban Growth Area and a portion of Whatcom County surrounding Bellingham, and it is a plan designating the interface between urban and rural land uses. Part of the Urban Fringe Area is included in an Urban Growth Area. Some of the area already lies within Bellingham's Urban Service Area. (Brenner)

35) p. A-10: Urban Growth Area Reserves: These are areas that are adjacent and contiguous to Urban Growth Areas which appear to be suitable for future inclusion of the respective Urban Growth Area. These lands are held in reserve until it is demonstrated that they are needed for urban growth, and that consideration is given to ensuring adequate public facilities and services, reduction of sprawl, economic development, open space corridors, and natural resource conservation. (Brenner)

36) p. A-10: Urban Level of Service: The minimum level of urban facilities and services, including sanitary sewer, water service, police protection, fire protection and emergency medical services, parks and recreation programs, solid waste management, electric service, land use controls, communication facilities, and public schools, to support urban levels of development. A full range of services would add urban public transit, natural gas, storm drainage facilities, street lighting, libraries, local parks, local recreation facilities and services, and health services. (Brenner)

37) p. A-10: Watershed: A geographic region within which water drains into a particular river, stream, or body of water. (Brenner)
APPENDIX B
Appendix B

List of Acronyms

Note: (0x) and (1x) represent number of times the acronym is used in the proposed 2016 Comprehensive Plan. Because the acronym is either not used or is only used once in conjunction with the full spelling, they are proposed for removal from Appendix B.

AAC  Agricultural Advisory Committee
ADO  Associate Development Organization
ADU  Accessory Dwelling Unit (1x)
AG  Agricultural zone (0x)
APO  Agriculture Protection Overlay
ARCO  Atlantic Richfield Oil Company (0x)
BMP  Best Management Practices
CDBG  Community Development Block Grant (1x)
CEDS  Comprehensive Economic Development Strategy
GERB  Community Economic Revitalization Board (1x)
CF  Commercial Forestry zone (0x)
CFHMP  Comprehensive Flood Hazard Management Plan
CFR  Code of Federal Regulations
CIG  Climate Impacts Group
CIP  Capital Improvement Program
CPROS  Comprehensive Parks, Recreation and Open Space Plan
CTAC  Citizens’ Transportation Advisory Committee (0x)
GTR  Community Trip Reduction (0x)
CWPP  County-Wide Planning Policies
CWSP  Whatcom County Coordinated Water System Plan
GZM  Coastal Zone Management (0x)
DLI  Washington State Department of Labor and Industries (1x)
DNL  Day Night Average Sound Level
DNR  Washington State Department of Natural Resources
DOC  Department of Corrections (0x)
DOE  Washington State Department of Ecology or US Department of Energy
DUI  Driving under the influence (0x)
ECA  Environmentally Critical Area (0x)
EDA  Economic Development Administration (1x)
EDTF  Economic Development Task Force (0x)
EFSEC  Energy Facility Site Evaluation Committee (1x)
EIS  Environmental impact statement (0x)
EMF  Electromagnetic field
EPFAC  Essential Public Facility Advisory Committee (0x)
ESA  Endangered Species Act
ETF  Environmental Task Force (0x)
FAWS  Forest And Wildlife Stewardship (0x)
FERC  Federal Energy Regulatory Commission
GC  General Commercial zone (0x)
<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
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<tbody>
<tr>
<td>GI</td>
<td>Gateway Industrial zone (0x)</td>
</tr>
<tr>
<td>GIS</td>
<td>Geographic Information System</td>
</tr>
<tr>
<td>GM</td>
<td>General Manufacturing zone (0x)</td>
</tr>
<tr>
<td>GMA</td>
<td>Growth Management Act</td>
</tr>
<tr>
<td>G-P</td>
<td>Georgia-Pacific (0x)</td>
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<tr>
<td>HII</td>
<td>Heavy Impact Industrial zone (0x)</td>
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<tr>
<td>HUD</td>
<td>US Department of Housing and Urban Development (1x)</td>
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<tr>
<td>HPA</td>
<td>Hydraulic Project Approval (0x)</td>
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<tr>
<td>I-5</td>
<td>Interstate-5 (north-south freeway)</td>
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<tr>
<td>ITS</td>
<td>Intelligent Transportation Systems (1x)</td>
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<tr>
<td>JRA</td>
<td>Junior Rehabilitation Administration (0x)</td>
</tr>
<tr>
<td>kV</td>
<td>Kilovolt (1x)</td>
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<tr>
<td>LAMIRD</td>
<td>Limited Areas of More Intensive Rural Development</td>
</tr>
<tr>
<td>LID</td>
<td>Low Impact Development (1x) Local improvement district (0x)</td>
</tr>
<tr>
<td>LII</td>
<td>Light Impact Industrial zone (0x)</td>
</tr>
<tr>
<td>LMI</td>
<td>Low-to-Moderate-Income (1x)</td>
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<tr>
<td>LOS</td>
<td>Level of service</td>
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<td>LWD</td>
<td>Large Woody Debris</td>
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<td>mbf</td>
<td>Thousand board feet (0x)</td>
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<td>Marine Resources Committee</td>
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<td>MRL</td>
<td>Mineral Resource Land</td>
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<td>MVA</td>
<td>Megavoltampere (0x)</td>
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<td>MW</td>
<td>Megawatt (0x)</td>
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<td>NC</td>
<td>Neighborhood Commercial zone (0x)</td>
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<td>NPDES</td>
<td>National Pollutant Discharge Elimination System</td>
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<td>Overall Economic Development Program (1x)</td>
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<td>Washington State Office of Financial Management</td>
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<td>ORV</td>
<td>Off-road vehicle</td>
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<td>PHS</td>
<td>Priority habitats and species (1x)</td>
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<td>PSE</td>
<td>Partnership for Sustainable Economy (0x)</td>
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<td>PUD</td>
<td>Public utility district OR-Planned unit development (0x)</td>
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<td>Revised Code of Washington</td>
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<td>RF</td>
<td>Rural Forestry zone (on the Lummi Reservation, Rural Farm) (0x)</td>
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<td>Residents’ Housing Advisory Committee (0x)</td>
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<td>RR R/W</td>
<td>Rail Road Right of Way</td>
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<td>RRI</td>
<td>Rural Residential Island zone (0x)</td>
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<td>RRMA</td>
<td>Recreation Resource Management Area</td>
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<td>Residential Rural zone (1 dwelling per acre) (0x)</td>
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<td>RR2</td>
<td>Residential Rural zone (2 dwellings per acre) (0x)</td>
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<td>RR3</td>
<td>Residential Rural zone (3 dwellings per acre) (0x)</td>
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<td>RTPO</td>
<td>Regional Transportation Planning Organization (1x)</td>
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<tr>
<td>Acronym</td>
<td>Description</td>
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<td>---------</td>
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<tr>
<td>RV</td>
<td>Recreational vehicle</td>
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<tr>
<td>R2A</td>
<td>Rural zone (1 dwelling per 2 acres) (0x)</td>
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<td>R5A</td>
<td>Rural zone (1 dwelling per 5 acres) (0x)</td>
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<td>R10A</td>
<td>Rural zone (1 dwelling per 10 acres)</td>
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<td>State Environmental Protection Act</td>
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<td>Shoreline Management Act</td>
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<td>SMAC</td>
<td>Surface Mining Advisory Committee (0x)</td>
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Appendix C

Growth-Management Act Planning Goals
Countywide Planning Policies
Visioning Value Statements

Growth-Management Act Planning Goals
(RCW 36.70A.020)

The following goals are adopted to guide the development and adoption of comprehensive plans and development regulations of those counties and cities that are required or choose to plan under RCW 36.70A.040. The following goals are not listed in order of priority and shall be used exclusively for the purpose of guiding the development of comprehensive plans and development regulations:

1. **Urban Growth.** Encourage development in urban areas where adequate public facilities and services exist or can be provided in an efficient manner.

2. **Reduce Sprawl.** Reduce the inappropriate conversion of undeveloped land into sprawling, low-density development.

3. **Transportation.** Encourage efficient multimodal transportation systems that are based on regional priorities and coordinated with county and city comprehensive plans.

4. **Housing.** Encourage the availability of affordable housing to all economic segments of the population of this state, promote a variety of residential densities and housing types, and encourage preservation of existing housing stock.

5. **Economic Development.** Encourage economic development throughout the state that is consistent with adopted comprehensive plans, promote economic opportunity for all citizens of this state, especially for unemployed and for disadvantaged persons, promote the retention and expansion of existing businesses and recruitment of new businesses, recognize regional differences impacting economic development opportunities and encourage growth in areas experiencing insufficient economic growth, all within the capacities of the state's natural resources, public services, and public facilities.

6. **Property Rights.** Private property shall not be taken for public use without just compensation having been made. The property rights of landowners shall be protected from arbitrary and discriminatory actions.

7. **Permits.** Applications for both state and local government permits should be processed in a timely and fair manner to ensure predictability.

8. **Natural Resource Industries.** Maintain and enhance natural resource-based industries, including productive timber, agricultural, and fisheries industries. Encourage the conservation of productive forest lands and productive agricultural lands, and discourage incompatible uses.
9. **Open Space and Recreation.** 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.

10. **Environment.** Protect the environment and enhance the state’s high quality of life, including air and water quality, and the availability of water.

11. **Citizen Participation and Coordination.** Encourage the involvement of citizens in the planning process and ensure coordination between communities and jurisdictions to reconcile conflicts.

12. **Public Facilities and Services.** Ensure that those public facilities and services necessary to support development shall be adequate to serve the development at the time the development is available for occupancy and use without decreasing current service levels below locally established minimum standards.

13. **Historic Preservation.** Identify and encourage the preservation of lands, sites, and structures, that have historical or archaeological significance.

14. **Shoreline Management.** Per RCW 36.70A.480 Shorelines of the State, the goals and policies of the Shoreline Management Act, as set forth in RCW 90.58.020, are added as one of the goals of the Growth Management Act.
Whatcom County
Countywide Planning Policies
Adopted April 1993
(Revised March 11, 1997 & January 25, 2005)

A. Citizen Involvement

1. The county and the cities shall cooperate to provide public education on the requirements of the Growth Management Act.

2. The county and the cities shall provide opportunities for citizens to become involved in the growth management planning process through various mechanisms, such as surveys, public workshops, meetings, hearings, and advisory committees. The method of citizen involvement may vary based on the needs and constituents in various communities and shall include representation of both rural and urban interests on those issues that affect both urban and rural areas.

3. Citizens shall be notified in a timely manner of opportunities to have input and key decision points in the planning process. This should include actions such as use of telephone hotlines, notification to interest groups, pre-development meetings, early incorporation of public comments and broader notification of property owners and residents during a planning process as well as working more extensively with community and neighborhood groups. The cities shall also develop a public participation process to solicit and incorporate comments from residents outside city limits but within proposed Urban Growth Areas.

4. Citizen comments and viewpoints shall be incorporated into the decision-making process in development of draft plans and regulations. Consideration of citizen comments shall be evident in the decision-making process.

5. The county and the cities shall establish a system for subarea, community and neighborhood liaison to foster communication between the respective government and its neighborhoods. This system would also provide a point of contact for issues that may affect subareas, the community, or neighborhoods.

6. Various planning techniques, such as overlay maps and Geographic Information Systems, shall be utilized to allow citizens and public officials the ability to make accurate comparison of issues so appropriate trade-offs can be consciously made.

B. Urban Versus Rural Distinctions

1. Whatcom County shall primarily become a government of rural areas in land use matters directed towards agriculture, forestry and other natural resources and natural resource based industries. The county shall work with citizens to define a variety of types of rural areas based on the characteristics and needs of different areas. This Section shall not preclude county
governance of large urban industrial areas outside of the city UGA's (see
Cherry Point below), developed urban areas within urban growth areas not
yet annexed, and developed rural areas where the "urban" designation is
inappropriate.

2. The county shall discourage urban level development outside Urban Growth
Areas and outside of areas currently characterized by a development
threshold greater than a rural development density.

3. Whatcom County shall promote appropriate land uses and allow for infill
within rural settlements characterized by existing commercial, industrial and
intensive residential development greater than a rural development density.
These areas should be clearly delineated, and not expanded beyond logical
outer boundaries in accordance with RCW 36.70.070(5). Impacts on rural
character, critical areas and other economic considerations as well as the
availability of capital facilities and rural levels of service must be considered
before allowing infill in these areas.

4. In the next 20 years, Whatcom County should discourage "new fully
contained communities" (as defined and authorized by RCW 36.70A.350)
outside designated Urban Growth Areas.

5. Whatcom County should undertake a public process to define rural areas and
rural growth as distinct from urban areas and urban growth.

C. Urban Growth Areas

1. Urban growth needs shall be met by a combination of in-fill within cities and
by growth within designated municipal and non-municipal Urban Growth
Areas.

2. The size and location of Urban Growth Areas shall be consistent with adopted
local policies and with the capital facilities plans.

3a. The most current, accurate population projections based on a range provided
for Whatcom County by the Office of Financial Management shall be used as
the basis for determining that Urban Growth Areas shall include sufficient
area to permit the urban growth that is projected to occur in the county for
the succeeding twenty-year period.

3b. The County and Cities shall develop a consistent approach to calculating the
land supply needed within an urban growth area. This approach shall
consider limitations imposed by critical area regulations, infrastructure
needs, open space, existing uses, local market factors and the ability of the
jurisdiction to provide services. It is recognized that the above limitations
may vary by jurisdiction, but the method for applying them shall be
consistent. Urban growth areas shall permit a range of densities and uses;
however, in recognition of community character, these uses and densities
may vary among jurisdictions.

4. Urban Growth Areas shall be evaluated at least every ten years to determine
if they contain sufficient area to accommodate the urban growth that is
projected for the succeeding twenty-year period. The market factor for each
Urban Growth Area shall also be evaluated to determine whether the land supply is adequate to meet the needs of the community or whether the land supply is excessive and contributing to sprawl.

5. Urban Growth areas should be established in a way that preserves agricultural land, forestry, mineral resources, water resources, and critical areas. Urban growth shall maintain proper buffers from natural resource areas to minimize conflicts with natural resources and industries based on them.

D. City Urban Growth Areas

1. The Urban Growth Areas for the small cities shall be of an adequate size to allow them to become viable economic centers with a balance of jobs and housing. The small cities shall do appropriate planning to ensure adequate distribution of land uses and services at a range of urban densities and zoning classifications.

2. Urban Growth Areas for cities shall include those areas contiguous to cities and with urban characteristics as defined by the Act. The Geneva area in Bellingham’s UGA is characterized by urban development, but is also identified by the city and county as a Water Resource Protection UGA because of its location in the Lake Whatcom Watershed. Lake Whatcom is the drinking water source for much of the Bellingham urban area. Geneva is appropriate to include in an urban growth area, but is not an area where additional urban development is desirable.

3. Cities shall develop a plan to provide urban level water and sewer services within their Urban Growth Areas. This plan should be developed in cooperation with existing water purveyors and other municipal corporations providing water or sewer services within each city’s Urban Area, and should be implemented through interlocal agreements. Short term and long term boundaries may be used to facilitate provision of urban levels of service and to not preclude future urban densities as defined within the Whatcom County Comprehensive Plan.

4. Existing cities should absorb additional population at a range of densities appropriately responsive to the city’s community vision before extending city Urban Growth Areas into areas where growth would adversely impact critical areas and resource lands. In those small cities entirely surrounded by flood plains, critical area and resource lands or within Shellfish Protection Districts, the county and the city shall seek to negotiate a balance between protection of resources and the allocation of adequate land area to meet the growth needs of the city and to maintain the desired character of the community.

5. All cities should grow in an efficient manner while maintaining their character and, where reasonable, shall provide for adequate open space between cities to prevent strip development.

6. Cities should be encouraged to provide positive incentives for in-fill.
E. Non-City Urban Growth Areas

1. Urban Growth Areas may also be established in areas that are not contiguous to existing cities, and are already characterized by urban growth where adequate facilities and services can be provided and which are intended to meet needs not met by cities and their Urban Growth Areas.

2. Non-city urban growth areas, for already urbanized unincorporated residential areas shall be encouraged to infill in a way that will facilitate efficient provision of facilities and services consistent with the scale of development.

3. Cherry Point shall be designated as an unincorporated industrial urban growth area in recognition of existing large scale industrial land uses. Additional large scale development shall be encouraged consistent with the ability to provide needed services and consistent with protecting critical areas along with other environmental protection considerations. The Cherry Point industrial area is an important and appropriate area for industry due to its access to deep water shipping, rail, all-weather roads, its location near the Canadian border, and its contribution to the County’s goal of providing family wage jobs.

4. The County shall assure that there are plans to provide appropriate levels of urban facilities and services within non-city Urban Growth Areas. These plans should be developed by special purpose districts, water associations and private service providers within each of these Areas, and should be implemented, where appropriate, through interlocal agreements. Short term and long term boundaries may be used to facilitate provision of urban levels of service.

F. Contiguous, Orderly Development and Planning in Urban Growth Areas

1. Cities, the county and special districts shall execute interlocal agreements to coordinate plans for and manage growth in Urban Growth Areas prior to annexations. Interlocal agreements shall acknowledge and implement the Countywide Planning Policies.

2. Interlocal agreements shall incorporate clear and reasonable criteria for orderly annexation. The county and the cities shall establish a process to incorporate representative citizen input into interlocal agreement and encourage appropriate districts to participate. If adequate procedures are developed to replace it, the Boundary Review Board may be replaced.

3. All urbanized areas currently within urban growth boundaries associated with cities should be encouraged to annex to cities. Orderly annexations with logical boundaries shall be encouraged. Interlocal agreements shall specify guidelines on size, timing of annexations and urban levels of development, and tax revenue sharing when appropriate.

4. Within Urban Growth Areas, cities shall not extend water and sewer utilities without an adopted program for annexation and an adopted Capital Facilities Plan. Exceptions may be made in cases where human health is threatened as
determined by the County Health Department. If water extensions are made, they shall be consistent with the service area boundaries and other provisions within the adopted Coordinated Water System Plan.

5. In the areas where utilities presently extend beyond city limits, but are within Urban Growth Areas, the city, county, and the existing water purveyors for the area should jointly plan with the county. The County shall adopt zoning which reflects this joint planning.

6. Unless specifically provided for by state statutes, Cities, other municipal corporations, and other public and private utilities shall not extend urban levels of water service to serve urban uses outside Urban Growth Areas. If legally allowed water extensions are made outside of Urban Growth Areas, the maximum number of connections shall not exceed the density allowed under the associated zoning. The number of connections shall be specified in a legally binding document at the time the extension is approved. Property contiguous to extension of utilities necessary to solve existing water deficiencies, but which cannot benefit from them because of zoning constraints, shall not be assessed for those improvements.

7. The availability of pipeline capacity required to meet local needs and/or supply shall not be used to justify development counter to the countywide land development pattern and shall not be considered in conversions of agricultural land, forestry, and rural areas.

8. The cities, other municipal corporations, public utilities, and the county shall cooperate to identify and balance the needs of each jurisdiction and entity when planning for transition of services and annexation within Urban Growth Areas. This intergovernmental cooperation and coordination should be reflected in revenue agreements, work programs for joint projects, and regional solutions adopted by the affected parties.

9. Major transportation, utility and greenway corridors shall be planned within Urban Growth Areas. Development shall be consistent with these corridors. The county shall ensure conformance through the permit process and incentive programs.

10. Interlocal agreements shall include provisions for agreed upon development standards within Urban Growth Areas. Unless a different standard is negotiated, the more rigorous of the standards shall be enforced by the county.

11. The county and the City of Bellingham shall establish, through the Urban Fringe Subarea Plan update, the policies, zoning and criteria to comply with current state Growth Management law.

12. To encourage contiguous, orderly development and annexation in Urban Growth Areas around cities, the county shall designate Urban Residential zones limiting density to a maximum of one dwelling unit per five acres in undeveloped areas until urban level utilities are provided. Developed or partially developed areas presently zoned Residential-Rural shall retain that zoning. In the Bellingham Urban Growth Area, substantial development and
subdivisions already have occurred without annexation. The revised Urban
Fringe Subarea Plan and a new Interlocal Agreement between the City of
Bellingham and the county will address sequence and timing for annexations,
subdivisions, and urban levels of development.

13. In Urban Growth Areas where development is occurring based on the
presence of utilities, urban development shall meet common urban standards
including fire flow requirements and supply. The county and the cities will
work together to develop reasonable standards over time.

14. The County and the cities shall coordinate drainage, stormwater
management and flood control in Urban Growth Areas and work toward the
development of common standards.

G. Affordable Housing

1. The county and the cities shall take actions to ensure a balance of housing
and economic growth consistent with each jurisdiction's employment base
and diverse income levels and to reduce commuting times and traffic
congestion.

2. The county and the cities shall plan for a range of housing types and costs
commensurate with their affordable housing needs.

3. Affordable housing should be convenient to major employment centers and
public services or be designed to accommodate public transportation.

4. The county and the cities shall promote innovative techniques and develop
strategies to provide for affordable housing with design, density, lot sizes and
development standards that provide for a variety of housing types.

5. The county and the cities shall review existing regulations and policies that
exclude or discourage affordable housing in their communities and shall not
adopt regulations and policies which do so. Mobile, modular, and
manufactured homes on individual lots, mobile home parks, accessory units,
inclusionary zoning, mixed use, and increased densities shall be reviewed as
affordable housing alternatives.

6. The county and the cities should work with the private sector, other public
and non-profit agencies, citizen groups, and trade representatives to assure
that there is an adequate supply of sites available for affordable housing and
to encourage housing design that is compatible with the surrounding
neighborhoods.

7. Low income housing shall not be concentrated in only a few communities or
neighborhoods.

8. The county and the cities shall consider reducing impact and/or mitigation
fees for affordable housing provided in a proposed development.

9. Each jurisdiction should explore options for providing shelter for the
homeless.
H. Open Space/Greenbelt Corridors

1. Adequate open space is vital to the quality of life and sense of place in Whatcom County. The county, cities, Port of Bellingham, and other appropriate jurisdictions should coordinate protection of linked greenbelts, within and between Urban Growth Areas, parks, and open space to protect wildlife corridors and to enhance recreational opportunities, public access and trail development.

2. The county and the cities shall plan for greenbelts and open space in their Comprehensive Planning processes and coordinate with each other. Open space systems should include lands which contain natural areas, habitat lands, natural drainage features, and/or other environmental, cultural and scenic resources. With increased residential densities, jurisdictions also should ensure provision of adequate neighborhood parks and play areas within safe bicycling and walking distance for children.

3. The county and the cities shall encourage, to the extent it is feasible, separation of Urban Growth Areas through planning, zoning, development regulations, open space purchase, conservation easements and other mechanisms which may be appropriate. Also, an array of incentives such as density bonuses, design flexibility and transferable development rights shall be offered to affected land owners.

4. The County and Cities should work cooperatively to protect and restore stream corridors within Urban Growth Areas that support anadromous fish.

I. Economic Development and Employment

1. Whatcom County recognizes that a healthy economy, which provides opportunity for diverse segments of the community, is important to the quality of life in the area. The Greater Whatcom Comprehensive Economic Development Strategy (CEDS) “is intended to put forth economic development alternatives for Whatcom County that will support jobs creation, with an emphasis on higher wage jobs and diversification”

2. New business development and expansion of existing businesses are key factors in providing “family wage” jobs and a strong tax base. Economic development that pays family wage rates should be encouraged. Industrial land designations must be sufficient to permit the concentration of industry in appropriate locations beyond 20 years. In order to attract new industry and provide for expansion of existing industries, the county and the cities will designate land supply of sufficient size and diversity to provide a range of suitable locations for industrial development. The designation of this land shall be established in a way that preserves natural resource based industries and critical areas.

3. To provide sufficient land supply for industrial growth and development, industrial designations must not only include lands suitable for development, but also lands suitably zoned to provide adequate buffers. It is also important that these lands and buffers be conserved with appropriate land use and zoning provisions to ensure that they will be available for future use.
4. Encourage business location, retention, and expansion according to city and county comprehensive plans in order to meet current and future demand for diverse business and industry. Work with funding agencies and the private sector to facilitate extension of adequate sewer, water, telecommunications and road access to existing commercial and industrial-zoned properties, creating shovel-ready sites. Cities and county may utilize the “Quick Sites” economic development program through OTED, which links strategic elements of planning, zoning, environmental review, and permitting with the business-siting effort.

5. The county and the cities should include an economic development element in their Comprehensive Plans. Economic development elements should be consistent with the CEDS. Economic development shall be coordinated with environmental concerns to protect the quality of life. Planning efforts should address economic sustainability. As part of the comprehensive planning process and through implementation of the comprehensive plan, the County shall develop and adopt goals, policies and regulations that protect resource land industries and support and encourage resource-based industries.

6. The county and the cities should continue to cooperate through the Partnership for a Sustainable Economy to maintain the CEDS for infrastructure funding. Other appropriate organizations, businesses, and individuals should be involved in the process.

7. Economic vitality and job development shall be encouraged in all the cities and in designated areas of the county consistent with community growth policies, particularly addressing adequacy of transportation corridors, public transportation, impacts on the environment, and the ability of the area to provide urban services.

8. Economic development should be encouraged that:
   a. Does not adversely impact the environment;
   b. Is consistent with community values stated in local comprehensive plans;
   c. Encourages development that provides jobs to county residents;
   d. Addresses unemployment problems in the county and seeks innovative techniques to attract different industries for a more diversified economic base;
   e. Promotes reinvestment in the local economy;
   f. Supports retention and expansion of existing businesses.

9. The County and the cities recognize the need for the protection and utilization of natural resources and resource lands including agricultural, mineral, forestry and fishing. As part of a broad based economy, productive timber, agriculture and fisheries industries should be supported in a sustainable manner.
10. The cities and county agree to set policies for approving proposals to authorize siting of Major Industrial Developments for large or resource-based industries outside of Urban Growth Areas (as per RCW 36.70A.365). The master planning process for specific manufacturing, industrial, or commercial businesses shall address infrastructure, buffers, environmental protection, sprawl, resource lands, critical areas, and land supply.

11. Whatcom County encourages siting of industrial uses in proximity to and to further utilization of our access to deep water and port facilities for shipping, rail, airports, roadways, utility corridors and the international border.

J. Countywide Transportation Facilities and Strategies

1. A Regional Transportation Planning Organization (RTPO) has been established in Whatcom County to conduct regional, cooperative transportation planning. The RTPO has completed a Regional Transportation Plan (RTP) including countywide transportation policies. The RTP has been approved by a regional transportation Policy Board consisting of elected representatives of most area jurisdictions. The Transportation Chapter of the Whatcom County Comprehensive Plan and the Comprehensive Plans for each of the City’s must be consistent with the RTP as it is amended. The county and the cities will continue to support the RTPO on an on-going basis to coordinate transportation planning across Whatcom County.

2. Whatcom County jurisdictions shall encourage alternative modes of transportation to the single occupancy vehicle. Each jurisdiction shall encourage:
   a. Use of public transportation;
   b. Development of liked on-street bicycle routes and pedestrian and bicycle trail corridors;
   c. Adequate pedestrian facilities;
   d. Connections between different modes of transportation;
   e. Intermodal connection of freight transportation.

3. To encourage use of single occupant vehicle alternatives and development of pedestrian scale neighborhoods, high density residential development shall be encouraged in urban growth areas with particular attention to those locations within cities and in close proximity to arterials and main transit routes.

4. Cities are particularly encouraged to support transit and pedestrian friendly mixed use developments within their UGAs to help achieve the goals supported in these policies.

5. Where the roadway level of service (LOS) adopted in local comprehensive plans cannot be maintained as a result of proposed new development, that development shall be denied, unless the proponents agree to pay a proportionate share of the cost of maintaining the LOS.

Whatcom County Comprehensive Plan
6. Strategies for maintaining established levels of service may include transportation demand management techniques, project impact mitigation fees, enhanced access to public transportation service, and/or other steps to reduce or limit traffic congestion.

7. Priorities shall be established and expenditures coordinated for countywide bicycle and trail corridors. Bicycle and pedestrian-specific trails and other facilities shall be included during project planning and review. Coordinated corridors and cost sharing should be explored among all responsible and interested parties.

8. Whatcom County should work cooperatively with the Whatcom County Council of Governments, Cities, Whatcom Transit Authority and other agencies with jurisdiction to plan for inter-county and international transportation links, such as airports, border crossings, passenger rail, freight rail, transit, ferries, and other transportation facilities.

K. Siting of Public Facilities

1. As part of the comprehensive planning process, the county and the cities shall identify appropriate land for public facilities which meets the needs of the community, such as schools, recreation, transportation and utility corridors, human service facilities, and airport and other port facilities. In order to reduce land use conflicts, policies related to a design component shall be incorporated in the comprehensive plans.

2. The county and the cities will implement a cooperative and structured process, which includes early and continuous public involvement, to consider siting of essential public facilities of a regional and statewide nature. State facilities shall conform to local siting procedures.

3. Public facilities that generate substantial travel demand should be sited along or near major transportation and public transit corridors, where available.

4. The county and the cities shall work with their respective school district to encourage siting of schools in conjunction with areas where substantial development exists or is projected and near public transportation corridors.

5. Sharing of corridors for major utilities, trails and other transportation rights-of-way is encouraged when not in conflict with goals to protect wildlife, public health and safety.

L. Impact Fees

1. The county and the cities are encouraged to adopt fair and reasonable impact and/or mitigation fee ordinances to ensure that new growth pays its fair share of the cost of capital facilities, such as transportation improvements, parks, and schools.

2. The county and cities shall work with their school districts to develop impact fee formulas as appropriate to the district's capital needs.
M. Intergovernmental Cooperation

1. To adequately plan for growth and implement the policies of the Growth Management Act, the governmental jurisdictions in Whatcom County, including the Lummi Nation and Nooksack Tribe, and the Port of Bellingham shall work together to establish on-going mechanisms to improve communication, information sharing and coordinated approaches to common problems.

2. Whatcom County governments should communicate with neighboring counties and governments in British Columbia and work cooperatively on growth management issues that cross county and national borders.

N. Water Quality and Quantity

1. The cities, and the county, in cooperation with other municipal corporations, tribal governments, federal and state agencies, and public and private utilities shall cooperate in the protection of water resources and in drawing upon said water to support growth.

2. The Cities and the County in cooperation with other municipal corporations and tribal governments shall adopt zoning regulations and development standards to protect water resources. Where there are potential conflicts with designations required by the Growth Management Act, such as natural resource lands and critical areas, water resource protection shall generally have priority.

3. Jurisdictions shall cooperate to protect and restore water resources and fish habitat within UGA’s and across jurisdictional boundaries to maintain quality of life and economic health in Whatcom County.

4. Jurisdictions involved in the development of ground and/or surface water management plans shall pursue the adoption and implementation of the plans, as well as coordination and integration of the plans into local comprehensive plans as appropriate. Examples of such plans include the Lake Whatcom Management Plan, WRIA 1 Watershed Management Plan, Shellfish Protection District Plans and drinking water source protection plans.

5. All jurisdictions should participate in the process to establish a countywide water resource management body in accordance with the Watershed Management Act and other applicable federal, state and local regulations to inform GMA planning efforts.

6. All jurisdictions shall maximize reduction of water pollutants from stormwater runoff and combined sewer overflows.

O. Fiscal Impact

1. It is recognized that if the Growth Management Act and these policies are implemented to their maximum extent, county government may eventually lose the tax base needed to operate essential services, including the criminal justice function and the Offices of Treasurer, Assessor, and Auditor, which
serve all jurisdictions in the area. Revenue-sharing shall be addressed in inter-local agreements between Cities and the County.

P. Private Property Rights

1. As required in the Growth Management Act, private property shall not be taken for public use without just compensation having been made. It is not the purpose of this paragraph to expand or reduce the scope of private property already provided in local, state and federal law.

2. The county as required by Whatcom County Home Rule Charter Section 1.11, and cities should establish a pro-active process to anticipate potential takings and other private property issues and resolve them out of court.
Glossary

Affordable Housing: In this document the definition of "affordable housing" is to be developed by each community as part of the Comprehensive Planning process.

Capital Facilities Plan: A required element of the Comprehensive Plan designed to form a better match between development and provision of services. It must include an inventory of existing facilities, forecast of future needs and a six-year financing plan.

Critical Areas: As defined by each jurisdiction, including at least the following areas and ecosystems: (a) wetlands; (b) areas with a critical recharging effect on aquifers used for potable water; (c) fish and wildlife habitat conservation areas; (d) frequently flooded areas; and (e) geologically hazardous areas.

Greenbelts/Greenways: These are undeveloped open space, natural areas, including agricultural lands, golf courses and other recreational uses, wildlife corridors and similar uses.

Impact/Mitigation Fees: A payment of money imposed upon new development as a condition of approval as defined and provided by RCW 82.02 and/or 43.21C. This fee must be used exclusively to finance improvements in capital facilities that are necessitated by the development.

Inclusionary Zoning: Zoning that requires developers to provide a portion of housing units in a specific project or area to meet the needs of low and moderate income people.

In-fill: The practice of using developable land that lies within a city, UGA, or developed area outside resource lands, where services are available rather than passing over such parcels in favor of land farther out or farther from available services.

Interlocal Agreements: An agreement intended to apply within designated Urban Growth Areas to set clear and reasonable criteria for orderly annexations including guidelines on size and timing of annexations and urban levels of development, appropriate development standards and tax revenue-sharing provisions. Participants in the agreement could include the county, any adjacent city, affected fire districts (if applicable) and any other utility provider.

Level of Service (LOS): An established minimum capacity of public facilities or services that must be provided per unit of demand or other appropriate measure of need: Level of Service for transportation is usually expressed as a proportion derived by comparing a roadway's current volume to its capacity.

Low-Income Housing: The federal government defines low-income housing as housing provided for individuals earning 50% or less of the average family wage of the local jurisdiction.

Natural Resource Lands: Natural Resource Lands include agricultural, forestry, and mineral resource lands that are not already characterized by urban growth and that have long-term significance for the commercial production of food or other agricultural products, for the commercial production of timber, and that have long-term significance for the extraction of minerals.
Private Utilities: Water and/or sewer service owned and operated by an entity other than a political subdivision of the federal, state, or tribal governments.

Public Utilities: Water and/or sewer services owned and operated by a political subdivision of federal, state, or tribal governments (includes water and sewer districts and public utility districts).

Regional Transportation Planning Organization: An organization created by the Growth Management Act to coordinate regional transportation efforts and to foster cooperation among state and local jurisdictions. The Whatcom Council of Governments has been designated as the Regional Transportation Planning Organization for Whatcom County.

Resource-Based Industry: A business or industry that has a direct relationship to natural resources such as agriculture, minerals, forestry, and fishing. This type of industry is generally located in close proximity to the resource or resource land.

Short Term/Long Term Boundaries: Short Term boundaries are used as a tool for facilitating provision of urban levels of services and preventing sprawl. The Long Term boundary includes the short term boundary as well as areas that have unresolved issues within the identified 20-year Urban Growth Boundary.

Urban Fringe Subarea Plan: A plan pertaining to the Bellingham Urban Growth Area and a portion of Whatcom County immediately north of Bellingham and containing most of Bellingham’s suburban growth. It is a plan designating the interface between urban and rural land uses. Some part of the Urban Fringe Area will be included in an Urban Growth Area. Some of the area already lies within Bellingham’s Urban Service Area.

Urban Growth: growth that makes intensive use of land for the location of buildings, structures, and impermeable surfaces to such a degree as to be incompatible with the primary use of land for the production of food, other agricultural products, or fiber, or the extraction of mineral resources, rural uses, rural development, and natural resource lands designated pursuant to RCW 36.70A.170.

Urban Growth Area: An area designated within which urban growth will be encouraged and outside of which growth can occur only if it is not urban in nature.

Urban Level of Service: The minimum level of urban facilities and services, including sanitary sewer, water service, police protection, fire protection and emergency medical services, parks and recreation programs, solid waste management, electric service, land use controls, communication facilities and public schools, to support urban levels of development. A full range of services would add urban public transit, natural gas, storm drainage facilities, street lighting, libraries, local parks, local recreation facilities and services, and health services.

*Those headings with an asterisk (*) are the elements required by the Growth Management Act. The title was expanded for the first required category (Urban Growth Areas) to better reflect the content as the policies developed.
Community Value Statements
As derived from Visioning Public Process by Visioning Committee February 1994

Transportation
1. More lanes on major roads and more frequent public transit service with additional routes are the most important transportation issues for Whatcom County. The following transportation issues are of secondary importance:
   a. Need for bike lanes and footpaths.
   b. Enhancement of safety measures along County roads, for example, wider shoulders and signals at busy intersections.
   c. The desire for carpooling.
   d. Integration of various transportation modes (i.e.: ferry/bus link).

2. Financing transportation improvements need to be addressed because the public is only somewhat willing to pay additional taxes for roads and transit.

Urban Growth
1. Given that roughly 75% to 90% of the land base in Whatcom County (excluding public land) should be designated for rural, agricultural and forestry use 50 years hence, urban sprawl should be discouraged. To prevent sprawl, we should infill where possible, allow for growth where the infrastructure exists (sewer, water, etc.) and encourage upward not outward growth, particularly in Bellingham. Cluster housing should be allowed in rural areas. The objective is to increase housing densities in urban areas so that the elements which contribute to a rural lifestyle, including privacy, peace and quiet, open space, and little or no traffic are preserved.

2. Urban growth should not pollute or deplete water supplies and should not be allowed to encroach on lands needed to sustain our natural resource based industries, including agriculture, forestry, mining and fishing. Infill should occur in existing urban areas before annexation is considered. Both annexations and infilling should be subject to local citizen review and input. The costs of urban growth, including infrastructure and services (fire, sewer, schools, roads, etc.) should be paid for primarily by developers and secondarily by cities and public agencies (which are funded by taxpayers).

3. As Whatcom County continues to grow it is important to retain individual town and community character.

Property Rights
1. Preserving private property rights and protecting Whatcom County's natural environment and resources need not conflict with one another. Private property rights go hand-in-hand with private property responsibilities. People should be allowed to utilize their lands as they wish, so long as their actions do not unduly impact affected property owners. The interests of the community outweigh a single individual's property rights, however, in instances where property rights are infringed upon through public action, some form of compensation should be available to the landowner.

Historic Preservation
1. Whatcom County should preserve and maintain historical sites and artifacts.
2. As the County population continues to grow, the cultural composition of the County will become more diverse. Accepting these cultures in coming years will be important.

Public Facilities and Services
1. In the social services sector, first priority should be given to providing quality basic education and vocational training. Law enforcement, crime prevention, and other social services are also, although to a lesser extent, services which the community is willing to support.
2. While there was general consensus that expanding our County parks system is a worthwhile investment, financing such expansion through additional taxes should be approved by a vote of the people.

Housing
1. The ability to purchase or rent affordable housing (Mean price: $90,000) is important.
2. While affordable housing should be located in urban areas it should also exist throughout the County and there should be latitude and flexibility in zoning to allow for affordable housing in rural areas.
3. There was support for a mix of housing types that reflect different income and age levels.

Natural Resource Industries
1. Productive resource-based industries like agriculture, forestry, and fisheries should be encouraged and protected.
2. Gravel mining was a contentious issue, with some people supporting and others opposing gravel mining.
3. Agriculture, forestry, and fisheries industries should be sustained through good conservation practices.
4. Farmers should be given first priority when allocating water supplies, even if this has an impact on the volume of water available for future residential and industrial users.

Permits
Many residents in the County believe that they are over-regulated. A comprehensive review of the building permit process needs to be undertaken to ensure that the rules and regulations imposed are simpler to understand, less redundant, and above all, more flexible and more user friendly. Government agencies need to be more responsive to the public and more efficient and consistent in the processing of building permit applications. Wherever possible economic incentives rather than additional regulations should be used. There also needs to be better coordination between the regulatory requirements of federal, state and local agencies so that building permit applications are not unduly delayed.
Moreover, there needs to be greater, uniform enforcement of existing land-use rules and regulations.

Fewer building restrictions should apply to those property owners who want to build or enhance a single primary residence or accessory buildings on land zoned rural.

Rural residents should not be constrained by unnecessary and inflexible urban regulations, including land-use regulations, dog-leash laws, and burn bans.

**Citizen Participation and Coordination**

1. Respondents felt that government needs to be more responsive to its citizens and that people want to be able to exercise local control (i.e., neighborhoods/subareas) in all land-use decisions.

2. Property owners want personal notification prior to land-use decisions which impact them.

3. People want more opportunity for public input prior to passage of regulations, taxes, etc.

4. More issues should be subject to a vote of the people.

**Economic Development**

1. Allow free market solutions to economic development problems.

2. Business and industrial development should be encouraged.

3. Attracting high-paying jobs is more important than the quantity of jobs, but the County should, nonetheless, plan for service-related jobs such as tourism and recreation.

4. Allow for small and cottage businesses in rural areas that don’t remove productive agricultural and forest land.

5. Business and industrial development should occur primarily in designated areas including the I-5 corridor.

6. Maintaining water quality and quantity take priority over economic development.

7. Resource jobs should be encouraged.

8. Commercial development should occur along Guide-Meridian corridor at key intersections.

**Sprawl**

1. New growth should be located in existing business and residential areas, so that we can prevent urban sprawl.

2. Urban sprawl should be discouraged in Whatcom County. As a means to prevent sprawl we should infill where possible, grow where infrastructure is available, encourage growth to go up, not out, encourage clustering in rural areas, and 75-90% of the land area in Whatcom County designated for rural, agricultural, and forestry use in 50 years.

**Environment**

*Whatcom County Comprehensive Plan*
1. Protecting water quality and quantity and associated natural features like watersheds and aquifers is extremely important.

2. It is essential to protect Whatcom County's rivers, streams and natural beauty.

3. Our natural environment should be protected while at the same time ensuring our natural resource industries remain an important segment of our economy.

4. Residential, industrial, and commercial development should be discouraged on productive agricultural and forested lands.

**Open Space and Recreation**

1. Encourage open space designation, retention/development of recreational opportunities and conservation of fish and wildlife habitat.

2. Land purchased for open space or greenbelts should be purchased with existing County and state funds and other sources as appropriate.

3. Purchase of park land, greenbelts, and open space should be imposed only upon vote of the people.

**Land-Use/Zoning**

1. Zoning should provide consistency and predictability for property owners. At the same time, however, zoning designations are subject to change because the variables that dictate zoning designations are dynamic (population increase, building restrictions, transitions in the economy, etc.) and not static.

2. Clearly, zoning should conform to the best use of the land and allow for flexibility, latitude, and creativity in its application (cluster housing, accessory housing, etc.).

3. Citizens want to exercise more control in determining how their community will develop and grow including review of large-scale commercial, industrial, and residential projects.

4. 75% – 90% of our land supply (excluding National Forest and Park land) should be designated as rural, agricultural, and forestry land in the year 2040.

5. Residents want to maintain the rural character of Whatcom County and protect agriculture and forest lands. However, they also want greater self-determination on their property.

6. Three units or more per acre should be located only in urban areas.

7. New development should be prohibited in areas prone to flooding and discouraged on productive agricultural and forest lands.

**Rural Lifestyle**

1. Maintaining rural character is very important to County residents. The elements making up a rural lifestyle include:
Rank 1: Open Space
Rank 2: Quiet Areas/Private
Rank 3: Largely agriculture and forestry oriented
Rank 4: Low-density population
Crossroads/gathering places
Enjoy natural features of landscape
Freedom

Open space is an important element of rural lifestyle

Taxes

1. Current taxes are high. Spend tax money wisely and eliminate government waste.
2. If money must be spent to preserve land that provides significant public benefit, then current local funds should be used to compensate property owners.
3. People are more willing to be taxed for schools than for other services.
4. Some rural areas should have greater revenue-generating tax bases.
5. Use tax breaks to encourage positive stewardship of land, protect critical areas and resource lands, and provide relief to residents on a fixed income.
6. New taxes should be imposed only upon the vote of the people.
7. County residents do not want city residents to control the amount of taxes levied on them.
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Land Use
APPENDIX E

(PROPOSED TO BE REPLACED IN ITS ENTIRETY WITH THE ATTACHED)
[Note: this appendix is proposed to be deleted and replaced in its entirety]
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Chapter 1 - Introduction

Capital facilities, such as parks & recreation facilities, County buildings, law enforcement & criminal justice facilities, transportation, stormwater, water, sewer, school, and fire protection facilities are important because they support the growth envisioned in the Whatcom County Comprehensive Plan. Capital facilities generally have very long useful lives, significant costs, and are not mobile.

The focus of this 20-Year Capital Facilities Plan (CFP) is supporting the County’s review of urban growth areas and planning needed public facilities for the County’s population. County facility plans, city plans, special district plans, population, adopted level of service (LOS) standards and other demand indicators are the principal factors considered in the CFP. This CFP addresses both the six year period from 2017-2022 and, more generally, the seven to twenty year planning period from 2023-2036.

Growth Management Act

Growth Management Act (GMA) Planning Goal # 12 is to:

Ensure that those public facilities and services necessary to support development shall be adequate to serve the development at the time the development is available for occupancy and use without decreasing current service levels below locally established minimum standards (RCW 36.70A.020(12)).

The CFP is required by the GMA under RCW 36.70A.070. The GMA requires the CFP to identify facilities, include a realistic financing plan, and make adjustment to the plan if funding is inadequate. Specifically, RCW 36.70A.070(3) requires the capital facilities plan to include:

(a) An inventory of existing capital facilities owned by public entities, showing the locations and capacities of the capital facilities;

(b) a forecast of the future needs for such capital facilities;

(c) the proposed locations and capacities of expanded or new capital facilities;

(d) at least a six-year plan that will finance such capital facilities within projected funding capacities and clearly identifies sources of public money for such purposes; and

(e) a requirement to reassess the land use element if probable funding falls short of meeting existing needs and to ensure that the land use element, capital facilities plan element, and financing plan within the capital facilities plan element are coordinated and consistent.
CFP Purpose

In 2016, the County completed the required urban growth area (UGA) review in which the County considered growth forecasts and allocations, urban growth boundaries, and comprehensive plan designations. Projected population and employment growth to 2036 is a key assumption of this CFP. The purpose of the CFP is to plan adequate public facilities consistent with the Comprehensive Plan’s land use element, including UGA planning.

CFP Assumptions

This CFP is based on the following sources of information and assumptions:

- **County Facility Plans**: The County updates the *Six-Year Capital Improvement Program for Whatcom County Facilities* every other year and this six-year plan informs the 20-Year CFP. The County updates this 20-Year CFP, which also includes information relating to capital improvements in years 7-20, at least every eight years at the state-required periodic update of the Comprehensive Plan.

- **Service Provider Plans**: The capital plans of cities, special purpose districts, and other service providers, particularly those serving UGAs, were collected and reviewed including inventories, forecast of future needs, planned facilities, growth forecasts, and potential funding.

- **Growth Forecasts**: Forecasts of population and job growth were allocated to each UGA and the rural areas. The 2013 population and employment and the 2036 growth for each capital facility service provider were then estimated by special district boundary.

- **Revenue Forecasts**: Forecasts of revenues for County facilities were prepared out to the 2036 horizon year (Chapter 16). The revenue sources for city and special district service providers are summarized from available plans.

Special Purpose District Plans

Special purpose districts provide a number of facilities addressed by this CFP, including water, sewer, schools, and fire protection. Some of these special districts have prepared their own capital plans that provide information for these facilities. Specifically, with regard to special purpose district plans, Washington Administrative Code 365-196-415(4) indicates that the County should:

(a) Summarize the information within the capital facilities element;

(b) Synthesize the information from the various providers to show that the actions, taken together, provide adequate public facilities; and

(c) Conclude that the capital facilities element shows how the area will be provided with adequate public facilities.
Special districts play an important role in supporting the County’s land use plans. Information from special district plans, when available, has been summarized in this CFP.

**CFP Organization**

The CFP contains the inventory of existing facilities and presents a summary of capital improvement projects and financing to pay for these projects.

Each type of public facility is presented in a separate chapter, which generally follows the format shown below.

- **Inventory of Current Facilities**: A summary of existing capital facilities.
- **Forecast of Future Needs**: A forecast of future capital facility needs, which may include review of the County or service provider level of service (LOS) or design standards if applicable, is presented for each type of public facility.
- **Capital Projects and Funding**: A summary of capital improvements proposed through the planning period. A more detailed plan for County facilities is provided in the *Six-Year Capital Improvement Program for Whatcom County Facilities 2017-2022*, while generalized County capital improvements and funding for the remainder of the planning period (2023-2036) are identified in this 20-year CFP. For non-County providers, capital projects identified in the service providers’ most recent plans are summarized.
Chapter 2 – Parks, Trails and Activity Centers

The Whatcom County Parks and Recreation Department mission statement is to enrich the quality of life for the community and preserve the natural and cultural heritage of the County through provision of outstanding parks and trails, open space and natural areas, as well as recreational activities and senior services. Whatcom County government accomplishes this mission by providing a variety of recreational facilities, services and programs to residents and visitors.

In addition, there are three special parks districts that include land in unincorporated portions of the County. These parks and recreation districts are presented after County facilities.

Inventory of Current Facilities – County Facilities

County Parks, Trails and Activity Centers

The 2016 inventory of Whatcom County recreation facilities includes approximately 14,700 acres of park and open space area, 65 miles of trails, and 13 activity centers, as shown in more detail in the Six-Year Capital Improvement Program for Whatcom County Facilities.

Future Needs – County Facilities

Whatcom County Comprehensive Plan Policy 4F-1 (in Chapter 4) establishes level of service standards for developed parks and trails, as shown below.

<table>
<thead>
<tr>
<th>Category</th>
<th>LOS Standard</th>
</tr>
</thead>
<tbody>
<tr>
<td>Developed Parks</td>
<td>9.6 acres per 1,000 population</td>
</tr>
<tr>
<td>Trails</td>
<td>0.60 of a mile per 1,000 population</td>
</tr>
</tbody>
</table>

Developed Parks - Forecast of Future Needs

A level of service of 9.6 acres of developed parkland for every 1,000 people in the County was adopted in the Whatcom County Comprehensive Plan. With a projected county-wide population of 275,450 in the year 2036, the County’s existing parks will meet the adopted level of service over the 20-year planning period. However, the County is proposing park improvement projects to increase quality of existing park facilities and develop the Birch Bay Community Park to meet the longer term needs of a growing population.

Trails - Forecast of Future Needs

A level of service of 0.60 miles of trails for every 1,000 people in the County was adopted in the Whatcom County Comprehensive Plan. With a projected county-wide population of 275,450 in
the year 2036, almost 100 additional miles of trails would be needed over the 20-year planning period to serve the people of Whatcom County.

**Activity Center - Forecast of Future Needs**

The Whatcom County Comprehensive Plan does not contain a level of service standard for activity centers. Rather, the Comprehensive Plan Policy 4F-5 states:

> Continue to provide and support activity centers, including senior centers, to serve the growing population of Whatcom County by the following methods, as needed, which are listed in priority order: (1) implementing programming changes, (2) adding space to existing centers, and/or (3) establishing new centers.

**Capital Projects and Funding – County Facilities**

**Developed Parks**

Park projects anticipated in the six-year planning period include approximately $2.2 million in improvements. These projects, and their associated funding sources, are shown in the *Six-Year Capital Improvement Program for Whatcom County Facilities*. It is anticipated that approximately $500,000 would be spent annually on various park projects throughout the 7 to 20 year planning period. These costs would be paid from Real Estate Excise Tax (REET), grants, and foundation funds. The County will also monitor the adequacy of County park facilities throughout the planning period and consider other capital improvements and maintenance projects if warranted in the future.

**Trail Improvements**

Trail projects anticipated in the six-year planning period include approximately $3.5 million in improvements. These projects, and their associated funding sources, are shown in the *Six-Year Capital Improvement Program for Whatcom County Facilities*. It is anticipated that approximately $326,000 would be spent annually on various trail projects throughout the 7 to 20 year planning period. These costs would be paid from REET and grant funds. The County will also monitor the adequacy of County trail facilities throughout the planning period and consider other capital improvements and maintenance projects if warranted in the future.

**Activity Centers**

Activity Center projects anticipated in the six-year planning period include approximately $125,000 in improvements. These projects, and their associated funding sources, are shown in the *Six-Year Capital Improvement Program for Whatcom County Facilities*. It is anticipated that approximately $23,000 would be spent annually on various activity center projects throughout the 7 to 20 year planning period. These costs would be paid from REET and grant funds. The County will also monitor the adequacy of activity centers throughout the planning period and consider other capital improvements and maintenance projects if warranted in the future.
Regional Parks Districts

There are three regional park districts that include land area in unincorporated Whatcom County:

- Point Roberts Park & Recreation District 1;
- Blaine-Birch Bay Park & Recreation District 2; and
- Lynden Regional Parks & Recreation District 3.

Point Roberts Park & Recreation District 1

The Point Roberts Park and Recreation District does not have a capital facilities plan or master plan. However, the voters of the District approved a proposition on November 5, 2013 for Community Center Capital Improvements General Obligation Bonds in the amount of $250,000. This proposition authorized the District to replace the roof and HVAC systems of the community center, improve drainage on the site, and make other capital improvements to maintain and improve the safety and structural soundness of the center. The proposition authorized the District to issue $250,000 of general obligation bonds maturing within a maximum 10 years and to levy property taxes annually, in addition to regular tax levies, to repay the bonds.

Blaine-Birch Bay Park & Recreation District 2

The *Blaine-Birch Bay Park & Recreation District 2 Master Plan Document* was adopted by the Blaine-Birch Bay Park and Recreation District 2 Commissioners on February 9, 2016 (Resolution # 2016-1). The *Master Plan* states:

... The Blaine-Birch Park and Recreation District 2 (Formerly Northwest Park and Recreation District 2) has been in existence since 1979. From the time of the original inception of the District, the area has gone through significant change and growth. New homes, businesses and residents have come to the area over the past twenty years. Residents with a wide range of ages and interests now live in the District. Park, recreation and trail needs are becoming very important to the livability of the region... (p. 18).

The *Master Plan* contains a facility inventory identifying park and recreation facilities within the District (pp. 24-34), recommended LOS standards (pp. 20-21), funding options and methods (p. 35), and a six-year capital improvement program that includes $1.5 million in trail connection improvement projects in 2016-2017 (pp. 36-37).

The voters of the District approved a proposition on November 5, 2013 to assess a regular property tax levy for a four year period (2014-17) of $0.10 per $1,000.00 of assessed valuation to fund staffing, operations, maintenance, and capital improvements to improve recreation and leisure time activities and opportunities for people of all ages in the greater Blaine-Birch Bay area.
Lynden Regional Parks and Recreation District 3

The Lynden Regional Parks and Recreation District is currently in the process of updating their master plan. The voters of the District did not approve a proposition on November 6, 2012 that would have authorized the District to purchase an indoor recreation facility, to issue $9,500,000 of general obligation bonds maturing within a maximum term of 30 years to finance acquisition of such facility, and to levy property taxes annually in excess of regular property tax levies to repay such bonds.
Chapter 3 – Maintenance & Operations

Inventory of Current Facilities

The 2016 inventory of County maintenance and operations/facilities management space is 44,411 square feet located at 901 W. Smith Rd. (the Central Shop), 316 Lottie St. and 2030 Division Street, as shown in more detail in the Six-Year Capital Improvement Program for Whatcom County Facilities.

Future Needs

Chapter 4 of the Whatcom County Comprehensive Plan does not contain LOS standards for maintenance and operations facilities. Rather, it contains goals and policies supportive of providing adequate County facilities.

Capital Projects and Funding

The following capital improvement projects are anticipated in the six-year planning period: A new vector truck garage and the Central Shop exhaust system. These improvements will cost approximately $400,000, which will be paid with the funding sources shown in the Six-Year Capital Improvement Program for Whatcom County Facilities.

There are no capital improvement projects currently identified that would add maintenance and operations space within the 7 to 20 year planning period. However, the County will monitor the adequacy of maintenance and operation facilities throughout the planning period and consider capital improvements if warranted in the future. Maintenance projects will be undertaken as needed.
Chapter 4 – General Government Office Buildings and Sites

Inventory of Current Facilities

The 2016 inventory of County general government office buildings and sites is 306,691 square feet at eight locations, as shown in more detail in the *Six-Year Capital Improvement Program for Whatcom County Facilities*.

Future Needs

Chapter 4 of the Whatcom County Comprehensive Plan does not contain LOS standards for maintenance and operations facilities. Rather, it contains goals and policies supportive of providing adequate County facilities. Specifically, Comprehensive Plan Policy 4A-1 is to “Plan appropriate county facilities commensurate with the ability of the county to fund them.”

Capital Projects and Funding

Capital improvement projects anticipated in the six-year planning period include improvements to the Whatcom County Courthouse (311 Grand Ave.), 509 Girard St., 1500 N. State St., the Civic Center (322 North Commercial), Northwest Annex (5280 Northwest Dr.) and multiple other locations. Additionally, a new mental health triage center is planned. These improvements will cost approximately $23.2 million, which will be paid with the funding sources shown in the *Six-Year Capital Improvement Program for Whatcom County Facilities*.

Capital improvement projects in the 7 to 20 year planning period include a $34 million dollar Courthouse exterior project, which would be paid with bond proceeds that would be repaid from the General Fund, Real Estate Excise Tax (REET I) and/or Economic Development Initiative (EDI) program funds. Additionally, approximately $700,000 to $1,000,000 would be spent annually on various general maintenance projects. These costs would be paid from REET I and/or EDI funds.

The County will also monitor the adequacy of County buildings throughout the planning period and consider capital improvements and maintenance projects if warranted in the future.
Chapter 5 – Sheriff’s Office

Inventory of Current Facilities

The 2016 inventory of Sheriff’s Office space is 23,326 square feet at six locations, as shown in more detail in the Six-Year Capital Improvement Program for Whatcom County Facilities.

Future Needs

Chapter 4 of the Whatcom County Comprehensive Plan does not contain LOS standards for Sheriff’s Office space. Rather, it contains goals and policies supportive of providing adequate Sheriff’s Office facilities. Specifically, Comprehensive Plan Policy 4D-2 is to:

Maintain Sheriff’s Office adult corrections facilities and headquarters to provide a safe environment for the community, staff and inmates. . . Existing facilities may be expanded or new facilities developed in response to increasing need.

Most Sheriff’s Office functions are currently based in the Public Safety Building adjacent to the Courthouse and are remote from the majority of Sheriff’s Office Bureau of Law Enforcement and Investigative Services functions that take place in unincorporated Whatcom County. This results in inefficiencies and delays. Space and design factors in current facilities preclude consolidating various functions performed throughout the agency (reception, finance, etc.) and result in redundancies. Because of these issues, existing Sheriff’s Office facilities and associated functions will be consolidated (except for “Resident Deputy” program facilities), and co-located on the site of the proposed new jail.

Capital Projects and Funding

A new Sheriff’s Headquarters facility, co-located with the proposed new jail on LaBounty Rd. in Ferndale, is proposed within the six-year planning period. The Sheriff’s Headquarters facility would cost approximately $19 million, paid with bond proceeds that would be repaid from the General Fund.

There are no capital improvement projects currently identified that would add Sheriff’s Office space within the 7 to 20 year planning period. However, the County will monitor the adequacy of Sheriff’s Office facilities throughout the planning period and consider capital improvements if warranted in the future. Maintenance projects will be undertaken as needed.
Chapter 6 – Emergency Management

Inventory of Current Facilities

The 2016 inventory of Sheriff’s Office, Division of Emergency Management space is 24,000 square feet, located at the Whatcom Unified Emergency Coordination Center (WUECC). Rented by and shared between both Whatcom County and the City of Bellingham, the WUECC is comprised of 2,000 square feet of office space and an additional 22,000 square feet of support facilities (used for meetings, training, exercises, and during emergencies). The WUECC serves as the Emergency Operations Center for both the County and the City.

Future Needs

Chapter 4 of the Whatcom County Comprehensive Plan does not contain LOS standards for emergency management space. Rather, it contains goals and policies supportive of providing adequate emergency management facilities. Specifically, Comprehensive Plan Policy 4D-4 is to:

Maintain adequate facilities for daily emergency management activities and, during an emergency or disaster, for the emergency operations center. The facilities will provide sufficient space for activities relating to emergency/disaster planning, mitigation, response and recovery. Existing facilities may be expanded or new facilities developed in response to increasing need.

Capital Projects and Funding

There are no capital improvement projects currently identified that would add usable emergency management space within the 20 year planning period. However, the County will monitor the adequacy of emergency management facilities throughout the planning period and consider capital improvements if warranted in the future. Maintenance projects will be undertaken as needed.
Chapter 7 – Adult Corrections

Inventory of Current Facilities

The County’s Main Jail was designed for 148 beds, although it currently has 283 beds due to double bunking, internal remodeling and use of temporary beds. Additionally, the jail is currently not in compliance with the Building/Fire Codes for double bunking, although a plan has been approved to bring it into compliance. Whatcom County completed construction of a 150 bed minimum security correction facility on Division St. in 2006. The Main Jail is located in the Public Safety Building next to the County Courthouse in downtown Bellingham and the Minimum Security Correction Facility is located in the Bakerview Rd. industrial area.

Future Needs

Chapter 4 of the Whatcom County Comprehensive Plan does not contain LOS standards for adult corrections facilities. Rather, it contains goals and policies supportive of providing adequate corrections facilities. Specifically, Comprehensive Plan Policy 4D-2 is to:

Maintain Sheriff’s Office adult corrections facilities and headquarters to provide a safe environment for the community, staff and inmates. The number of jail beds in adult corrections facilities will be determined after review of multiple factors, including projected population growth, State sentencing laws, alternative programs, treatment diversion programs, early release programs, the need to separate violent inmates, the need to separate inmates by gender, the need to separate inmates by other classification considerations, average length of stay, peak inmate populations and available funding. Existing facilities may be expanded or new facilities developed in response to increasing need.

There are serious concerns among law and justice officials relating to jail facility needs in the community. This need has been documented by recommendations from the Whatcom County Law and Justice Plan Phase II Report (June 2000), in a report entitled Operational Review of the Whatcom County, Washington Jail (March 2004), in the Whatcom County Jail Planning Task Force Recommendations (Dec. 2011 and March 2012), and in the Whatcom County Adult Corrections Facilities & Sheriff’s Headquarters Pre-Design Report (Sept. 2013).

Capital Projects and Funding

In an effort to meet the community need, the County plans to construct a new Adult Corrections Facility on LaBounty Rd. in Ferndale, tentatively scheduled to open with 521 beds within the six-year planning period. At the time this new jail is opened, the offenders at the minimum-security
corrections facility would be relocated to the new facility. The cost of the proposed new jail is approximately $112,000,000, which would be paid with bond proceeds that would be repaid with new sales tax.

As an interim measure, existing correction facility improvements are planned so that these buildings can continue to function until the new jail is completed. The cost of the improvements to the existing jail facilities is approximately $3,000,000, which would be paid from the Jail Improvement Fund and the General Fund.

There are no capital improvement projects currently identified that would add jail facilities within the 7 to 20 year planning period. However, the County will monitor the adequacy of jail facilities throughout the planning period and consider capital improvements if warranted in the future. Maintenance projects will be undertaken as needed.
Chapter 8 – Juvenile Detention

Inventory of Current Facilities

The 2016 inventory of County juvenile detention facilities includes 32 beds serving the county-wide population. The juvenile detention facility is located on the sixth floor of the County Courthouse at 311 Grand Avenue.

Future Needs

Chapter 4 of the Whatcom County Comprehensive Plan does not contain LOS standards for juvenile detention. Rather, it contains goals and policies supportive of providing adequate juvenile facilities. Specifically, Comprehensive Plan Policy 4D-3 is to:

Maintain juvenile detention facilities and alternative corrections programs to provide safe and secure methods to provide accountability and support for minors who break the law. Existing facilities may be expanded or new facilities developed in response to increasing need.

Capital Projects and Funding

There are no capital improvement projects currently identified that would add juvenile detention space within the 20 year planning period. However, the County will monitor the adequacy of juvenile detention facilities and alternative correction methods throughout the planning period and consider capital improvements if warranted in the future. Maintenance projects will be undertaken as needed.
Chapter 9 – Transportation

Transportation (Countywide)

Overview

Whatcom County’s roadway network is principally made up of County roads as well as state highways, such as I-5 and SR-9, which provide intercity and interstate connections. In addition to the roadway network, Whatcom County also operates a daily ferry service between Gooseberry Point and Lummi Island.

Inventory of Current Facilities

The 2014 inventory of County transportation facilities shows a total of 939 miles of County roads (approximately 358 miles are classified as an arterial or collector roadways). Table 9-1 shows the existing miles of countywide arterial roadways by federal functional classification.

<table>
<thead>
<tr>
<th>Functional Classification</th>
<th>Total Miles of Roadway (centerline miles)</th>
<th>Percent of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rural Major Collector</td>
<td>134.1</td>
<td>14%</td>
</tr>
<tr>
<td>Rural Minor Collector</td>
<td>154.2</td>
<td>16%</td>
</tr>
<tr>
<td>Rural Local Access</td>
<td>455.8</td>
<td>49%</td>
</tr>
<tr>
<td>Urban Principal Arterial</td>
<td>0.3</td>
<td>0%</td>
</tr>
<tr>
<td>Urban Minor Arterial</td>
<td>25.5</td>
<td>3%</td>
</tr>
<tr>
<td>Urban Collector</td>
<td>37.8</td>
<td>4%</td>
</tr>
<tr>
<td>Urban Minor Collector</td>
<td>6.4</td>
<td>1%</td>
</tr>
<tr>
<td>Urban Local Access</td>
<td>125.5</td>
<td>13%</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td><strong>939.5</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>


In addition to the roadway network discussed above, the County owns one ferry vessel which it uses to provide its Lummi Island ferry service.
Future Needs

County LOS Standards
The Whatcom County Comprehensive Plan’s Chapter Six establishes LOS standards for transportation facilities. Motor vehicle LOS for roadway segments is based on a volume/capacity (V/C) ratio, the estimated peak-hour volume of a roadway segment divided by the estimated hourly capacity of that segment, as categorized in Table 9-2.

<table>
<thead>
<tr>
<th>LOS Designation</th>
<th>V/C Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>0-0.59</td>
</tr>
<tr>
<td>B</td>
<td>0.60-0.69</td>
</tr>
<tr>
<td>C</td>
<td>0.70-0.79</td>
</tr>
<tr>
<td>D</td>
<td>0.80-0.89</td>
</tr>
<tr>
<td>E</td>
<td>0.90-0.99</td>
</tr>
<tr>
<td>F</td>
<td>&gt;1.00</td>
</tr>
</tbody>
</table>

Whatcom County’s adopted transportation LOS standards for roadway segments are set in Comprehensive Plan Policies 6A-1 through 6A-4. For county arterials and major collectors located outside of urban growth areas during weekday p.m.-peak hours, the adopted LOS is C or better, except for specified primary routes as shown on Map 6-2, which have a LOS of D or better. The LOS standard for county arterials and major collectors within urban growth areas during weekday p.m. peak hours is D or better.

LOS Analysis
The Transportation LOS analysis is taken from an analysis prepared for the Final EIS Whatcom County 2016 Comprehensive Plan and Development Regulations Update and Urban Growth Areas Review (November 2015). Using the Whatcom Council of Governments regional model, the projected population and employment growth was used to estimate the number of trips that will be generated in 2036. These trips were then distributed among transportation analysis zones and assigned to the street network. The result is a model of projected future traffic conditions based on the land use assumptions for each of the studied alternatives. The future transportation network reflects future improvement projects for which funding has been committed.
After the future 2036 traffic volume on each analysis road segment was projected, it was divided by the road’s capacity to calculate the volume to capacity (V/C) ratio. For any segments on which projected V/C would exceed the adopted LOS standard for that road a potential adverse impact was identified, and mitigation identified that would lower V/C to a level within adopted standards.

Table 9-3 lists the county roads with projected 2036 V/C ratios that exceed LOS standards under the Final EIS preferred alternative. A total of 1.64 miles of County roadways are projected to be deficient, or about 0.5% of the total 358 miles of County arterial and collector roads.

### Table 9.3. Roadways with Deficient Segments by 2036

<table>
<thead>
<tr>
<th>Analysis ID</th>
<th>Road Name</th>
<th>Location</th>
<th>Length (mi.)</th>
<th>LOS Standard V/C</th>
<th>Projected 2036 LOS V/C</th>
</tr>
</thead>
<tbody>
<tr>
<td>162</td>
<td>Hannegan Rd</td>
<td>Van Wyck Rd to Kelly Rd</td>
<td>1.01</td>
<td>0.9 (LOS D)</td>
<td>0.93 (LOS E)</td>
</tr>
<tr>
<td>243</td>
<td>Lakeway Dr</td>
<td>Bellingham City Limits to Lowe Ave</td>
<td>0.42</td>
<td>0.9 (LOS D)</td>
<td>1.10 (LOS F)</td>
</tr>
<tr>
<td>244</td>
<td>Lakeway Dr</td>
<td>Lowe Ave to Terrace Ave</td>
<td>0.21</td>
<td>0.9 (LOS D)</td>
<td>0.97 (LOS E)</td>
</tr>
<tr>
<td>Total Deficient Roadway Segments</td>
<td></td>
<td></td>
<td>1.64</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Source: Final EIS Whatcom County 2016 Comprehensive Plan and Development Regulations Update and Urban Growth Areas Review (November 2015) Tables 3.9-1 and 3.9-2*

### Capital Projects and Funding

Table 9-4 identifies the roadway locations that have been identified for improvement over the next 20 years, with planning-level cost estimates. Based on this list and a review of current safety and system preservation needs, the County annually prepares and adopts a Six-Year Transportation Improvement Program (TIP), which programs the implementation of needed improvements over the next six years. Funding sources for transportation improvement projects are identified in Chapter 16.

Projects to increase capacity on roadway segments that are projected to fall below adopted LOS (listed in Table 9-3) are included in the 20-year plan. If sufficient capacity cannot be achieved through these projects, or funding is insufficient to implement the needed capacity increase, the County can consider adjusting the adopted LOS.

Only a few new roadway alignments are included among the 20-year projects: Lincoln Road between Shintaffer Road and Blaine Road, Horton Road between Northwest Drive and Aldrich Road, and Slater Road between Northwest Drive and Hannegan. These projects are intended to provide additional east-west connectivity north of Birch Bay and northwest of Bellingham.
<table>
<thead>
<tr>
<th>ID</th>
<th>Portion of project in 6-Year Plan</th>
<th>Project Name</th>
<th>Location/Project Limits</th>
<th>Proposed Improvement</th>
<th>Estimated Project Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>I-3</td>
<td>X</td>
<td>Birch Bay-Lynden Road/ Harborview Road</td>
<td>Intersection</td>
<td>Construct intersection improvements to include turn lanes and install traffic signal when warranted</td>
<td>$3,000,000</td>
</tr>
<tr>
<td>R-4</td>
<td>X</td>
<td>Lincoln Road Extension and Improvement</td>
<td>Harborview Road to Blaine Road (SR 548)</td>
<td>Reconstruct existing road and construct 2-lane urban arterial to Blaine Road with non-motorized enhancement including construction of roundabouts at intersections with Blaine Road and Harborview Road.</td>
<td>$4,500,000</td>
</tr>
<tr>
<td>S-15</td>
<td>X</td>
<td>Birch Bay-Lynden Road/Blaine Road (SR-548)</td>
<td>Intersection</td>
<td>Construct intersection improvements to include roundabout or install turn lanes and traffic signal, when warranted</td>
<td>$3,000,000</td>
</tr>
<tr>
<td>S-17</td>
<td></td>
<td>Grandview Road (SR 548)/ Vista Drive</td>
<td>Intersection</td>
<td>Construct intersection improvements to include roundabout or install turn lanes and traffic signal, when warranted</td>
<td>$3,000,000</td>
</tr>
<tr>
<td>EIS-3</td>
<td></td>
<td>Hannegan Road</td>
<td>Bellingham City Limits - Van Wyck Road</td>
<td>Add left-turn lanes at intersections and driveways and widen the road to meet the urban minor arterial standard.</td>
<td>$3,868,000</td>
</tr>
<tr>
<td>EIS-4</td>
<td></td>
<td>Hannegan Road</td>
<td>Van Wyck Road - SR 544</td>
<td>Add left-turn lanes at intersections and driveways and widen the road to meet the rural major collector standard.</td>
<td>$9,673,000</td>
</tr>
<tr>
<td>WC-7</td>
<td></td>
<td>Lake Louise Rd.</td>
<td>Sudden Valley Gate 13 to Austin St.</td>
<td>Reconstruct to Major Collector standards including non-motorized facilities</td>
<td>$8,000,000</td>
</tr>
<tr>
<td>WC-8</td>
<td></td>
<td>Lake Louise Rd.</td>
<td>Sudden Valley Gate to Whatcom Blvd.</td>
<td>Reconstruct to Major Collector standards including non-motorized facilities</td>
<td>$8,000,000</td>
</tr>
<tr>
<td>WC-10</td>
<td>X</td>
<td>Marine Drive</td>
<td>McAlpine Road to BNSFRR Overpass.</td>
<td>Reconstruct to Urban Minor Arterial standards with non-motorized facilities</td>
<td>$1,400,000</td>
</tr>
<tr>
<td>WC-14</td>
<td></td>
<td>Slater Rd.</td>
<td>Hannegan Rd. to Northwest Dr.</td>
<td>Construct 2-lane extension road to Kelly Rd. at Collector standards with non-motorized facilities</td>
<td>$4,000,000</td>
</tr>
<tr>
<td>ID</td>
<td>Portion of project in 5-Year Plan</td>
<td>Project Name</td>
<td>Location/ Project Limits</td>
<td>Proposed Improvement</td>
<td>Estimated Project Cost</td>
</tr>
<tr>
<td>------</td>
<td>----------------------------------</td>
<td>---------------------------------------</td>
<td>----------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------------------</td>
<td>------------------------</td>
</tr>
<tr>
<td>EIS-10</td>
<td>X</td>
<td>Slater Road/Ferndale Road</td>
<td>Intersection</td>
<td>Install traffic signal when warranted</td>
<td>$3,000,000</td>
</tr>
<tr>
<td>I-2</td>
<td></td>
<td>Birch Bay-Lynden Road/ Kickerville Rd.</td>
<td>Intersection</td>
<td>Construct intersection improvements to include roundabout or install turn lanes and traffic signal, when warranted</td>
<td>$3,000,000</td>
</tr>
<tr>
<td>I-4</td>
<td></td>
<td>Birch Bay Drive/ Harborview Rd</td>
<td>Intersection</td>
<td>Improve/ redesign the intersection with turn lanes, and install traffic signal, when warranted</td>
<td>$3,000,000</td>
</tr>
<tr>
<td>R-6</td>
<td></td>
<td>Harborview Road</td>
<td>Birch Bay Drive to Birch Bay-Lynden Road</td>
<td>Improve roadway to urban principal arterial standards including non-motorized facilities</td>
<td>$200,000</td>
</tr>
<tr>
<td>R-7</td>
<td></td>
<td>Harborview Road</td>
<td>Birch Bay-Lynden Road to Drayton Harbor Rd</td>
<td>Improve roadway to major collector standards including non-motorized facilities</td>
<td>$200,000</td>
</tr>
<tr>
<td>M-1</td>
<td>X</td>
<td>Birch Bay Drive</td>
<td>Alderson Road to Shintaffer Road</td>
<td>Improve roadway to urban minor arterial standards including non-motorized facilities</td>
<td>$1,000,000</td>
</tr>
<tr>
<td>M-2</td>
<td>X</td>
<td>Birch Bay Drive</td>
<td>Alderson Road to Point Whitehom Road</td>
<td>Improve to urban minor arterial standards including non-motorized facilities</td>
<td>$1,800,000</td>
</tr>
<tr>
<td>M-8</td>
<td></td>
<td>Portal Way</td>
<td>Birch Bay – Lynden Road to Loomis Trail Road</td>
<td>Reconstruct to rural collector standards including paved shoulders for non-motorized travel.</td>
<td>$1,200,000</td>
</tr>
<tr>
<td>M-13</td>
<td></td>
<td>Jackson Road</td>
<td>Birch Bay Drive to Grandview Road</td>
<td>Reconstruct to rural collector standards including paved shoulders for non-motorized facilities</td>
<td>$1,200,000</td>
</tr>
<tr>
<td>S-5</td>
<td></td>
<td>Blaine Road (SR 548)/ Drayton Harbor Road</td>
<td>Intersection</td>
<td>Improve / redesign the intersection with turn lanes and install traffic signal when warranted</td>
<td>$2,000,000</td>
</tr>
<tr>
<td>S-6</td>
<td></td>
<td>Blaine Road (SR 548) / Loomis Trail Road</td>
<td>Intersection</td>
<td>Improve/redesign the intersection with turn lanes and install traffic signal when warranted</td>
<td>$2,000,000</td>
</tr>
<tr>
<td>WC-11</td>
<td>X</td>
<td>North Shore Rd.</td>
<td>Bellingham City limits to Y Rd.</td>
<td>Reconstruct to Minor Arterial standards with non-motorized facilities enhancement (bike lane), clear zones</td>
<td>$8,000,000</td>
</tr>
<tr>
<td>WC-12</td>
<td>X</td>
<td>Siper Rd.</td>
<td>SR 9 (Nooksack Rd.) to Hopewell Rd.</td>
<td>Reconstruct to Collector Standards including drainage system and non-motorized facilities</td>
<td>$5,000,000</td>
</tr>
<tr>
<td>ID</td>
<td>Portion of project in 6-Year Plan</td>
<td>Project Name</td>
<td>Location/ Project Limits</td>
<td>Proposed Improvement</td>
<td>Estimated Project Cost</td>
</tr>
<tr>
<td>--------</td>
<td>----------------------------------</td>
<td>-----------------------</td>
<td>------------------------------------------------</td>
<td>-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>------------------------</td>
</tr>
<tr>
<td>WC-13</td>
<td></td>
<td>Slater Rd. (along Kelly)</td>
<td>Hannegan to SR 542 (Mt. Baker Highway)</td>
<td>Upgrade from Local to Collector class and reconstruct at Collector standards including drainage system and nonmotorized facilities</td>
<td>$10,000,000</td>
</tr>
<tr>
<td>M-6</td>
<td></td>
<td>Drayton Harbor Road</td>
<td>Harborview Road to Blaine Road</td>
<td>Improve to rural collector standards with shoulders for non-motorized travel.</td>
<td>$1,800,000</td>
</tr>
<tr>
<td>M-10</td>
<td></td>
<td>Birch Point Road</td>
<td>Semiahmoo Drive to Shintaffer Road</td>
<td>Reconstruct to urban minor arterial standards including non-motorized facilities.</td>
<td>$3,000,000</td>
</tr>
<tr>
<td>M-14</td>
<td></td>
<td>Loomis Trail Road</td>
<td>Blaine Road to Portal Way</td>
<td>Reconstruct to rural collector standards including paved shoulders for non-motorized travel.</td>
<td>$1,200,000</td>
</tr>
<tr>
<td>M-15</td>
<td></td>
<td>Semiahmoo Drive</td>
<td>Blaine city limits to Birch Point Road</td>
<td>Reconstruct to rural collector standards including paved shoulders for non-motorized travel.</td>
<td>$2,000,000</td>
</tr>
<tr>
<td>M-16</td>
<td></td>
<td>Shintaffer Road</td>
<td>Lincoln Road to Birch Bay Dr.</td>
<td>Reconstruct to rural collector standards including paved shoulders for non-motorized travel.</td>
<td>$600,000</td>
</tr>
<tr>
<td>M-17</td>
<td></td>
<td>Vista Drive</td>
<td>Bay Road to Grandview Road</td>
<td>Reconstruct to rural collector standards including paved shoulders for non-motorized travel.</td>
<td>$1,500,000</td>
</tr>
<tr>
<td>M-18</td>
<td></td>
<td>Bay Road</td>
<td>Blaine Road to Vista Road</td>
<td>Reconstruct to rural collector standards including paved shoulders for non-motorized travel.</td>
<td>$2,600,000</td>
</tr>
<tr>
<td>M-19</td>
<td></td>
<td>Alderson Road</td>
<td>Birch Bay Drive to Blaine Road</td>
<td>Reconstruct to rural collector standards including paved shoulders for non-motorized travel.</td>
<td>$600,000</td>
</tr>
<tr>
<td>WC-1</td>
<td></td>
<td>Bakerview Rd.</td>
<td>E Bakerview to Aldrich Rd</td>
<td>Reconstruct to urban arterial, standards including non-motorized facilities.</td>
<td>$3,000,000</td>
</tr>
<tr>
<td>WC-21</td>
<td></td>
<td>San Juan Blvd.</td>
<td>40th St. to 48th St.</td>
<td>Construction and extension of new Urban Arterial (2 phases) with non-motorized facilities.</td>
<td>$7,700,000</td>
</tr>
<tr>
<td>EIS-1</td>
<td></td>
<td>Lakeway Drive/ Terrace Avenue N/</td>
<td>Bellingham City Limits - Lake Whatcom</td>
<td>Widen to 4 lanes at urban minor arterial</td>
<td>$12,402,000</td>
</tr>
</tbody>
</table>

February 2014
<table>
<thead>
<tr>
<th>ID</th>
<th>Portion of project in 6-Year Plan</th>
<th>Project Name</th>
<th>Location/ Project Limits</th>
<th>Proposed Improvement</th>
<th>Estimated Project Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>EIS-2</td>
<td></td>
<td>Cable Street Boulevard</td>
<td></td>
<td>standards; add left turn lanes.</td>
<td>$7,993,000</td>
</tr>
<tr>
<td>EIS-6</td>
<td></td>
<td>Everson Goshen Road SR 542 - SR 544</td>
<td></td>
<td>Add left-turn lanes at rural major collector standards.</td>
<td>$1,833,000</td>
</tr>
<tr>
<td>EIS-7</td>
<td></td>
<td>Marine Drive Lummi Shore Drive (North of Cagey Road) - Country Lane</td>
<td></td>
<td>Add left-turn lanes at rural major collector standards.</td>
<td>$3,157,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Marine Drive Bancroft Road - Alderwood Avenue</td>
<td></td>
<td>Add left-turn lanes at urban minor arterial standards.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>W. Smith Road/ Northwest Drive Intersection</td>
<td></td>
<td>Construct roundabout when warranted</td>
<td>$4,000,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td>E. Smith Road/ Hannegan Road Intersection</td>
<td></td>
<td>Improve/redesign intersection or build roundabout when warranted</td>
<td>$3,000,000</td>
</tr>
<tr>
<td>EIS-8</td>
<td></td>
<td>Northwest Drive Bellingham City Limits - Smith Road W</td>
<td></td>
<td>Add left-turn lanes at rural minor arterial standards.</td>
<td>$5,526,000</td>
</tr>
<tr>
<td>EIS-9</td>
<td></td>
<td>Slater Road Lake Terrell Road - 0.70 mile west of Haxton Way (1.8 miles)</td>
<td></td>
<td>Add left-turn lanes at rural major collector standards.</td>
<td>$2,140,000</td>
</tr>
</tbody>
</table>
Transit

Overview

Whatcom Transportation Authority (WTA) is the primary provider of public transportation services in Whatcom County. WTA provides fixed-route bus service in Bellingham and throughout Whatcom County. Complementary paratransit service is offered in conjunction with broader senior and disabled service under the Specialized Transportation program. WTA also offers vanpool leasing, ride matching and commuter van service from selected markets.

Inventory of Current Facilities

The WTA operates 30 fixed routes with 59 transit coaches (primarily 35- and 40-foot Gillig buses). Paratransit service is provided by 34 mini-buses with a capacity to carry 16 passengers each. WTA owns and manages a fleet of 39 vans for its two commuter van services. Table 9-5 below summarizes the park & ride facilities that WTA serves along with routes that serve them.

Table 9-5. Whatcom Transportation Authority Park & Ride Facilities

<table>
<thead>
<tr>
<th>Park &amp; Ride</th>
<th>Location</th>
<th>Served by Routes</th>
<th>Number of Parking Stalls</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cordata Station</td>
<td>4170 Cordata Parkway</td>
<td>3, 4, 15, 24, 25X, 26, 27, 48, 55, 71X, 232, 331</td>
<td>70</td>
</tr>
<tr>
<td>Chuckanut</td>
<td>999 N. Burlington Rd.</td>
<td>80X</td>
<td>369</td>
</tr>
<tr>
<td>Alger</td>
<td>Lake Samish Rd.</td>
<td>80X</td>
<td>54</td>
</tr>
<tr>
<td>Ferndale Station</td>
<td>1671 Main Street</td>
<td>27, 70X, 55</td>
<td>131</td>
</tr>
<tr>
<td>South Bellingham East</td>
<td>I-5 and Old Fairhaven Parkway (Exit 250 East side)</td>
<td>105</td>
<td>29</td>
</tr>
<tr>
<td>South Bellingham West</td>
<td>I-5 and Old Fairhaven Parkway (Exit 250 West side)</td>
<td>105</td>
<td>24</td>
</tr>
<tr>
<td>Lynden Station</td>
<td>1945 Front Street</td>
<td>26, 25X</td>
<td>89</td>
</tr>
<tr>
<td>Northwest Avenue</td>
<td>East of Northwest on McLeod Rd.</td>
<td>232</td>
<td>(Not listed)</td>
</tr>
<tr>
<td>Birch Bay Square</td>
<td>8115 Birch Bay Square St.</td>
<td>70X, 55</td>
<td>10</td>
</tr>
<tr>
<td>Blaine Library</td>
<td>3rd and G Street</td>
<td>70X, 55</td>
<td>10</td>
</tr>
<tr>
<td>Lincoln Creek</td>
<td>Lincoln Street, north of I-5 on-ramp</td>
<td>80X, 90A&amp;B, 190</td>
<td>530</td>
</tr>
<tr>
<td>Fairhaven Park &amp; Ride</td>
<td>Harris and 4th</td>
<td>(Not listed)</td>
<td>237</td>
</tr>
<tr>
<td>Blaine Library</td>
<td>3rd and G Street</td>
<td>(Not listed)</td>
<td>10</td>
</tr>
</tbody>
</table>

Future Needs

Public transit providers typically provide LOS standards difficult to relate to capital facility needs with respect to changes in population over time. For example, Whatcom Transportation Authority (WTA) provides one capital facility standard of a shelter at each transit stop that has 25 boardings or more (WTA Strategic Plan, page 2-43, September 2004).

Capital Projects and Funding

Capital Project Funding

According to WSDOT’s 2014 Summary of Public Transportation, WTA is expected to receive $2.8 million annually from 2016-2021 from Federal Section 5307 Grants. These are the only funds reserved for capital, as other revenue sources such as fare box revenues and sales tax may also be used for operating expenses.

Capital Projects

The WTA breaks down capital outlays under categories that include Vehicles, Public Facilities, Strategic Partnerships, Street Side Improvements, and Technology Projects. The WTA’s 2016-2021 approved Transportation Improvement Program identified the following projects that will occur during the County CFP planning period.

Table 9-6. Transit Capital Projects

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Whatcom Transportation Authority</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vehicle Purchases</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cost</td>
<td>6,290</td>
<td>477</td>
<td>7,259</td>
<td>5,461</td>
<td>4,035</td>
<td>4,166</td>
<td></td>
<td>27,688</td>
</tr>
<tr>
<td>Technology Projects</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cost</td>
<td>4,150</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4,150</td>
</tr>
<tr>
<td>Facilities Improvements</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1,850</td>
</tr>
<tr>
<td>Cost</td>
<td>1,850</td>
<td>100</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1,950</td>
</tr>
</tbody>
</table>

Source: WTA 2016-2021 Approved Transportation Improvement Program.
Chapter 10 – Stormwater Facilities

Inventory of Current Facilities

The Public Works Department is responsible for design, engineering, and construction of county-owned stormwater facilities. Many stormwater facilities are road-related stormwater conveyance systems such as culverts and ditches on and adjacent to county roads. Others are off right-of-way facilities that control storm flows and improve water quality.

In response to increasing federal and state mandates to manage stormwater and the public’s desire to improve stewardship of sensitive watersheds, Whatcom County established a Stormwater group in the Surface Water Division of the Public Works Department in 2005. The Stormwater group is responsible for planning, designing, engineering, and construction of stormwater facilities. Inventories of existing stormwater facilities are maintained by the Public Works Department. The Engineering Services Division maintains an inventory of all road-related facilities. The Stormwater group maintains an inventory of public and private stormwater facilities in the area covered by the County’s NPDES Phase II permit for Municipal Separate Storm Sewer Systems. This inventory includes ditches, culverts, catch basins, vaults, ponds, and swales. Completed stormwater construction projects since the Public Works-Stormwater group was created in 2005 are listed below.

Table 10.1 Completed Stormwater Projects

<table>
<thead>
<tr>
<th>Project Description</th>
<th>Completion Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lake Whatcom Geneva Stormwater Retrofits</td>
<td>2006</td>
</tr>
<tr>
<td>Lake Whatcom Cable Street Reconstruction &amp; Stormwater Improvements</td>
<td>2007</td>
</tr>
<tr>
<td>Lake Whatcom Lahti Drive Stormwater Improvements</td>
<td>2010</td>
</tr>
<tr>
<td>Lake Whatcom Silver Beach Creek Improvements - Browndale Drive to E. 16th Place</td>
<td>2011</td>
</tr>
<tr>
<td>Lake Whatcom Silver Beach Creek Improvements - West Tributary</td>
<td>2012</td>
</tr>
<tr>
<td>Lake Whatcom Coronado-Fremont Stormwater Improvements</td>
<td>2014</td>
</tr>
</tbody>
</table>

Future Needs

An increasing emphasis on the protection of sensitive watersheds has resulted in the adoption of comprehensive stormwater plans, including plans for Lake Whatcom and Birch Bay. The adopted plans identify work towards planning, design, engineering, and construction of capital projects intended to address stormwater issues.

In addition, the County has adopted a Stormwater Management Program in accordance with the NPDES Phase II permit. This program applies to about 15,000 acres of unincorporated lands including the Birch Bay UGA, Ferndale UGA, Bellingham UGA and other lands along the south shore of Lake Whatcom. Goals of the Stormwater Management Program include detecting and eliminating illicit discharges to surface waters, controlling runoff from new development, redevelopment, and new construction, pollution prevention and operation and maintenance for
municipal operations, educating the public, monitoring stormwater monitoring, and collecting and reporting data on the Program.

**Capital Projects and Funding**

Stormwater improvement projects anticipated in the six-year planning period include the following:

- Lake Whatcom Watershed – Water quality improvements, drainage system upgrades, outfall retrofits, channel restoration, and stormwater improvements.

- Birch Bay Watershed - Drainage improvements and an inlet upgrade.

These improvements will cost a total of approximately $7.2 million, which will be paid with the funding sources shown in the *Six-Year Capital Improvement Program for Whatcom County Facilities*.

It is anticipated that approximately $1.4 million will be spent annually on various stormwater improvement projects in the 7 to 20 year planning period. These costs would be paid from the Flood Fund, REET, state grants and Birch Bay Watershed and Aquatic Resource Management (BBWARM) District funds. The County will also monitor the adequacy of County stormwater facilities throughout the planning period and consider additional capital improvements and/or maintenance projects if warranted in the future.
Chapter 11 – Water Systems

Water Systems

Planning relating to public water systems is carried out in the Whatcom County Coordinated Water System Plan (CWSP), individual water system plans, and this Capital Facilities Plan. An introduction to the CWSP is presented below. For purposes of this Capital Facilities Plan, water systems are divided into major systems that serve urban growth areas (urban water systems) and other systems that have 50 or more connections. This chapter addresses urban water systems, including information summarized from the individual water system plans. Information about other systems with 50 or more connections is included in the Coordinated Water System Plan.

Coordinated Water System Plan

The draft CWSP (2016) is a plan for public water systems that identifies the present and future needs of the systems and sets forth means of meeting those needs in the most efficient manner possible. The Whatcom County Council established the planning area, called the Critical Water Supply Service Area (CWSSA), for the original CWSP effort in 1993, and retained the same area for the 2000 CWSP update and the 2016 CWSP update. The CWSSA includes all of Whatcom County west of the Mount Baker-Snoqualmie National Forest Boundary excluding certain portions of the Lummi and Nooksack Indian reservations.

The draft CWSP was prepared under the direction of the Water Utility Coordinating Committee (WUCC). The WUCC included representatives of individual water utilities located in the CWSSA with more than 50 connections that chose to participate, as well as representatives of the Washington State Department of Health, Whatcom County Health Department, Whatcom County Planning & Development Services, Whatcom County Public Works, and the Whatcom County Council. The CWSP review was conducted with the primary objective of supporting the public drinking water supply needs of the County and achieving coordination between water services, the Growth Management Act, and the Whatcom County Comprehensive Plan.

The CWSP addresses a number of topics, including population, water demand, existing water systems, water utility service areas, minimum design standards, utility service review procedures, receivership of failing systems, issues with potential implications for public water systems, and plan implementation.

The draft CWSP contains a water rights capacity analysis to compare water system’s existing water rights, and/or existing intertie agreements, against current and anticipated future demands in an effort to determine whether systems are projected to meet their future requirements, have surplus water, or have insufficient future water rights. Based on the results of the water rights analysis (which take into account existing intertie agreements), the existing and projected population, and the historic and projected water demand, a water rights status for each Group A community public water system is assigned. Analyses prepared in the individual water system plans will be more accurate and should be utilized if available (draft CWSP, p. 3-5 and Appendix 1).
Urban Water Systems

Inventory of Current Facilities

This section of the Capital Facilities Plan inventories the 14 primary water systems that provide water service to Whatcom County’s UGAs. The table below provides information relating to existing connections, water rights, contracts for water, supply, storage and water sources.

Table 11.1 Water Supply Inventory by Service Provider

<table>
<thead>
<tr>
<th>Service Provider</th>
<th>Connections</th>
<th>Water Rights</th>
<th>Contracted Water</th>
<th>Available Supply</th>
<th>Storage Capacity (mg)</th>
<th>Primary Water Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Birch Bay Water and Sewer District (1)</td>
<td>Existing 5,184 unspecified</td>
<td>2.35</td>
<td>3.73</td>
<td>2.35</td>
<td>3.73</td>
<td>3.1</td>
</tr>
<tr>
<td>City of Bellingham</td>
<td>Approved 25,011 unspecified</td>
<td>162.62</td>
<td>162.62</td>
<td>(2.35)</td>
<td>(2.35)</td>
<td>160.52</td>
</tr>
<tr>
<td>City of Blaine (2)</td>
<td></td>
<td>5.41</td>
<td>7.70</td>
<td>(3.73)</td>
<td>(3.73)</td>
<td>160.57</td>
</tr>
<tr>
<td>City of Everett</td>
<td></td>
<td>0.54</td>
<td>3.15</td>
<td>(2.35)</td>
<td>(2.35)</td>
<td>160.52</td>
</tr>
<tr>
<td>City of Ferndale</td>
<td></td>
<td>1.51</td>
<td>4.22</td>
<td>1.51</td>
<td>4.22</td>
<td>160.52</td>
</tr>
<tr>
<td>City of Lynden (3)</td>
<td></td>
<td>5.83</td>
<td>13.92</td>
<td>5.83</td>
<td>13.92</td>
<td>160.52</td>
</tr>
<tr>
<td>City of Nooksack</td>
<td></td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>160.52</td>
</tr>
<tr>
<td>City of Sumas</td>
<td></td>
<td>3.58</td>
<td>5.68</td>
<td>(2.35)</td>
<td>(2.35)</td>
<td>160.52</td>
</tr>
<tr>
<td>Columbia Valley Water District</td>
<td></td>
<td>0.08</td>
<td>0.10</td>
<td>0.08</td>
<td>0.10</td>
<td>160.52</td>
</tr>
<tr>
<td>Lake Whatcom Water and Sewer District</td>
<td></td>
<td>2.05</td>
<td>2.30</td>
<td>2.05</td>
<td>2.30</td>
<td>160.52</td>
</tr>
<tr>
<td>Piedmont (4)</td>
<td></td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>160.52</td>
</tr>
<tr>
<td>Water District 2 (4)</td>
<td></td>
<td>38.87</td>
<td>53.64</td>
<td>38.87</td>
<td>53.64</td>
<td>160.52</td>
</tr>
<tr>
<td>Water District 7</td>
<td></td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>160.52</td>
</tr>
<tr>
<td>Water District 13</td>
<td></td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>160.52</td>
</tr>
</tbody>
</table>

Source: Draft EIS Whatcom County 2016 Comprehensive Plan and Development Regulations Update and Urban Growth Area Review (March 2015, p. 4-227), City of Bellingham Water System Plan (June 2009), Second Amendment to Agreement to Supply Water between Nooksack and Sumas (August 2009), Lake Whatcom Water and Sewer District e-mail of April 28, 2016, Lake Whatcom Water and Sewer District Water System Comprehensive Plan (October 2010), the Washington Department of Health Office of Drinking Water Sentei Internet Home page (accessed April and May 2016), Rodney Langer (CHS Engineers) e-mail of May 3, 2016, City of Lynden e-mail of May 10, 2016, City of Ferndale e-mail of May 16, 2016, and City of Blaine e-mail of May 16, 2016.

Notes:

1. All water quantity metrics expressed in millions of gallons per day (mgd), except storage capacity which is million gallons (mg).
2. Available supply is the sum of water rights and contracts. It represents the total supply available to serve a provider’s own customers.
3. Contracted water numbers in parentheses indicate contracts to provide water to other systems. Such contracts are subtracted from the provider’s water rights to calculate available supply.
4. This table does not provide a full accounting of all contracts to provide water to other systems. Rather it notes all contracts discovered when analyzing available water supply for these larger providers.

1. BBWS je has two water rights which are shared in a single system with City of Blaine. Therefore these rights are counted under City of Blaine’s water rights and available supply.
2. See note #1 regarding BBWS water rights.
3. Water rights in this table are based on City of Lynden’s interpretation which differs from the Department of Ecology’s interpretation.
4. The City of Bellingham provides both water and storage capacity to Water District 2.
Future Needs

Water system plans provide a design standard, generally expressed as water consumption in gallons/day per equivalent residential unit (ERU). When applying this standard to growth projections, and comparing to the water source capacity, a water system provider can obtain a sense for how planned growth will affect water service into the future.

Water service providers prepare water system plans including a program of capital improvements that address the system’s anticipated needs within their designated water service area, consistent with local land use plans. The table below identifies the purveyor’s design standards.

Table 11.2 Design Standards

<table>
<thead>
<tr>
<th>Service Provider</th>
<th>Design Standards</th>
</tr>
</thead>
<tbody>
<tr>
<td>Birch Bay Water and Sewer District</td>
<td>116-135 gallons/day per ERU</td>
</tr>
<tr>
<td>City of Bellingham</td>
<td>199 gallons/day per ERU</td>
</tr>
<tr>
<td>City of Blaine</td>
<td>165 gallons/day per ERU</td>
</tr>
<tr>
<td>City of Everson</td>
<td>250 gallons/day per ERU</td>
</tr>
<tr>
<td>City of Ferndale</td>
<td>175 gallons/day per ERU</td>
</tr>
<tr>
<td>City of Lynden</td>
<td>216 gallons/day per ERU</td>
</tr>
<tr>
<td>City of Nooksack</td>
<td>175 gallons/day per ERU</td>
</tr>
<tr>
<td>City of Sumas</td>
<td>282 gallons/day per ERU</td>
</tr>
<tr>
<td>Columbia Valley Water District</td>
<td>215 gallons/day per ERU</td>
</tr>
<tr>
<td>Lake Whatcom Water and Sewer District</td>
<td>150-250 gallons/day per ERU</td>
</tr>
<tr>
<td>PUD No. 1</td>
<td>N/A(^1)</td>
</tr>
<tr>
<td>Water District 2</td>
<td>170 gallons/day per ERU</td>
</tr>
<tr>
<td>Water District 7</td>
<td>214 gallons/day per ERU</td>
</tr>
<tr>
<td>Water District 13</td>
<td>239 gallons/day per ERU</td>
</tr>
</tbody>
</table>

\(^1\) PUD No. 1 serves industrial and commercial properties.

Population

The table below provides an overview of the planning horizon year and horizon year population for the latest water system plans in comparison to Whatcom County Comprehensive Plan’s population projections for the year 2036. As can be seen by a review of the table, most urban water systems plan conservatively for drinking water needs, particularly given the time it takes to seek new water supplies to serve growth.
Table 11.3 Population Comparison: Water Plans and 2036 Population Projection

<table>
<thead>
<tr>
<th>Service Provider</th>
<th>Horizon year of Capital Plan</th>
<th>Capital Plan Population</th>
<th>County's 2036 Population Projection</th>
</tr>
</thead>
<tbody>
<tr>
<td>Birch Bay Water/ Sewer</td>
<td>2036</td>
<td>14,565</td>
<td>14,414</td>
</tr>
<tr>
<td>City of Bellingham</td>
<td>2032</td>
<td>122,672(^1)</td>
<td>123,710</td>
</tr>
<tr>
<td>City of Blaine</td>
<td>2036</td>
<td>10,500(^2)</td>
<td>9,585</td>
</tr>
<tr>
<td>City of Everson</td>
<td>2036</td>
<td>4,046</td>
<td>3,907</td>
</tr>
<tr>
<td>City of Ferndale</td>
<td>2036</td>
<td>20,072</td>
<td>19,591</td>
</tr>
<tr>
<td>City of Lynden</td>
<td>2036</td>
<td>19,575</td>
<td>19,275</td>
</tr>
<tr>
<td>City of Nooksack</td>
<td>2036</td>
<td>2,425</td>
<td>2,425</td>
</tr>
<tr>
<td>City of Sumas(^3)</td>
<td>2036</td>
<td>2,323</td>
<td>2,323</td>
</tr>
<tr>
<td>Columbia Valley Water District</td>
<td>2030</td>
<td>N/A(^4)</td>
<td>2,886</td>
</tr>
<tr>
<td>PUD 1</td>
<td>N/A(^5)</td>
<td>N/A(^5)</td>
<td>N/A(^5)</td>
</tr>
<tr>
<td>Lake Whatcom Water and Sewer District</td>
<td>2027</td>
<td>10,855(^6)</td>
<td>12,204</td>
</tr>
<tr>
<td>W.C. Water District 2</td>
<td>2029</td>
<td>1,905(^7)</td>
<td>1,533</td>
</tr>
<tr>
<td>W.C. Water District 7</td>
<td>2027</td>
<td>2,123(^8)</td>
<td>2,118</td>
</tr>
<tr>
<td>W.C. Water District 13</td>
<td>2031</td>
<td>1,170(^9)</td>
<td>1,786</td>
</tr>
</tbody>
</table>

N/A = Not Available

1. The City of Bellingham Water System Plan (June 2009) contains a population projection of 122,672 for the year 2028. The City of Bellingham Water System Plan Update (October 2013) extends the horizon year to 2032, but does not include an updated population projection.
2. Projected service area population per draft City 2016 Comprehensive Water System Plan.
3. Information regarding the Sumas water system is from the Draft Capital Facilities Element of the Sumas Comprehensive Plan (April 2016).
4. The Columbia Valley Water District 2013 Water System Plan Update does not include a specific 20-year population projection. However, the Water System Plan projects that it will serve 2,142 equivalent residential units (ERUs) in 2030 (pp. 36 and 37).
5. Since PUD1 provides retail water service only to areas characterized by and designated for industrial and commercial uses, the district's 2004 WSP does not provide population projections or a horizon year. PUD 1 also owns and operates the Grandview potable water supply system – retail.
6. The Lake Whatcom Water and Sewer District Water System Comprehensive Plan anticipates 4,125 ERUs in 2027 (Appendix A, Exhibit 2), which equates to a population of about 10,855 using average household sizes described in the Water System Comprehensive Plan (p. 17).
7. Water District 2 projects future connections rather than population. The district plans to serve 797 connections by 2029. Applying the Bellingham average household size of 2.49 and occupancy rate of 96% results in approximately 1,905 people served by the 797 connections in 2029.
8. Water District 7 projects future connections rather than population. The district plans to serve 888 connections by 2027. Applying the Bellingham average household size of 2.49 and occupancy rate of 96% results in approximately 2,123 people served by the 888 connections in 2027. However, Water District 7 is approved to serve up to 1,145 residential service connections (State Department of Health letter from Richard Rodriguez and John Thielmann to James Trowbridge dated January 5, 2009). Therefore the District could serve a population of about 2,700, which is greater than the projected population of the District in 2036.
9. Water District 13 could potentially serve a total of 1,338 residential connections (Whatcom County Water District # 13 Small Water System Plan, p. 14).
Capital Projects and Funding

Water services and capital improvements are funded primarily by the users of the system through water rates and general facilities charges. Water rates can be adjusted to match the funding required for capital and operational needs. Connection fees are usually charged to developers when a development necessitates expansion of the district’s capacity. There are also governmental funding programs. These include the Public Works Trust Fund, a revolving loan fund designed to help local entities through low-interest loans, and the Drinking Water State Revolving Fund, which involves low-interest federally funded loans.

Birch Bay Water and Sewer District

The Birch Bay Water and Sewer District provides service within and adjacent to the Birch Bay Urban Growth Area. The District obtains its water supply from the City of Blaine (well field). The District’s facilities include over 3.1 million gallons of storage in three reservoirs, four booster pump stations and nearly 80 miles of water transmission and distribution piping. The system includes multiple interties with the City of Blaine system and an emergency intertie with the Bell Bay Jackson Water Association system. The District’s Comprehensive Water System Plan (2009) and Comprehensive Water System Plan Amendment No. 1 (2010) indicate that existing water supply is sufficient through 2030 at the forecast demand (page ES-3, as amended). The District’s plan states that additional water supply, including use of surplus storage, and/or conservation will be necessary to meet the demand beyond that time. The District’s 2009 Comprehensive Water Plan, as amended, includes several new supply and distribution projects expected to address supply deficiencies. Besides its residential and commercial customers, the District provides water supply to the BP Cherry Point Refinery. At the time of completion of the 2009 plan, the District provided this service through a wholesale agreement with PUD 1 (see below). The 2010 amendment to the plan was developed based on an amendment to the City of Blaine water supply contract confirming additional supply, and confirming retail water supply to the Refinery by the District. The District’s draft 2016 Comprehensive Water Plan is based on service to 14,565 persons by year 2036. The draft plan update is based on an annual water demand increasingly from 116 gpd/ERU in 2015 to 135 gpd/ERU in 2036 as seasonal homes transition into full time residences. With service to the forecast population and service to district commercial and other non-residential customers, the year 2036 maximum day demand is forecast to be 3.58 million gallons per day. The District has a contract with the City of Blaine to provide a maximum supply of 3.73 million gallons per day in 2036. Birch Bay’s Comprehensive Water Plan indicates that it will extend future service areas to areas within the district boundaries and provides future connection policies.
City of Bellingham

The City of Bellingham Water System Plan (June 2009) and the City of Bellingham Water System Plan Update (October 2013) indicate that the City maintains a water system consisting of an intake from Lake Whatcom, water treatment plant, pump stations, 13 water reservoirs with over 25 million gallons of storage capacity, and almost 400 miles of water lines (2009 Water System Plan, pp. 3-3, 3-5, 3-7, 3-19, 3-21, and 3-32). The Bellingham water system has interties with Water District 2, Water District 7, the Lake Whatcom Water and Sewer District, and five other systems (2009 Water System Plan, p. 1-8). The projected average daily demand for the water system is 12.2 million gallons per day in 2032 and the projected maximum daily demand is 20 million gallons per day in 2032 (2013 Water System Plan Update, p. 2-4). The City of Bellingham has adequate water rights to meet projected demand over the planning period (2013 Water System Plan Update, p. 2-5). The City of Bellingham Water System Plan Update contains a capital improvement program with approximately $50 million in capital projects (2016-2018). These projects include a dissolved air flotation pretreatment system, disinfection improvements, metering, water main replacements, property acquisitions in the Lake Whatcom Watershed, water quality projects in the Lake Whatcom Watershed, and Nooksack River dam and pipeline improvements (2013 Water System Plan Update, p. 5-3). Revenue sources for system improvements include water rates, grants, loans, utility local improvement districts, and revenue bonds (2009 Water System Plan, pp. ES-5 and 1-13). The City’s financing program is adequate to cover planned capital improvements (2013 Water System Plan Update, p. 6-1 and 6-2).

City of Blaine

The City of Blaine is updating their Comprehensive Water System Plan and anticipates completion in mid-2016. The City of Blaine Comprehensive Water System Plan (2009) indicates that the City maintains a water system consisting of wells, a water treatment plant, booster pumps, five water reservoirs with a storage capacity of 4.59 million gallons, and approximately 95 miles of water lines up to 18 inches in diameter (City GIS data). The Blaine water system serves city residents and provides water, per terms of wholesale supply agreements, to both the Birch Bay Water and Sewer District and the Bell Bay Jackson Water Association. The City provides service throughout the current City Limits, with the exception of a few parcels that are presently served directly by the Birch Bay Water and Sewer District. The City also serves the Pipeline Road UGA, but service to the Shipyard UGA is by Birch Bay Water and Sewer District. The City also serves an area of unincorporated Whatcom County southeast of the City. This service area was declared in 2010 and is anticipated to remain unchanged as a result of the City’s work on its 2016 Comprehensive Water System Plan.

The projected average daily demand for the Blaine water system is approximately 2.7 million gallons per day in 2036 and the projected maximum daily demand is approximately 5.4 million gallons per day in 2036 (2016 Plan, work in progress). This preliminary forecast is significantly lower than as presented in the 2009 Comprehensive Water System Plan due to lower residential growth rate forecasts in the City’s UGA, and lower water use per single family equivalent, in both the City and Birch Bay Water and Sewer District systems. The City of Blaine Comprehensive Water System Plan (2009) documents water rights in the form of a claim, permits and certificates in
the amount of 4.28 million gallons per day (instantaneous). Subsequent efforts have increased the City’s water rights in the form of a claim, permits and certificates in the amount of 7.776 million gallons per day (instantaneous). Those efforts included securing a portion of the water rights held by Birch Bay Water and Sewer District, by amendment to the water supply agreement. The additional rights are reflected in Water Rights No. G1-26820, G1-28481, G1-26821 and G128046. Comparison of the year 2036 forecast demand to current water rights indicates that the city has adequate water supply to meet the needs of population growth over the 20 year period.

The City of Blaine Comprehensive Water System Plan (2009) contains a capital improvement program with approximately $22 million in capital projects over the 20 year planning period (2009 - 2029). Several of those projects have been completed since 2009. The City of Blaine Comprehensive Water System Plan (2016 – work in progress) will include the remaining projects, subject to updated analysis in the context of the revised demand forecast. Some additional projects may be identified where opportunity or strategy arises to address a water system need more efficiently, or in phases, or to meet additional City objectives. Projects are identified and planned to maintain adequate capacity for all elements of the system, from supply through treatment, storage, transmission and distribution, as well as capital needs for operation and management of the system. Anticipated revenue sources for capital improvements include grants, loans, connection fees, water rates and developer constructed facility contracts (2009 Plan, p. 9-3). The City’s financing plan has and will project adequate revenues to cover expenses over the 20-year planning period (2009 Plan, p. 9-1).

City of Everson

The City of Everson Water System Comprehensive Plan (2013) and the City of Everson Water System Comprehensive Plan Amendment No. 1 (2015) indicate that the City of Everson maintains a water system consisting of a well field with three wells, booster pumps, three 160,000 gallon water reservoirs, and over 13 miles of water lines (pp. 3 and 10-12). The Everson water system also has an intertie with the City of Nooksack Water System for use during maintenance or an emergency (pp. 3 and 17). The projected average daily demand for the water system is 483,500 gallons per day in 2036 and the projected maximum daily demand is 908,980 gallons per day in 2036 (p. 11). The City of Everson’s water system has source capacity to meet the projected need over the 20-year planning period (pp. 10-11). The City of Everson Water System Comprehensive Plan Amendment No. 1 contains a capital improvement program with approximately $3.3 million in capital projects over the next 20 years (2016 - 2036). These projects include water line improvements, an additional deep well (to replace two existing shallow wells), water treatment facilities, and an additional 160,000 gallon storage reservoir (pp. 39-42). Anticipated revenue sources for system improvements include grants, loans, connection fees, water rates and developer constructed facility contracts (p. 43). The City’s financing plan projects adequate revenues to cover expenses over the 20-year planning period (Appendix D).
City of Ferndale

The Draft City of Ferndale Water System Plan (2016) indicates that the City maintains a water system consisting of wells, a water treatment plant, three water reservoirs with a storage capacity of almost three million gallons, two pump stations, one pressure booster station and 73 miles of water lines. In December 2011, Ferndale converted to a groundwater supply with greensand filtration for its drinking water. Previous to this, it purchased industrial grade water from PUD No.1 and treated the water at its own surface water treatment plant. In October 2014, Ferndale added a reverse osmosis system to treat its groundwater supply to reduce hardness. The City no longer purchases water from PUD No. 1. The Ferndale water system has interties for emergency use only with Mountain View Water Association, Northwest Water Association, Thornton Water Association and North Star Water Association (p. 2-18). The projected average daily demand for the Ferndale water system is 2.27 million gallons per day in 2036 and the projected maximum daily demand is 3.96 million gallons per day in 2036 (p. 2-15). The Draft City of Ferndale Water System Plan indicates that the city has adequate water rights to meet the needs of population growth over the 20 year period (p. 1-12). The Draft City of Ferndale Water System Plan contains a capital improvement program with approximately $20 million in capital projects over the next 20 years (2016 - 2036). These projects include water main upgrades and replacements, increasing well production and redundancy, and constructing additional storage (p. 3-16). Anticipated revenue sources for capital improvements include grants, loans, bonds, connection fees, water rates and developer constructed facility contracts. If applicable, the City may also utilize the utility local improvement district process (Ch. 9). The City has maintained budgetary controls over the water system. Rates and connection fees will continue to be set at levels required to finance operation, maintenance, and capital improvements (Ch. 9).

City of Lynden

The Draft City of Lynden Water System Plan (2016) indicates that the City of Lynden maintains a water system consisting of a Nooksack River water intake structure, water treatment plant, booster pumps, two water reservoirs with a storage capacity of approximately 8.47 million gallons, and 82 miles of water lines (Chapter 2). The City's new 8 million gallon per day Water Treatment Plant went online September 23, 2015. The new plant doubles treatment capacity includes grit removal and sedimentation basins equipped with plate settlers to handle the heavy sediment load from the Nooksack River. The facility also features high rate deep bed gravity filters, and a combination of UV disinfection and chlorine to disinfect the water. The Lynden water system provides wholesale water supply to two water association systems (Chapter 2). The projected average daily demand for the Lynden water system is 2.44 million gallons per day in 2036 and the projected maximum daily demand is 6.35 million gallons per day in 2036 (Chapter 4). The Draft City of Lynden Water System Plan indicates that the City has adequate water supply to meet the needs of population growth over the 20 year period (Chapter 7). However, the City of Lynden and Ecology have an existing dispute over the City water rights. The City has entered into a memorandum of agreement (MOA) with Ecology to address long-standing water right issues between the City and Ecology. Resolution of water supply issues for City of Lynden is important for future planning in the City’s water service area. The Draft City of Lynden Water System Plan contains a capital improvement
program in Chapter 9 that will include a new reservoir and booster pump station, as well as various water main improvements to increase distribution capacity and replace aging infrastructure. Anticipated revenue sources for capital improvements include grants, loans, connection fees, water rates and developer constructed facility contracts as discussed in Chapter 10. The City’s financing plan projects adequate revenues to cover expenses over the 20-year planning period (Chapter 10).

City of Nooksack

The City of Nooksack Water System Plan (2012) and the City of Nooksack Water System Plan Update (2016) indicate that the City of Nooksack obtains all its water from the City of Sumas (Water System Plan Update, p. 9). Nooksack maintains a water system consisting of booster pumps, water reservoirs shared with the Nooksack Valley Water Association with a capacity of 700,000 gallons (one-half of which is owned by Nooksack), and over 8 miles of water lines (Water System Plan, pp. 10 and 31). The Nooksack water system has interties with the Nooksack Valley Water Association and, for emergency purposes, with the Everson water system (Water System Plan, pp. 14 and 43). The projected average daily demand for the water system is 165,550 gallons per day in 2036 (derived from Water System Plan Update, Table D-2). The City of Nooksack’s water system has capacity to meet the projected demand over the 20-year planning period (Water System Plan Update, Tables D-2 and D-3). The City of Nooksack Water System Plan Update contains a capital improvement program with over $1 million in capital projects over the next 20 years (2016 - 2036). These projects include water line, standpipe and hydrant improvements (Water System Plan Update, p. 12). Anticipated revenue sources include water rates, connection fees, utility taxes, interest, reserves, grants, and loans. The City’s financing plan projects adequate revenues to cover expenses over the six-year planning period (Water System Plan Update, pp. 13-15).

City of Sumas

The City of Sumas Water System Comprehensive Plan (2011 Revision) indicates that the City of Sumas maintains a water system consisting of two well fields with seven wells, booster pumps, a 500,000 gallon water reservoir (which is directly adjacent to, and tied into, a 500,000 gallon water association reservoir), and almost 18 miles of water lines (pp. 1-5 and 3-21). The City of Sumas sells water wholesale to the Sumas Rural Water Association, the Nooksack Valley Water Association, and the City of Nooksack (p. 1-15). In addition, the draft Capital Facilities Element of the Sumas Comprehensive Plan (April 2016) indicates that, based on a 2015 water supply agreement, Sumas also sells water wholesale to the Meadowbrook Water Association (p. 4-5). As presented in the City’s water system plan, the projected average daily demand for the City of Sumas is 371,958 gallons per day in 2030 and the projected maximum daily demand is 743,916 gallons per day in 2030 (p. 3-24). The City of Sumas’ water system has source capacity to meet the annual projected need over the 20-year planning period through the year 2030 (pp. 4-3 and 4-8). According to the Capital Facilities Element of the draft 2016 update of the Sumas Comprehensive Plan, in the year 2036 the total system demand, including the city and all wholesale customers, will equal 3,569 gallons per minute and 3,383 acre-feet per year. These flow rates are below the maximum volumes established in the city’s water rights, therefore the city will have sufficient
source capacity to accommodate projected growth through 2036 (p. 4-6 and Table 4-2 on p. 4-7). The draft Capital Facilities Element also indicates that, based on the configuration of the city wholesale distribution system and construction of an additional 500,000 gallon storage tank by the Sumas Rural Water Association, Sumas has sufficient storage capacity to support planned growth through 2036 (p. 4-7). The draft 2016 update of the Capital Facilities Element of the Sumas Comprehensive Plan includes a 20-year capital improvement program (2016-2036) that identifies over $900,000 in capital projects to be funded through a combination of monthly rates and charges, connection charges, and developer contracts (Table 4-3 on p. 4-8). The draft Capital Facilities Element also includes a six-year financial analysis (2016-2021) indicating that the city water system will have sufficient revenues to cover anticipated expenditures, including capital improvement costs, through 2021 (p. 4-25). The City of Sumas Water System Comprehensive Plan "Service Area Policies and Conditions" requires that facilities necessitated by new development will be funded by the developer, except when the City requires oversizing (p. 1-14).

Columbia Valley Water District

The Columbia Valley Water District 2013 Water System Plan Update (2013) indicates that the Columbia Valley Water District maintains a water system consisting of three wells, booster pumps, four reservoirs with a total storage capacity of 762,000 gallons, and approximately 20 miles of water lines (pp. 8, 9 and 11). The District has explored an emergency intertie with Water District 13 (p. 22). The projected average daily demand for the water system is 279,450 gallons per day in 2030 and the projected maximum daily demand is 536,600 gallons per day in 2030 (pp. 45-47). The District has source capacity to meet the projected need over the 20-year planning period through the year 2030 (pp. 45-47). The Columbia Valley Water District 2013 Water System Plan Update contains a capital improvement program with almost $7.9 million in capital projects (2016-2022). These projects include water line improvements, fire hydrant replacements, pump replacements, and a potential intertie (Figure 8-2). Potential revenue sources for system improvements include cash reserves, general facilities charges, water sales revenue, local facilities charges, developer participation, utility local improvement district financing, bond financing, grants, and loans (pp. 77-82).

PUD 1

PUD 1 provides water service to both the Grandview industrial/commercial service area north of Ferndale, as well the Cherry Point UGA (an industrial area). PUD 1’s Comprehensive Water Plan (2004) does not measure water demand in population as most other WSPs do. The majority of the district’s water service customers are industrial and commercial customers. The PUD’s Comprehensive Water Plan indicates that it has sufficient water supply to meet the district’s needs to the end of the district plan’s 20-year planning period (2024). The plan includes a series of capital improvements including the acquisition of other potable water system treatment plants and water distribution and storage improvements. Although the district’s plan does not include maps showing future water service extensions, portions of the narrative on future water service indicate the district’s future water service plans to serve its entire district.
Lake Whatcom Water and Sewer District

The *Lake Whatcom Water and Sewer District Water System Comprehensive Plan* (2010) indicates that the District maintains a water system consisting of a water intake system, water treatment plant, booster pumps, water reservoirs with a combined storage capacity of almost 2.56 million gallons, and approximately 67 miles of water lines (pp. 8-10). The District’s water system has interties with the City of Bellingham water system, both for purchased water supply and for emergency use (pp. 47-48). The projected average daily demand for the water system is 909,596 gallons per day in 2027 and the projected maximum daily demand is 1,617,880 gallons per day in 2027 (Appendix A, Exhibit 2). The Lake Whatcom Water and Sewer District water system has source capacity to meet the projected demand through 2027 and for full build-out (Appendix A, Exhibit 2). The *Lake Whatcom Water and Sewer District Comprehensive Sewer Plan* (2014) contains a capital improvement program for both sewer and water projects. This plan contains over $2.2 million in water system capital projects (2016 - 2019). These projects include security upgrades, an overflow drain, water system rehabilitation and replacement projects, treatment plant improvements, water line replacements, and reservoir maintenance (*Comprehensive Sewer Plan*, Exhibit K). Anticipated financing methods for system improvements include connection fees, water rates, utility local improvement districts, developer extension agreements, loans and bonds (*Water System Comprehensive Plan*, p. 63).

Water District 2

The *Whatcom County Water District # 2 Water System Plan* (2009) indicates that the District obtains all its water from the City of Bellingham, through an intertie with the City (p. 1-2). Water District 2 maintains a water system consisting of approximately 15 miles of water lines. The District does not have storage reservoirs or pumps, but relies on the City of Bellingham for storage and pressure (p. 1-2). The projected average daily demand for the water system is approximately 163,325 gallons per day in 2029 (derived from the *Water System Plan*, p. 2-10). The District has a contract in place with the City of Bellingham that will provide adequate water to meet this demand over the planning period.

The District’s Certified Operator stated, in an e-mail of May 9, 2016, that all of the District financed projects in the Water System Plan’s “Capital Improvement Schedule” have been completed (p. 8-2). The most recent capital improvements included approximately 5,150 of old water main completed in 2014 financed by a loan from the Drinking Water State Revolving Fund and repaid from general revenue. The Water System Plan is scheduled for update over the next couple of years during which time the capital improvement plan will be reviewed for the next 10 – 20 year period. Revenue sources for future capital projects include water rates and connection fees to repay loans (p. 9-1).
Water District 7

The *Whatcom County Water District # 7 Water System Plan* (2008) indicates that the District obtains all its water from the City of Bellingham, through an intertie with the City (p. 1-3). Water District 7 maintains a water system consisting of booster pumps, water reservoirs with a capacity of 485,000 gallons, and over 12 miles of water lines. The projected average daily demand for the water system is approximately 190,000 gallons per day in 2027 (derived from the *Water System Plan*, pp. 2-5 and 3-1). Water District 7 is approved to serve up to 1,145 residential connections (p. 1-3), which is more than the projected number of dwelling units in the District in the year 2036.

The District’s Certified Operator stated, in e-mails of April 10, 12, and 14 2016, that all of the “Recommended 6 Year Capital Improvements” identified in the 2008 Water System Plan have been completed as of 2015. The “Recommended 20 Year Capital Improvements” identified in the 2008 Water System Plan focus on replacement of existing water mains with similar size pipe, at a total cost of approximately $750,000 (p. 8-4). Revenue sources will be water rate increases as necessary to repay loans likely from the United States Department of Agriculture, Drinking Water State Revolving Fund, or Public Works Trust Fund.

Water District 13

The *Whatcom County Water District # 13 Small Water System Plan* (2012) indicates that Water District # 13 maintains a water system consisting of two wells, two reservoirs with a total storage capacity of 300,000 gallons, and associated water lines (pp. 26-27). The projected average daily demand for the water system is almost 127,000 gallons per day in 2031 and the projected maximum daily demand is estimated at over 253,000 gallons per day in 2031 (pp. 15). The District has source capacity to meet the projected need over the 20-year planning period through the year 2031 (p. 32). The *Whatcom County Water District # 13 Small Water System Plan* contains a capital improvement program with approximately $353,000 in capital projects. These projects include backup power at well sites, storage tank piping modifications, replacing/adding valves, and water line improvements (p. 31).
Chapter 12 – Sewer Systems

Sanitary Sewer

There are a total of 10 wastewater collection systems and seven wastewater treatment plant (WWTP) facilities that serve UGAs in Whatcom County. Most of the facilities provide services within city limits with plans for future service to areas designated as UGAs. However, some systems provide service to unincorporated UGAs (Birch Bay Water & Sewer District and Water District 13).

Inventory of Current Facilities

The following cities and sewer districts (in alphabetical order) provide sanitary sewer service to UGAs in the County:

- **City of Bellingham** maintains a wastewater collection system within its city limits and sewer service zones within the UGA. The City operates a wastewater treatment plant that is also used by Lake Whatcom Water and Sewer District. The city plans future service within its UGA.

- **Birch Bay Water & Sewer District** owns and operates a wastewater collection and treatment system that serves the Birch Bay UGA, a portion Cherry Point UGA, and a parcel within the Blaine UGA.

- **City of Blaine** provides a collection and a wastewater treatment system for property within the city limits. The City also provides contract service to the Harbor Shores Sewer Association in the City’s southern UGA area. Blaine’s wastewater treatment is handled by the Lighthouse Point Water Reclamation Facility, constructed in 2010. The facility, which generates Class A reclaimed water, was a full replacement of the City’s prior treatment plant. The city plans future sewer service to areas within its UGA, and has adequate expansion capacity in the Lighthouse Point facility.

- The **City of Everson** maintains a collection system to serve property within the city limits. The city’s sewer system also provides wastewater treatment for the City of Nooksack. Both cities provide funding for operation and maintenance of the treatment facility. The city plans future sewer service to areas within its UGA.

- The **City of Ferndale** provides sewer collection and treatment facilities for property within the city limits and plans future collection and treatment to the city’s UGA. The City also serves two areas outside the UGA, east of the City, but has no plans to expand service in these areas.

- **Lake Whatcom Water & Sewer District** maintains a sanitary sewer collection system that serves the Geneva UGA, east of the city limits, and other areas around Lake Whatcom. The district relies upon the City of Bellingham wastewater system for treatment.

- The **City of Lynden** provides sewer collection and treatment facilities for property within the city limits and plans future collection and treatment to the city’s UGA upon annexation. The City also operates permitted composting facilities for beneficial use of biosolids.

- **City of Nooksack** constructed a wastewater collection system for property within the city limits in 1987. The city has plans to provide future service to unserved properties within its city limits.
and to properties within its associated UGA. By agreement with the City of Everson, Nooksack pumps its sewage for treatment at the Everson Wastewater Treatment Plant. Nooksack also provides funding for the operation and maintenance of the Everson Wastewater Treatment Plant.

- The **City of Sumas** provides a wastewater collection system for property within the city limits. Since 1999, the city has had wastewater treatment provided at a large regional treatment facility in Abbotsford, BC owned and operated by Fraser Valley Regional District. The city plans to extend sewer service to UGA property upon annexation.

- **Whatcom County Water District 13** provides wastewater collection and treatment to a portion of the Columbia Valley UGA in unincorporated Whatcom County.

An inventory of existing wastewater facilities located in the County is presented in the table on the following pages. The table summarizes wastewater volume treated per day, total treatment capacity, and surpluses or deficits for the wastewater treatment systems expressed in million gallons per day (mgd). Existing population is also noted.
## Table 12.1 Wastewater System Inventory

<table>
<thead>
<tr>
<th>Year of Plan</th>
<th>Service Provider</th>
<th>Miles of Pipe</th>
<th>Collection System Existing Conditions</th>
<th>Collection System</th>
<th>Treatment</th>
<th>Service Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>Birch Bay Water and Sewer District (BBWSD)</td>
<td>56</td>
<td>The collection system is composed of approximately 56 miles of gravity and pressure sewer lines and 11 pump stations. Bellingham's sewer service area covers approximately 30 sq. miles. The City operates and maintains approximately 318 miles of sewer mains and 6 miles of force mains. There are 27 pump stations in the system. The existing service area for the Blaine sewage treatment system is in the Blaine city limits. In July 2010, the Lighthouse Point Water Reclamation Facility came on-line with capacity to treat 1.52 MGD. The City of Blaine wastewater collection system consists of gravity sewers, force mains, and eight pumping stations. The collection system has over 10 miles of gravity and force main pipe and 8 wastewater pump stations within city limits. The Everson WWTP treats wastewater from both Everson and Nooksack. Ferndale's collection system has 56 miles of gravity and force main piping and 17 pump stations. There are over 62 miles of pipe and 14 operating wastewater pump stations within the City of Lynden sewage collection system. The Lynden WWTP is an extended aeration secondary treatment plant that uses oxidation ditches and UV disinfection to treat effluent prior to discharge in the Nooksack River. The collection system consists of almost 8 miles of gravity and force main pipe, 4 wastewater pump stations, and 2 grinder pumps. The City's sewage is treated at the Everson WWTP. The City of Sumas contracts with the City of Abbotsford, Canada for sewer service. Sumas sewage flows account for less than 2% of the volume received by the JAMES Treatment Plant in Abbotsford. The City contract allows for a</td>
<td>Existing Average Annual Flow (mgd)</td>
<td>Design Flow (mgd)</td>
<td>Surplus/ Deficit (mgd)</td>
</tr>
<tr>
<td>---------------</td>
<td>------------------</td>
<td>---------------</td>
<td>--------------------------------------</td>
<td>-------------------</td>
<td>-----------</td>
<td>--------------</td>
</tr>
<tr>
<td>2009</td>
<td>City of Bellingham</td>
<td>324</td>
<td>19.5</td>
<td>34.3</td>
<td>14.8</td>
<td>89,629</td>
</tr>
<tr>
<td>2004</td>
<td>City of Blaine</td>
<td>40</td>
<td>0.5</td>
<td>1.54</td>
<td>1.04</td>
<td>4,778</td>
</tr>
<tr>
<td>2012</td>
<td>City of Everson</td>
<td>10</td>
<td>0.28</td>
<td>0.44</td>
<td>0.16</td>
<td>2,510</td>
</tr>
<tr>
<td>2016</td>
<td>City of Ferndale</td>
<td>58</td>
<td>1.62</td>
<td>6.37</td>
<td>4.75</td>
<td>12,556</td>
</tr>
<tr>
<td>2016</td>
<td>City of Lynden</td>
<td>62</td>
<td>1.11</td>
<td>2.18</td>
<td>1.07</td>
<td>12,707</td>
</tr>
<tr>
<td>2012 (Amended in 2016)</td>
<td>City of Nooksack</td>
<td>8</td>
<td>0.14</td>
<td>0.22</td>
<td>0.08</td>
<td>1,400</td>
</tr>
<tr>
<td>2009</td>
<td>City of Sumas</td>
<td>10</td>
<td>0.227</td>
<td>0.400</td>
<td>0.173</td>
<td>1,448</td>
</tr>
</tbody>
</table>
### Collection System | Treatment | Service Area | Notes
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Year of Plan</strong></td>
<td><strong>Service Provider</strong></td>
<td><strong>Miles of Pipe</strong></td>
<td><strong>Collection System Existing Conditions</strong></td>
</tr>
<tr>
<td>2014</td>
<td>Lake Whatcom Water and Sewer District</td>
<td>82</td>
<td>maximum treatment of 0.4 mgd.</td>
</tr>
<tr>
<td>2012</td>
<td>Water District 13</td>
<td>4</td>
<td>The District does not have a sewage treatment plant. The District contracts with the City of Bellingham to treat and dispose of domestic sewage. The District operates and maintains gravity and pressure sewer lines and 27 sewage pump stations. Water District 13 owns, operates, and maintains a domestic wastewater collection system consisting of two pump stations, approximately 4 miles of pipe, a wastewater treatment plant, and a force main that transfers flows from the treatment plant to the drainfield.</td>
</tr>
</tbody>
</table>

1. The information in this table is from the Draft EIS Whatcom County 2016 Comprehensive Plan and Development Regulations Update and Urban Growth Area Review (March 2015, p. 4-241), the Final EIS Whatcom County 2016 Comprehensive Plan and Development Regulations Update and Urban Growth Area Review (November 2015, Appendix E), and individual sewer plans.

2. Permitted capacity subject to completion of treatment plant upgrades (in progress 2016).

3. City of Bellingham e-mail of May 12, 2016.

4. Design flow figure is the planned upgrade capacity for the Everson WWTP (two-thirds of the planned capacity is for the City of Everson). Construction activities on the Everson WWTP upgrade commenced in 2015 and are scheduled to be completed by the end of 2016.

5. Design flow figure is the City of Ferndale's WWTP capacity following Phase III construction in 2019.

6. Design flow figure is the planned upgrade capacity for the Everson WWTP (one-third of the planned capacity is for the City of Nooksack). Construction activities on the Everson WWTP upgrade commenced in 2015 and are scheduled to be completed by the end of 2016.

7. Design flow is determined by dividing the peak contract capacity by a peaking factor of 2.5.

industrial user; the PSE cogeneration plant.

The 2014 agreement between the District and the City of Bellingham is for maximum peak instantaneous flows of up to 2,400 gallons per minute.
Future Needs

Sewer provider design standards are provided below, which are based on the estimated wastewater usage (gallons/day for each person or equivalent residential unit).

**Table 12.2 Design Standards**

<table>
<thead>
<tr>
<th>Service Provider</th>
<th>Design Standards</th>
</tr>
</thead>
<tbody>
<tr>
<td>Birch Bay Water and Sewer District</td>
<td>70 gallons/capita/day</td>
</tr>
<tr>
<td>City of Bellingham</td>
<td>102 gallons/capita/day</td>
</tr>
<tr>
<td>City of Blaine</td>
<td>184 gallons/ERU/day</td>
</tr>
<tr>
<td>City of Everson</td>
<td>96 gallons/capita/day</td>
</tr>
<tr>
<td>City of Ferndale</td>
<td>154 gallons/capita/day</td>
</tr>
<tr>
<td>City of Lynden</td>
<td>100 gallons/capita/day</td>
</tr>
<tr>
<td>City of Nooksack</td>
<td>89 gallons/capita/day</td>
</tr>
<tr>
<td>City of Sumas</td>
<td>80 gallons/capita/day</td>
</tr>
<tr>
<td>Lake Whatcom Water and Sewer District</td>
<td>100 gallons/capita/day</td>
</tr>
<tr>
<td>Water District 13</td>
<td>67 gallons/capita/day</td>
</tr>
</tbody>
</table>

*Source: Derived from individual sewer plans. Blaine figure is from City of Blaine in an e-mail of May 12, 2016. Sumas figure is from the Sumas City Planner in an e-mail of March 7, 2016.*
The table below identifies projected treatment capacity in 2022 for each sewer provider that serves a UGA, given planned growth for these areas.

**Table 12.3 Sewer Treatment Capacity 2022**

<table>
<thead>
<tr>
<th>Service Provider</th>
<th>Current Treatment Capacity (MGD)</th>
<th>2022 Treatment Capacity Surplus (Deficit) expressed in MGD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bellingham</td>
<td>34.300</td>
<td>10.6</td>
</tr>
<tr>
<td>Birch Bay Water &amp; Sewer</td>
<td>1.44</td>
<td>0.00 (^1)</td>
</tr>
<tr>
<td>Blaine</td>
<td>1.54</td>
<td>0.75</td>
</tr>
<tr>
<td>Everson</td>
<td>0.441(^2)</td>
<td>0.124</td>
</tr>
<tr>
<td>Ferndale</td>
<td>6.37(^3)</td>
<td>3.36</td>
</tr>
<tr>
<td>Lynden</td>
<td>2.18</td>
<td>0.48</td>
</tr>
<tr>
<td>Nooksack</td>
<td>0.220(^2)</td>
<td>0.062</td>
</tr>
<tr>
<td>Sumas</td>
<td>0.400</td>
<td>0.150</td>
</tr>
<tr>
<td>Lake Whatcom Water &amp; Sewer</td>
<td>1.382</td>
<td>0.444</td>
</tr>
<tr>
<td>WC Water District 13</td>
<td>0.125</td>
<td>0.039</td>
</tr>
</tbody>
</table>

1. Per forecast of future flows in *Engineering Report for Wastewater Treatment Plant Improvements*, Birch Bay Water and Sewer District, 2012. The next facility upgrade is planned for completion by 2022 for capacity through year 2032, per the flow and loading forecast in the referenced report.
2. The City of Everson anticipates completing a wastewater treatment plant upgrade in 2016, which will increase the current peak month treatment capacity to 0.441 MGD for Everson and to 0.220 MGD for Nooksack.
3. Treatment capacity with planned improvements to the wastewater treatment plant.
The table below identifies projected treatment capacity in 2036 for each sewer provider that serves a UGA, given planned growth for these areas.

### Table 12.4 Sewer Treatment Capacity 2036

<table>
<thead>
<tr>
<th>Service Provider</th>
<th>Current Treatment Capacity (MGD)</th>
<th>2036 Treatment Capacity Surplus (Deficit) expressed in MGD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bellingham</td>
<td>34.300</td>
<td>.800</td>
</tr>
<tr>
<td>Birch Bay Water &amp; Sewer</td>
<td>1.44</td>
<td>(0.50)¹</td>
</tr>
<tr>
<td>Blaine</td>
<td>1.54</td>
<td>0.39</td>
</tr>
<tr>
<td>Everson</td>
<td>0.441²</td>
<td>0.000</td>
</tr>
<tr>
<td>Ferndale</td>
<td>6.37³</td>
<td>2.27</td>
</tr>
<tr>
<td>Lynden</td>
<td>2.18</td>
<td>0.13</td>
</tr>
<tr>
<td>Nooksack</td>
<td>0.220²</td>
<td>0.000</td>
</tr>
<tr>
<td>Sumas</td>
<td>0.400</td>
<td>0.105</td>
</tr>
<tr>
<td>Lake Whatcom Water &amp; Sewer District</td>
<td>1.382</td>
<td>0.265</td>
</tr>
<tr>
<td>WC Water District 13</td>
<td>0.125</td>
<td>0.006</td>
</tr>
</tbody>
</table>

¹ The Engineering Report for Wastewater Treatment Plant Improvements, Birch Bay Water and Sewer District, 2012, forecasts flow in year 2032 as 1.80 MGD, resulting in apparent deficit of 0.36 MGD at that time. The forecast flow in 2032 is extrapolated to 2036 for the analysis above. The 2012 report recommends capacity upgrade by 2022 to maintain adequate capacity. The 2012 report will be updated prior to that upgrade to assure the upgrade is implemented for then-current flow and loading forecasts, including provision of adequate capacity for year 2036.

² The City of Everson anticipates completing a wastewater treatment plant upgrade in 2016, which will increase the current peak month treatment capacity to 0.441 MGD for Everson and to 0.220 MGD for Nooksack.

³ Treatment capacity with planned improvements to the wastewater treatment plant.

### Population and Capital Projects

#### Population

The table below identifies each sewer provider’s latest sewer plan horizon year and population, as well as the County’s 2036 population projection. This table serves to provide an order of magnitude check with respect to the population that each service provider is planning on serving in comparison to the population projections for the 2036 Whatcom County Comprehensive Plan.
Table 12.5 Population Comparison: Sewer Plans and 2036 Population Projection

<table>
<thead>
<tr>
<th>Service Provider</th>
<th>Horizon year of Capital Plan</th>
<th>Capital Plan Population</th>
<th>County’s 2036 Population Projection</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bellingham</td>
<td>2026</td>
<td>122,007</td>
<td>123,710</td>
</tr>
<tr>
<td>Birch Bay Water and Sewer</td>
<td>2036</td>
<td>13,578</td>
<td>13,046</td>
</tr>
<tr>
<td>Blaine</td>
<td>2025</td>
<td>10,871</td>
<td>9,585</td>
</tr>
<tr>
<td>Everson</td>
<td>2036</td>
<td>4,044</td>
<td>3,907</td>
</tr>
<tr>
<td>Ferndale</td>
<td>2036</td>
<td>19,591</td>
<td>19,591</td>
</tr>
<tr>
<td>Lynden</td>
<td>2036</td>
<td>19,282</td>
<td>19,275</td>
</tr>
<tr>
<td>Nooksack</td>
<td>2036</td>
<td>2,470</td>
<td>2,425</td>
</tr>
<tr>
<td>Sumas</td>
<td>2036</td>
<td>2,323(^1)</td>
<td>2,323</td>
</tr>
<tr>
<td>Lake Whatcom Water and Sewer District</td>
<td>2032</td>
<td>10,556</td>
<td>12,380(^2)</td>
</tr>
<tr>
<td>Water District 13</td>
<td>2029</td>
<td>1,595</td>
<td>1,773</td>
</tr>
</tbody>
</table>

1 From the Draft City of Sumas Comprehensive Plan.
2 The boundaries of the District are larger than the area served by sewer.

Capital Facility Projects

Sewer services and capital facilities are funded primarily by the users of the system through service charges and connection fees. These rates are adjusted as needed to fund capital and operational needs. Some grant programs exist for the construction of sewer facilities and upgrades, but, like many grant programs, they are generally very competitive.

City of Bellingham

The City of Bellingham Comprehensive Sewer Plan (2009) indicates that the City maintains a wastewater collection and conveyance system comprised of gravity sewers, pump stations, and force mains (p. 5-1). The City of Bellingham operates a wastewater treatment plant, which is also utilized by the Lake Whatcom Water and Sewer District (pp. 2-1 and 8-1). The City of Bellingham Comprehensive Sewer Plan contains a capital improvement program with approximately $54.2 million in capital projects (2016 - 2026). These projects include collection system improvements and wastewater treatment plant improvements (p. 12-6). The financial plan indicates that system development charges, rates, cash reserves, and revenue bonds are funding sources to implement the plan and that projected funds will be adequate for planned capital projects (p. 12-7).

Birch Bay Water and Sewer District

The Birch Bay Water and Sewer District Comprehensive Sewer Plan was adopted by the District in 2009. The District is completing an updated plan in 2016. Birch Bay Water and Sewer District provides sewer collection and treatment services for the area within and some areas adjacent to the
Birch Bay UGA. The system includes a wastewater treatment plant, 11 pump stations and over 56 miles of collection and conveyance piping. The wastewater treatment plant was evaluated in 2012. The headworks facility was replaced in 2014 and aeration upgrades are in progress in 2016. Following completion of the aeration upgrades, the facility will be permitted for 1.44 million gallons per day, maximum month average daily flow. The District’s 2009 plan indicates where current sewer service exists and establishes a future service area that consists of portions of then-current Birch Bay, Blaine, and Cherry Point UGAs. The plan identifies future trunk lines and lift station and force main upgrades or additions. The system serves development throughout the UGA, including all developed areas along the Birch Bay shoreline and existing urban-density development inland. The County has since removed significant areas from the Birch Bay and Blaine UGAs, particularly areas at Birch Point and north of Lincoln Road. The sewer service area addressed in the 2016 plan update includes all of the Birch Bay UGA, and parcels and plats with existing sewer service. The most recent District sewer planning document is its Engineering Report for Wastewater Treatment Plant Improvements (2012). The report includes an updated forecast of growth in population, flow and loadings. The report recommended improvements for immediate implementation (the work to be completed in 2016) and an upgrade to be completed by year 2022. With the revised population forecast for this plan, the next plant upgrade will potentially be necessary prior to 2022. The 2016 plan update will refine the timing of the next plant upgrade and future updates to the 2012 report will address capacity needs for year 2036 population and corresponding flow and loading. The 2009 plan includes a capital improvement plan for adequate capacity and extension or upgrade of collection system facilities to service the designated area. Several of those projects have been completed. The 2016 plan will revise that capital plan to exclude service to areas no longer in the UGA or service area and update the list of projects anticipated for service within the UGA and adjacent existing service area.

City of Blaine

The City of Blaine General Sewer Plan (2004, revised 2005) and associated Technical Memorandum (2016) indicate that the City of Blaine maintains a wastewater collection and conveyance system comprised of gravity sewers, pump stations, and force mains. The City of Blaine operates a bio-membrane wastewater treatment plant that discharges to Semiahmoo Bay. The plant is called the Lighthouse Point Water Reclamation Facility and uses advanced membrane bio-reactors to purify wastewater to meet Class A water reuse standards, such as irrigation of parks and golf courses. Lighthouse Point replaced the city’s former facility which has since been decommissioned. Lighthouse Point generates reclaimed water suitable for industrial and agricultural uses, and the city is currently contracted with Resort Semiahmoo to supply reclaimed water for golf course irrigation, and a private user for service of a landscape water feature.

The plant has a design capacity of 3.1 million gallons per day (mgd) for purification, and has the current capacity to treat an annual average of 1.54 mgd. The City of Blaine General Sewer Plan contains a capital improvement program with approximately $33.5 million in capital projects over its 20-year planning period. A significant portion of that has already been invested in developing Lighthouse Point and the flow attenuation tanks; a total of $26.0 million was estimated in the Plan for those two facilities. In the next 20 years (2016 - 2036), the City forecasts line extensions and
installation of pumping facilities to serve new development, as well as phased expansion of the Lighthouse Point facility. However, these are only necessary if development occurs and will be paid primarily through general facility fees. These projects include sewer trunk line extensions, and associated pump stations, into the East Blaine planning area as development in that area generates the need. They also include development of sewer trunk line extensions, and associated pump stations, in the West Blaine planning area as development also creates the need there. The vast majority of these facilities will be developer installed. The City’s financing plan projects adequate revenues to cover expenses over the 20-year planning period only if the City continually assesses the rate structure and general facility fees as time progresses. The City has accomplished the greatest goal outlined in the plan (building the new treatment facility), and is well-staged to expand the delivery system as demand increases due to expanding population.

City of Everson

The City of Everson General Sewer Plan (2012) indicates that the City of Everson maintains a wastewater collection and conveyance system comprised of gravity sewers, pump stations, and force mains. The City of Everson operates a wastewater treatment plant, which is also utilized by the City of Nooksack (pp. 3-1 and 3-3). The Everson Wastewater Treatment Plant is being upgraded in 2016 to increase capacity to accommodate projected growth over the 20-year planning period (City of Nooksack 2012 General Sewer Plan Elements Amendment, January 2016, p. 3-2). The Everson General Sewer Plan contains a capital improvement program with approximately $4.5 million in capital projects over the next 20 years (2016 - 2036). These projects include pump station, collection system and wastewater treatment plant improvements (pp. 11-3 through 11-8). The financing plan indicates there are fiscal challenges, but also includes strategies for addressing projected funding gaps (pp. 11-8 through 11-10).

City of Ferndale

The Draft City of Ferndale Comprehensive Sewer Plan (2016) indicates that the City of Ferndale maintains a wastewater collection and conveyance system comprised of gravity sewers, pump stations, and force mains. The City of Ferndale also operates a wastewater treatment plant (pp. 15). The City plans to increase the capacity of the wastewater treatment plant from 3.23 MGD to 6.37 MGD (p. 16). The existing lagoon system will be converted to an extended aeration activated sludge treatment plant. The Draft Ferndale Comprehensive Sewer Plan contains a capital improvement program with approximately $71 million in capital projects over the next 20 years (2016 - 2036). These projects include pump stations, collection system, and wastewater treatment plant improvements and inflow/infiltration reduction projects. The City’s financing plan projects adequate revenues to cover expenses over the 20-year planning period (p. 32).

City of Lynden

The Draft City of Lynden General Sewer Plan (2016) indicates that the City of Lynden maintains a wastewater collection and conveyance system comprised of gravity sewers, pump stations, and force mains. The City of Lynden also operates a wastewater treatment plant that include an influent pump station, headworks with screens and grit removal, three anoxic selector tanks, two oxidation
ditches, two secondary clarifiers, effluent cloth disc filters, UV disinfection system, effluent Parshall flume, effluent pump station, sludge thickening and digestion, sludge dewatering, and composting facilities (Chapter 5). The Draft Lynden General Sewer Plan contains a capital improvement program with capital projects over the next 20 years from 2016 - 2036 (Chapter 12). The City’s financing plan projects adequate revenues to cover expenses over the 20-year planning period (Chapter 12).

City of Nooksack

The City of Nooksack 2012 General Sewer Plan Elements Amendment (January 2016) indicates that the City of Nooksack maintains a wastewater collection and conveyance system comprised of gravity sewers, pump stations, and force mains. The City of Nooksack does not operate a wastewater treatment plant. Wastewater from Nooksack is treated at the Everson Wastewater Treatment Plant (pp. 3-1 and 3-3). The Everson Wastewater Treatment Plant is being upgraded in 2016 to increase capacity to accommodate projected growth over the 20-year planning period (City of Nooksack 2012 General Sewer Plan Elements Amendment, January 2016, p. 3-2). The Plan also contains a capital improvement program with over $2.5 million in capital projects over the next 20 years (2016-2036). These projects include pump station, collection system and wastewater treatment plant improvements (pp. 11-2 through 11-5). The six-year and 20-year financing plans indicate there are fiscal challenges based upon existing fee structures, but also includes strategies for addressing projected funding gaps (pp. 11-6 through 11-9).

City of Sumas

The City of Sumas does not have a comprehensive sewer plan. The Sumas sewer system was addressed in the 2016 update of the Sumas Comprehensive Plan. The Sumas Comprehensive Plan addresses the 20-year period through 2036 including a 2036 population of 2,323.

The City of Sumas owns and maintains a sewage collection and transmission system that includes gravity sewer lines and a small number of sewer lift stations. The Sumas system directs sewage to a discharge into the City of Abbotsford system in British Columbia, Canada.

The City has an ongoing contract with the City of Abbotsford to receive and treat sewage collected in Sumas. This contract provides for the receipt and treatment of a maximum volume of 400,000 gallons per day through December 31, 2028. Discharges from the Sumas system are metered on a daily basis. A review of City records from January through December 2015 indicates that typical maximum effluent levels are approximately 227,000 gallons per day total. Approximately 110,000 gallons of the City’s total maximum daily discharge is generated by a single industrial customer. Using the conversion factor of 300 gallons per day per equivalent residential unit (ERU), the total contract amount equates to 1,333 ERUs. The available capacity of 173,000 gallons per day is equivalent to approximately 577 ERUs. Excluding the one large industrial customer, which generates the equivalent of 367 ERUs, leaves an available capacity of 966 ERUs for the remainder of the City. This available capacity equals a 248% increase over the current City typical maximum daily volume of 117,000 gallons per day or 390 ERUs (e.g., maximum daily volume without considering the single large industrial use). This CFP assumes a population increase from 1,468 in
2015 to 2,323 in 2036 along with a comparable level of employment, representing a 58% increase through 2036. On this basis, it appears that Sumas has sufficient sewer service capacity to meet its needs through 2036.

The Sumas Comprehensive Plan shows the locations of sewer main extensions necessary to serve new development in the Sumas UGA. All system extensions necessary to serve new development will be provided by developers. The City completed a sewer lift station that was designed to be deep enough to receive gravity flows from all areas within the Sumas unincorporated UGA and UGA Reserve. The draft Capital Facilities Element of the Sumas Comprehensive Plan (2016) includes a 20-year capital improvement program (2016-2036) that identifies over $480,000 in capital projects to be funded through a combination of monthly rates and charges, connection charges, and developer contracts (Table 4-1 on p. 4-4). The draft Capital Facilities Element of the Sumas Comprehensive Plan also includes a six-year financial analysis (2016-2021) indicating that the city sewer system will have sufficient revenues to cover anticipated expenditures, including capital improvement costs, through 2021 (p. 4-25).

**Lake Whatcom Water and Sewer District**

The *Lake Whatcom Water and Sewer District Comprehensive Sewer Plan 2014 Update* (2014) indicates that the District maintains a wastewater collection and conveyance system comprised of gravity sewers, pump stations, and force mains. The District sends wastewater to the City of Bellingham for treatment and disposal (pp. 4-16). The District and the City of Bellingham have a contract for wastewater treatment and disposal through the year 2034. The *Lake Whatcom Water and Sewer District Comprehensive Sewer Plan 2014 Update* contains a capital improvement program with approximately $3.4 million in capital projects over the next several years (2016-2019). These projects include pump station replacements, sewer line replacements, and manhole rehabilitation (pp. 24-25 and Exhibit K). The District engages in revenue planning and reviews sewer rate structures to address future costs to the District (pp. 19-21 and 24).

**Water District 13**

Water District 13 provides sewer service to a portion of the Columbia Valley UGA. The *Whatcom County Water District No. 13 Comprehensive Sewer Plan* (2012) indicates that Water District 13 maintains a wastewater system comprised of pressure and gravity sewer pipes, pump stations, a wastewater treatment plant, and a force main that transfers flows from the treatment plant to the drainfield (p. 5-1). The *Whatcom County Water District No. 13 Comprehensive Sewer Plan* contains a capital improvement program with approximately $11.7 million in capital projects from 2017 to 2029. These projects include re-lining lagoons in the wastewater treatment plant, replacing a pump station force main, upgrading the wastewater treatment plant by installing a membrane bioreactor, refurbishing chlorination equipment, and installing new pipe (p. 7-11). The financing plan indicates that the District could issue bonds and utilize general facilities charges, developer extension charges, and monthly service charges to pay for capital facility improvements (pp. 7-7, 7-8, 7-14 and Figure 7.2).
Chapter 13 – Schools

Schools

This section evaluates the seven public school districts that serve Whatcom County and provides:

- An inventory of current facilities, showing the existing enrollment capacity at the elementary, middle school and high school levels;
- A forecast of future needs, indicating whether existing school facilities can accommodate future student enrollment projections; and
- Capital projects and funding, summarizing the facility improvements proposed by the districts to provide additional classroom space for future students.

Inventory of Current Facilities

Inventories of the school districts’ existing facilities located in Whatcom County are presented in this section. Each inventory includes the number of students that the school district can accommodate (enrollment capacity) for the elementary, middle school and high school grades.

Bellingham School District

The Bellingham School District serves the majority of the City of Bellingham and surrounding areas. The school district’s current enrollment capacity is shown below.

Table 13.1 Bellingham School District Current Enrollment Capacity

<table>
<thead>
<tr>
<th>School</th>
<th>Total Enrollment Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elementary</td>
<td>4,815</td>
</tr>
<tr>
<td>Middle School</td>
<td>2,700</td>
</tr>
<tr>
<td>High School</td>
<td>3,350</td>
</tr>
<tr>
<td>Total K-12</td>
<td>10,865</td>
</tr>
</tbody>
</table>

Source: Bellingham School District No. 501 Capital Facilities Plan 2015-2021 (August 2015, Table 2-A). This capacity reflects permanent and portable capacity at each grade level.
Blaine School District

The Blaine School District serves the City of Blaine and its UGA, most of the Birch Bay UGA, and surrounding rural areas. The school district's current enrollment capacity is shown below.

Table 13.2 Current Enrollment Capacity

<table>
<thead>
<tr>
<th>School</th>
<th>Total Enrollment Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elementary</td>
<td>1,120</td>
</tr>
<tr>
<td>Middle School</td>
<td>540</td>
</tr>
<tr>
<td>High School</td>
<td>740</td>
</tr>
<tr>
<td>Total K-12</td>
<td>2,400</td>
</tr>
</tbody>
</table>

Source: Blaine School District Capital Facilities Plan (December 2015, p. 6).

Ferndale School District

The Ferndale School District serves the City of Ferndale and its UGA, and rural areas including the Lummi Reservation and Lummi Island. The school district's current enrollment capacity is shown below.

Table 13.3 Current Enrollment Capacity

<table>
<thead>
<tr>
<th>School</th>
<th>Total Enrollment Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elementary</td>
<td>2,975</td>
</tr>
<tr>
<td>Middle School</td>
<td>1,300</td>
</tr>
<tr>
<td>High School</td>
<td>1,925</td>
</tr>
<tr>
<td>Total K-12</td>
<td>6,200</td>
</tr>
</tbody>
</table>

Source: Ferndale Schools Capital Facilities Plan and School Impact Fee Ordinance (April 2013, p. 3).
Lynden School District

The Lynden School District serves the City of Lynden and its UGA, and surrounding agricultural and rural areas. The school district’s current enrollment capacity is shown below.

Table 13.4 Current Enrollment Capacity

<table>
<thead>
<tr>
<th>School</th>
<th>Total Enrollment Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elementary</td>
<td>1,350</td>
</tr>
<tr>
<td>Middle School</td>
<td>600</td>
</tr>
<tr>
<td>High School</td>
<td>700</td>
</tr>
<tr>
<td>Total K-12</td>
<td>2,650</td>
</tr>
</tbody>
</table>

Source: Lynden School District Capital Facilities Plan (Feb. 2016, p. 5)

Meridian School District

The Meridian School District serves mostly rural areas, although the City of Bellingham extends into the southern portion of the District. The school district’s current enrollment capacity is shown below.

Table 13.5 Current Enrollment Capacity

<table>
<thead>
<tr>
<th>School</th>
<th>Total Enrollment Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elementary</td>
<td>888¹</td>
</tr>
<tr>
<td>Middle School</td>
<td>494</td>
</tr>
<tr>
<td>High School</td>
<td>870</td>
</tr>
<tr>
<td>Total K-12</td>
<td>2,252</td>
</tr>
</tbody>
</table>


¹ Capacity includes Irene Reither Elementary School and Ten Mile Creek Elementary School (which currently provides space for the Parent Partnership Program).
Mount Baker School District
The Mount Baker School District serves the Columbia Valley UGA and rural areas in eastern Whatcom County. The school district’s current enrollment capacity is shown below.

<table>
<thead>
<tr>
<th>School</th>
<th>Total Enrollment Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elementary</td>
<td>1,255</td>
</tr>
<tr>
<td>Middle School</td>
<td>428</td>
</tr>
<tr>
<td>High School</td>
<td>944</td>
</tr>
<tr>
<td>Total K-12</td>
<td>2,627</td>
</tr>
</tbody>
</table>


Nooksack Valley School District
The Nooksack Valley School District serves the cities of Everson, Nooksack, Sumas and their associated UGAs, and surrounding agricultural and rural areas. The school district’s current enrollment capacity is shown below.

<table>
<thead>
<tr>
<th>School</th>
<th>Total Enrollment Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elementary</td>
<td>1,160</td>
</tr>
<tr>
<td>Middle School</td>
<td>650</td>
</tr>
<tr>
<td>High School</td>
<td>1,320</td>
</tr>
<tr>
<td>Total K-12</td>
<td>3,150</td>
</tr>
</tbody>
</table>

Source: Everson/Nooksack/Sumas City Planner e-mail of March 7, 2016.
Future Needs

The forecast of future needs shows whether a school district's existing capacity will be able to accommodate projected student enrollment increases over the 20-year planning period, or whether the districts will need plans for additional school facilities to meet future needs. Several school districts have developed 20-year student enrollment projections in association with their capital facility plans (CFPs). School district projections are used in the analysis, when available. When 20-year projections are not available from the school district CFPs, consultant projections developed for the Final EIS Whatcom County 2016 Comprehensive Plan and Development Regulations Update and Urban Growth Areas Review (November 2015) are utilized.

Future enrollment is affected by demographic trends (such as an aging population) and trends in alternative school methods including home schooling, Running Start program, and online schooling. Therefore, school districts routinely monitor enrollment growth trends and may adjust their plans accordingly. The table below shows whether existing classroom capacity will be adequate to serve the projected student enrollment in 2036. As can be seen by this analysis, deficits are experienced in four school districts by 2036. School districts can address future deficits by constructing additional classrooms, installing portables, and/or increasing the number of students accommodated in existing classrooms.

Table 13.8 Whatcom County School District – Forecast of Future Needs 2036

<table>
<thead>
<tr>
<th>School District</th>
<th>Existing Student Capacity</th>
<th>2036 Enrollment Projection</th>
<th>2036 School Surplus</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bellingham</td>
<td>10,865</td>
<td>12,331</td>
<td>(1,466)</td>
</tr>
<tr>
<td>Blaine</td>
<td>2,400</td>
<td>2,456</td>
<td>(56)</td>
</tr>
<tr>
<td>Ferndale</td>
<td>6,200</td>
<td>6,521</td>
<td>(321)</td>
</tr>
<tr>
<td>Lynden</td>
<td>2,650</td>
<td>3,432</td>
<td>(782)</td>
</tr>
<tr>
<td>Meridian</td>
<td>2,252</td>
<td>1,529</td>
<td>723</td>
</tr>
<tr>
<td>Mount Baker</td>
<td>2,627</td>
<td>2,128</td>
<td>499</td>
</tr>
<tr>
<td>Nooksack Valley</td>
<td>3,150</td>
<td>2,012</td>
<td>1,138</td>
</tr>
</tbody>
</table>

1. The Bellingham School District No. 501 Capital Facilities Plan 2015-2021 (August 2015) shows enrollment in the 2034-35 school year at 12,141 students (Table 1-8). The County has extrapolated this enrollment projection to the year 2036.
3. Projected enrollment is from the background information prepared for the Final EIS Whatcom County 2016 Comprehensive Plan and Development Regulations Update and Urban Growth Areas Review (November 2015), contained in an e-mail from BERK Consulting (March 1, 2016).
5. Projected enrollment is from the background information prepared for the Final EIS Whatcom County 2016 Comprehensive Plan and Development Regulations Update and Urban Growth Areas Review (November 2015), contained in an e-mail from BERK Consulting (March 1, 2016). The projected enrollment does not include students in the Meridian Parent Partnership Program (MP3). MP3 currently serves approximately 150 students on campus that live all over Whatcom County and another 130 students via on-line methods from around the state. It is anticipated that MP3 enrollment will continue to increase throughout the 20-year planning period.
7. Projected enrollment is from the background information prepared for the Final EIS Whatcom County 2016 Comprehensive Plan and Development Regulations Update and Urban Growth Areas Review (November 2015), contained in an e-mail from BERK Consulting (March 1, 2016).
Capital Projects and Funding

Most school districts in Whatcom County have capital facility plans that inventory existing school facilities, project future enrollment levels, and identify capital projects needed to support student enrollment growth in their respective districts.

Capital Project Funding

School Districts in Washington State fund capital improvements with both State and local dollars. Local capital financing is usually achieved through two primary mechanisms. The first is the property tax, in which residents of the school district vote to finance a capital bond with an increase in property taxes. The annual bond cost is spread over the life of the bond. Therefore, if property values increase over time the levy rate necessarily declines to generate the same annual revenue.

The second potential financing tool is a school impact fee, which is designed to recover costs from new development for the facility improvements necessary to serve development. This fee is usually charged to new residential development based on the number and type of units constructed.

Bellingham School District

The future needs analysis above indicates that the Bellingham School District’s projected enrollment in 2036 will exceed the current school capacity by 1,466 students. The Bellingham School District No. 501 Capital Facilities Plan 2015-2021 (Aug. 2015) indicates that permanent capacity will increase by 652 over the six-year planning period (Table 3). The projects that will increase permanent capacity are the Lowell Elementary School renovation/addition, the Happy Valley Elementary School replacement, a new Options High School, and the Sehome High School replacement/addition (Table 3). Installing portables and purchasing additional property are also planned in the next six years (Table 3). These projects are being funded by a $160 million bond measure passed by the voters in November 2013, state matching funds, and impact fees.

While the District’s CFP is a six-year plan, rather than a 20-year plan, it does state that “The District will closely monitor population growth and incorporate planned projects to meet actual student needs in future updates to this Plan” (p. 3).
Blaine School District

The future needs analysis above indicates that the Blaine School District’s projected enrollment in 2036 will exceed the current school capacity by 56 students. The *Blaine School District Capital Facilities Plan* (Dec. 2015) indicates that permanent capacity will increase by at least 60 more students over the six-year planning period, with flexibility built into the plan to accommodate up to a total of 184 more students (p. 11). Projects in the six-year planning period include improvements to the Blaine Primary School, Blaine Elementary School and Blaine High School (p. 11). These projects are being funded by a $45 million bond measure passed by the voters in February 2015. The CFP also indicates that the District plans to identify a site that could accommodate a school in the Birch Bay area, although this project is not currently funded (p. 12).

Ferndale School District

The future needs analysis above indicates that the Ferndale School District’s projected enrollment in 2036 will exceed the current school capacity by 321 students. The *Ferndale Schools Capital Facilities Plan and School Impact Fee Ordinance* (April 2013) indicates that the District is looking at replacing two elementary schools and one high school in the six-year planning period at the cost of about $140 million (p. 5). The proposed funding source would primarily be voter approved bonds and state matching funds (p. 6).

Lynden School District

The future needs analysis above indicates that the Lynden School District’s projected enrollment in 2036 will exceed the current school capacity by 782 students. The *Lynden School District Capital Facilities Plan* (Feb. 2016) indicates that permanent capacity will increase by 250 more students over the six-year planning period and by a total of 1,050 over the 20-year planning period (pp. 5, 10 and 11). Projects in the six-year planning period that will add capacity are construction of a new Fisher Elementary School and construction of a new Lynden Middle School (p. 10). These projects are being funded by a $48 million bond measure passed by the voters in April 2015 and state matching funds. The CFP also indicates that the District plans to make necessary additions to address the high school facility needs and elementary school facility needs within the 20-year planning period. The District would seek voter approval of bond measures in the future for these projects (pp. 10 and 11).
Meridian School District

The future needs analysis above indicates that the Meridian School District’s projected enrollment in 2036 can be accommodated by the current school facilities. The *Meridian School District No. 505 Capital Facilities Plan 2015-2021* (June 2015) indicates that the District recently completed capacity and improvement projects at Irene Reither Elementary School and Meridian High School (p. 8). The District’s CFP states that “The District plans to monitor capacity and enrollment growth and, as necessary, will update this Plan to reflect capacity needs and related planned projects” (p. 8). In fact, the Meridian School District Superintendent indicated, in a letter of February 23, 2016, that the District is currently experiencing considerable growth at the elementary level. Therefore, the Meridian Parent Partnership Program (MP3), which currently occupies the Ten Mile Creek Elementary School, will be re-located to a new campus west of the District Office on Laurel Rd. This new campus will consist of portable buildings, parking and lawn area. The Ten Mile Creek Elementary School will be utilized for kindergarten and 1st grade classrooms at the beginning of the 2017-2018 school year.

Mount Baker School District

The future needs analysis above indicates that the Mount Baker School District’s projected enrollment in 2036 can be accommodated by the current school facilities. The *Mount Baker School District Capital Facilities Plan* (May 2013) indicates that the District has adequate classroom space to serve projected student enrollment through the entire 20-year planning period (p.12). While the District does not plan to add classroom space, it does plan to invest in facility improvements, maintenance and energy upgrades (p. 12).

Nooksack Valley School District

The future needs analysis above indicates that the Nooksack Valley School District’s projected enrollment in 2036 can be accommodated by the current school facilities. Projects in the six-year planning period include replacing the Nooksack Valley Middle School (except the covered play area), expanding the Nooksack Elementary School (adding one kindergarten, three general classrooms and enclosing a covered play area), and replacing the Nooksack Valley High School. These projects are being funded by almost $28 million bond measure passed by the voters in February 2015 and state matching funds. The District also plans improvements to roofs, HVAC controls, gym floors and floor coverings over the six-year planning period.
Chapter 14 – Fire Protection

Fire Protection

The County is served by 15 different fire departments or districts, 13 of which serve unincorporated portions of the County:

- City of Bellingham
- City of Lynden
- Fire District 1
- Fire District 4
- Fire District 5
- Fire District 7
- Fire District 8
- Fire District 11
- Fire District 14
- Fire District 16
- Fire District 17
- Fire District 18
- Glacier Fire District 19
- North Whatcom Fire and Rescue
- South Whatcom Fire Authority

The cities of Bellingham and Lynden have their own fire departments. There are urban growth areas (UGAs) within the boundaries of seven fire districts in the County. These seven districts serve the UGAs along with surrounding rural areas. Fire District 1 serves the cities of Everson and Nooksack. Fire District 7 serves the City of Ferndale and the Cherry Point UGA. Fire District 8 serves portions of the Bellingham UGA. Fire District 14 serves the City of Sumas and the Columbia Valley UGA. North Whatcom Fire and Rescue, which also provides service within the boundaries of Fire District 4, serves the City of Blaine, the Birch Bay UGA, the Lynden UGA (outside city limits) and portions of the Bellingham UGA. South Whatcom Fire Authority serves portions of the Bellingham UGA. Six fire districts serve rural areas and do not contain UGAs within their boundaries. These are Fire Districts 5, 11, 16, 17, 18 and 19.

Each city and fire protection district is assigned a numeric fire protection rating (a Class 1 rating is considered best) by the Washington Surveying and Rating Bureau. Insurance companies fund the Bureau to perform on-site inspections of fire districts to determine the rating. The Bureau analyzes five areas: average response time, water supply, communication network, schedule of fire inspections, and existing conditions of fire stations. Fire station evaluations focus on the age of vehicles, amount of personnel training, and whether the facilities are staffed or not. Insurance companies use the fire protection rating to help determine insurance rates on all fire insurance policies. Quality of fire service can have a significant impact on fire insurance rates with the greatest impact experienced by commercial occupancies.

In addition to fire protection services, the agencies listed here provide responses to medical emergencies. In fact, EMS calls account for the majority of the responses by most fire protection agencies.

The City of Bellingham and Whatcom County operate the 911 emergency telephone system, called What-Comm. The initial call receiving site is located in Bellingham, and is responsible for dispatching most law enforcement agencies in Whatcom County. All fire and medical related calls
are forwarded to the Fire Dispatch Center located at Bellingham Fire Department’s Broadway Street Station. The Fire Dispatch Center is responsible for dispatching all municipal fire departments and fire districts in Whatcom County. The Bellingham Police Department operates the What-Comm center and the Bellingham Fire Department operates the Fire Dispatch Center.

Inventory of Current Facilities

The table below summarizes the capital facilities for each fire district. It also includes each district’s fire rating, service population and whether the District serves an urban growth area (UGA).

Table 14.1 Fire Facilities Inventory

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>City of Bellingham</td>
<td>2</td>
<td>3</td>
<td>82,203</td>
<td>Y</td>
</tr>
<tr>
<td>City of Lynden</td>
<td>1</td>
<td>5</td>
<td>12,726</td>
<td>Y</td>
</tr>
<tr>
<td>Fire District 1</td>
<td>2</td>
<td>7/8</td>
<td>10,796</td>
<td>Y</td>
</tr>
<tr>
<td>Fire District 5</td>
<td>1</td>
<td>5</td>
<td>1,452</td>
<td>N</td>
</tr>
<tr>
<td>Fire District 7</td>
<td>6</td>
<td>6/5[^3]</td>
<td>22,447</td>
<td>Y</td>
</tr>
<tr>
<td>Fire District 8</td>
<td>2</td>
<td>5</td>
<td>7,779</td>
<td>Y</td>
</tr>
<tr>
<td>Fire District 11</td>
<td>1</td>
<td>7</td>
<td>999</td>
<td>N</td>
</tr>
<tr>
<td>Fire District 14</td>
<td>3</td>
<td>5-9[^4]</td>
<td>7,855</td>
<td>Y</td>
</tr>
<tr>
<td>Fire District 16</td>
<td>3</td>
<td>8</td>
<td>1,616</td>
<td>N</td>
</tr>
<tr>
<td>Fire District 17</td>
<td>2</td>
<td>5</td>
<td>1,364</td>
<td>N</td>
</tr>
<tr>
<td>Fire District 18</td>
<td>2</td>
<td>6</td>
<td>2,132</td>
<td>N</td>
</tr>
<tr>
<td>Glacier Fire District 19</td>
<td>1</td>
<td>7</td>
<td>425</td>
<td>N</td>
</tr>
<tr>
<td>North Whatcom Fire &amp; Rescue and Fire District 4</td>
<td>11</td>
<td>4/5</td>
<td>40,750</td>
<td>Y</td>
</tr>
<tr>
<td>South Whatcom Fire Authority</td>
<td>5</td>
<td>5</td>
<td>12,782</td>
<td>Y</td>
</tr>
</tbody>
</table>

[^1] Fire rating is based upon the Washington Surveying and Rating Bureau (WSRB).
[^2] One of the 7 stations is a medic station that serves unincorporated areas of the County.
[^3] Fire rating for Cherry Point is 6 and fire rating for Ferndale is 5.
[^4] The WSRB ratings vary within Fire District 14 from 5 (in Sumas) to 9 (in outlying areas), depending on location and type of structure.
Future Needs

Whatcom County adopted a level of service (LOS) standard tied to response time and fire ratings in the Comprehensive Plan in 2011. The Whatcom County Comprehensive Plan contains the following LOS standards:

Urban levels of service for fire protection shall be a response time of 8 minutes 80% of the time when the department covering the urban area has staffed the fire station. When the fire station is not staffed the response time shall be 10 minutes 80% of the time, or a WSRB Rating of a 6.

Rural levels of service for fire protection shall be a response time of 12 minutes 80% of the time when the department covering the rural area has staffed the fire station. When the fire station is not staffed the response time shall be 14 minutes 80% of the time, or a WSRB Rating of an 8.

Staffed stations shall be a fire station that is staffed 24 hours a day 7 days a week 365 days a year. Staff may be paid, volunteer, or combination of the two.

Fire district capital facility plans submitted in 2011 or later will be reviewed against the new county-wide LOS standards. Whatcom County will consider incorporating information from fire district capital facility plans into the Whatcom County Comprehensive Plan, as they are approved by the districts.
<table>
<thead>
<tr>
<th>Fire District</th>
<th>WSRB Rating Standard</th>
<th>Response Time Standard</th>
<th>Meets Adopted LOS?</th>
</tr>
</thead>
<tbody>
<tr>
<td>City of Bellingham Fire Department</td>
<td></td>
<td>8 minutes 80% of the time for the Bellingham UGA</td>
<td>Yes(^2)</td>
</tr>
<tr>
<td>City of Lynden Fire Department</td>
<td></td>
<td>8 minutes 80% of the time for the Lynden UGA</td>
<td>Yes(^3)</td>
</tr>
<tr>
<td>Fire District 1</td>
<td>6 for the Everson and Nooksack UGAs 8 for rural areas</td>
<td>10 minutes 80% of the time for the Everson and Nooksack UGAs 14 minutes 80% of the time for rural areas</td>
<td>Yes(^4)</td>
</tr>
<tr>
<td>Fire District 7</td>
<td></td>
<td>8 minutes 80% of the time for the Ferndale UGA and Cherry Point UGA 12 minutes 80% of the time for rural areas</td>
<td>Yes(^5)</td>
</tr>
<tr>
<td>Fire District 8</td>
<td></td>
<td>8 minutes 80% of the time for the Bellingham UGA 12 minutes 80% of the time for rural areas</td>
<td>No(^6)</td>
</tr>
<tr>
<td>Fire District 14</td>
<td>6 for the Columbia Valley &amp; Sumas UGAs 8 for rural areas</td>
<td>10 minutes 80% of the time for the Columbia Valley &amp; Sumas UGAs 14 minutes 80% of the time for rural areas</td>
<td>Yes(^7)</td>
</tr>
<tr>
<td>North Whatcom Fire and Rescue and Fire District 4</td>
<td>8 for rural areas (unstaffed stations)</td>
<td>8 minutes 80% of the time for the stations serving the UGAs (outside city limits) 12 or 14 minutes 80% of the time for rural areas (depending on whether the station is staffed or not)</td>
<td>Yes(^8)</td>
</tr>
<tr>
<td>South Whatcom Fire Authority</td>
<td></td>
<td>8 for rural areas (unstaffed stations)</td>
<td>Yes(^9)</td>
</tr>
</tbody>
</table>

1 The Fire Districts also serve rural areas located outside UGAs.
2 Final EIS Whatcom County 2016 Comprehensive Plan and Development Regulations Update and Urban Growth Areas Review (November 2015, p. 3-17).
3 Final EIS Whatcom County 2016 Comprehensive Plan and Development Regulations Update and Urban Growth Areas Review (November 2015, p. 3-17).
4 Whatcom County Fire District #1 Capital Facilities Plan August 2015.
5 Whatcom County Fire District No. 7 Capital Facility Plan 2016-2026 (February 2016).
6 Current response times to portions of the Bellingham UGA are not within the LOS standards. However, the LOS will be met with planned improvements set forth in the Whatcom County Fire District #8 Capital Facilities Plan (June 2013).
7 Whatcom County Fire District #14 Capital Facilities Plan (August 2015).
8 North Whatcom County Fire & Rescue and Fire District #4 Capital Facilities Plan (May 2016).
Table 14.3  LOS Analysis – Fire Districts Serving Rural Areas

<table>
<thead>
<tr>
<th>Fire District</th>
<th>WSRB Rating Standard</th>
<th>Response Time Standard</th>
<th>Meets Adopted LOS?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fire District 5</td>
<td>8</td>
<td>14 minutes 80% of the time</td>
<td>Yes^1</td>
</tr>
<tr>
<td>Fire District 11</td>
<td>8</td>
<td>14 minutes 80% of the time</td>
<td>Yes^1</td>
</tr>
<tr>
<td>Fire District 16</td>
<td>8</td>
<td>14 minutes 80% of the time</td>
<td>Yes^1</td>
</tr>
<tr>
<td>Fire District 17</td>
<td>8</td>
<td>14 minutes 80% of the time</td>
<td>Yes^1</td>
</tr>
<tr>
<td>Fire District 18</td>
<td>8</td>
<td>14 minutes 80% of the time</td>
<td>Yes^1</td>
</tr>
<tr>
<td>Glacier Fire District 19</td>
<td>8</td>
<td>14 minutes 80% of the time</td>
<td>Yes^1</td>
</tr>
</tbody>
</table>

^1 Final EIS Whatcom County 2016 Comprehensive Plan and Development Regulations Update and Urban Growth Areas Review (November 2015, pp. 3-18 and 3-19).

Capital Projects and Funding

Capital Project Funding

Fire Districts usually fund needed capital improvements through a combination of revenue sources. These can include property tax levies, cash reserves, capital bond proceeds, mitigation fees, fire impact fees and other sources.

The State of Washington authorizes fire districts to levy both “regular” and “special” property taxes to support their operational and capital needs. As part of the regular property tax levy, a fire service provider is authorized to levy a property tax at a total maximum rate of $1.50 per $1,000 of assessed value. However, the total maximum aggregate “regular” property tax levy by local taxing agencies in an area may not exceed $5.90. Occasionally, all local levies will total more than this limit. In this case, “junior” taxing districts, including fire districts, must follow state statute to lower their levy rate so that the total aggregate rate does not exceed the statutory limit. Fire districts may also pass “special” property tax levies for short-term periods without a statutory maximum levy limit. Fire impact fees may be collected on new residential and commercial development to fund facility improvements, provided that the County and/or city governments adopt ordinances authorizing such impact fees.
Capital Projects

A summary of the capital projects for the fire departments and districts serving UGAs are provided below.

City of Bellingham Fire Department

The City of Bellingham Fire Department serves area within the city limits and will serve the UGA upon annexation. Currently, the Bellingham Fire Department assists in providing service to the City's UGA through mutual aid response agreements with Fire Districts. The Draft Bellingham Comprehensive Plan Capital Facilities and Utilities Chapter (2016) contains $495,997 in Fire Department capital improvement projects over the six-year planning period (2017-2022). These projects include replacing medic units and equipment. These costs will be paid from the Medic One fund. There are also a number of unfunded projects including the fire boathouse, Fire Station 1 remodel, fire training center, new fire station, and replacing fire engines, a ladder truck, medic units and support vehicles.

City of Lynden Fire Department

The City of Lynden Fire Department serves area within the city limits and will serve the UGA. Currently, the City of Lynden Fire Department assists in providing service to the City’s UGA through mutual aid and automatic aid agreements with North Whatcom Fire and Rescue. The Draft Lynden Capital Facilities Plan (2016) contains approximately $8,020,000 million in capital improvement projects over the 20-year planning period. These projects include a new fire station, training facility, air unit, adding a third ambulance and a variety of apparatus and vehicle replacement purchases. Capital facility funding sources include property tax, sales tax, ambulance utility fees, transport fees, plan check fees, and impact fees.

Fire District # 1

Fire District # 1 serves the Everson UGA, Nooksack UGA and surrounding areas. The Whatcom County Fire District # 1 Capital Facilities Plan (August 2015) contains approximately $9.5 million in capital improvement projects over the 20-year planning period (pp. 14 and 15). These projects include Station 81 replacement (Everson), Station 82 remodel and storage building (Lawrence Rd.), and a variety of apparatus and vehicle purchases. Capital facility funding sources include property tax revenues, a bond measure, other district revenues and grants (pp. 12 and 13).

Fire District # 7

Fire District # 7 serves the Ferndale UGA, Cherry Point UGA and surrounding areas. The Whatcom County Fire District No. 7 Capital Facility Plan (February 2016) contains approximately $19.2 million in capital improvement projects over the 20-year planning period (pp. 22-24). These projects include station improvements, a Department Training Center, and a variety of apparatus and vehicle purchases. Capital facility funding sources include property tax revenues, bonds, grants, reserves and potentially mitigation fees (pp. 24-26).
Fire District # 8

Fire District # 8 serves a portion of the Bellingham UGA and surrounding areas. The *Whatcom County Fire District # 8 Capital Facilities Plan* (June 2013) contains approximately $9.8 million in capital improvement projects over the 20-year planning period (pp. 17-18). These projects include Station 31 replacement (Marine Dr.), Station 34 improvements (McKenzie Rd.), a new station (Kwina Rd.), and a variety of apparatus and vehicle purchases. Capital facility funding sources include District revenues such as property taxes, bonds, property sales, mitigation fees, funds from the Lummi Nation, funds from the City of Bellingham, and grants (pp. 13-15).

Fire District # 14

Fire District # 14 serves the Sumas UGA, Columbia Valley UGA and surrounding areas. The *Whatcom County Fire District # 14 Capital Facilities Plan* (August 2015) contains approximately $6 million in capital improvement projects over the 20-year planning period (pp. 17-18). These projects include station improvements, land purchase, and a variety of apparatus and vehicle purchases. Capital facility funding sources include annual revenues such as property taxes, reserves, mitigation fees and grants (pp. 13-15).

North Whatcom Fire & Rescue / Fire District 4

In 2011, North Whatcom Fire and Rescue (also known as Fire District 21) completed a functional consolidation with Whatcom County Fire District 4 whereby NWFR provides management and all operation services through a contract with District 4. North Whatcom Fire & Rescue now provides service to the Blaine UGA, Birch Bay UGA, Lynden UGA (outside of city limits), and a portion of the Bellingham UGA. A single capital facilities plan has been developed for the two Districts. The *North Whatcom Fire & Rescue and Fire District # 4 Capital Facilities Plan* (May 2016) contains approximately $59.6 million in capital improvement projects over the 20-year planning period (pp. 9 and 10). These projects include a new station, upgrading/remodeling existing stations, and a variety of apparatus and vehicle purchases. Capital facility funding will primarily come from capital bond proceeds (p. 13).

South Whatcom Fire Authority

The South Whatcom Fire Authority was formed in 2009 after voters approved a consolidation of four smaller fire districts. South Whatcom Fire Authority serves portions of the Bellingham UGA and surrounding areas. The District has five existing station and five fire engines. In 2016, the District is asking voters to approve a $1.96 million bond to replace three of the District’s five fire engines.
Chapter 15 – Solid Waste

Solid Waste (County)

State law requires each county within the state, in cooperation with the various cities located within the county, to prepare a coordinated, comprehensive solid waste management plan. The purpose is to plan for solid waste reduction, collection, handling, management and programs designed to meet the needs of the county and cities (RCW 70.95.080).

The Whatcom County Health Department is the lead planning agency for solid waste management in the County. The Health Department’s Solid Waste Division is responsible for several program areas encompassing waste prevention, economically efficient recycling and disposal systems, litter control, hazardous waste education and disposal opportunities, monitoring the county’s closed landfills, comprehensive planning, and providing support for the Whatcom County Solid Waste Advisory Committee.

The County prepared a Draft 2016 Whatcom County Comprehensive Solid and Hazardous Waste Management Plan (Jan. 2016) which serves as the basis for the solid waste component of the Capital Facilities Plan.

Inventory of Current Facilities

The County’s solid waste system is a combination of private and public entities. Solid waste handling facilities in Whatcom County currently include two primary transfer stations, five drop box collection stations, one public-use and one private moderate-risk waste fixed facility (for small business and household hazardous waste collection), one vactor waste transfer station, and approximately 13 composting and recycling facilities (both permitted and non-permitted). Additionally, there are three anaerobic digesters (one of which requires a permit), three biosolids land application facilities, three private industrial landfills, and six landfills in post-closure status.

The two primary transfer stations are located within the City of Ferndale. Municipal solid waste transported to these transfer stations, by either self-haulers or one of two local certificated haulers, is transported to landfills located outside of Whatcom County. While exempt from the need to obtain permits, recycling facilities are important to the system in Whatcom County, particularly, Northwest Recycling, Inc., which is presently one of the largest facilities offering residential and commercial recycling. The table below lists solid waste facilities in the County that are part of the solid waste permit system.
Table 15.1 Exiting Solid Waste Facilities with Permits

<table>
<thead>
<tr>
<th>Facility</th>
<th>Operator</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary Transfer Stations</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RDS Transfer Station</td>
<td>Recycling &amp; Disposal Services, Inc.</td>
<td>4916 LaBounty Pl, Ferndale, WA 98248</td>
</tr>
<tr>
<td>RDC Transfer Station</td>
<td>Regional Disposal Co.</td>
<td>1524 Slater Rd, Ferndale, WA 98248</td>
</tr>
<tr>
<td>Drop Box Collection Stations</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SSC Birch Bay-Lynden Drop Box Facility</td>
<td>Sanitary Service</td>
<td>4297 Birch Bay Lynden Rd, Blaine, WA 98230</td>
</tr>
<tr>
<td>SSC Cedarville Drop Box Facility</td>
<td>Sanitary Service</td>
<td>Cedarville Rd, Bellingham, WA 98226</td>
</tr>
<tr>
<td>SSC Roeder Ave Drop Box Facility</td>
<td>Sanitary Service</td>
<td>1001 Roeder Ave, Bellingham, WA 98225</td>
</tr>
<tr>
<td>Nooksack Valley Disposal Drop Box Facility</td>
<td>Nooksack Valley Disposal, Inc.</td>
<td>250 Birch Bay-Lynden Rd, Lynden, WA 98264</td>
</tr>
<tr>
<td>Cando Recycling Transfer Station</td>
<td></td>
<td>2005 Johnson Rd, Point Roberts, WA 98281</td>
</tr>
<tr>
<td>Moderate-Risk Waste (MRW) Facility, Public Use</td>
<td>Whatcom County Health Department</td>
<td>3505 Airport Dr, Bellingham, WA 98226</td>
</tr>
<tr>
<td>Moderate-Risk Waste (MRW) Facility, Private Use</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Seattle City Light MRW Facility</td>
<td>Seattle City Light</td>
<td>500 Newhalem St, Rockport, WA 98283</td>
</tr>
<tr>
<td>Vector Waste Transfer Station</td>
<td></td>
<td></td>
</tr>
<tr>
<td>City of Bellingham Vector Waste Transfer Station</td>
<td></td>
<td>2140 Division St, Bellingham, WA 98226</td>
</tr>
<tr>
<td>Composting Facility (permitted)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Green Earth Technology Composting Facility</td>
<td>Alsand Enterprises</td>
<td>774 Meadowlark Ln, Lynden, WA 98264</td>
</tr>
<tr>
<td>Anaerobic Digester (permitted)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Edaleen Cow Power, LLC</td>
<td>Edaleen Cow Power, LLC</td>
<td>9593 Guide Meridian, Lynden, WA 98264</td>
</tr>
<tr>
<td>Biosolids Land Application Facilities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tjoelker Enterprises Biosolids Facility</td>
<td>Tjoelker Enterprises</td>
<td>1530 Burk Rd, Blaine, WA 98230</td>
</tr>
<tr>
<td>Shannon Tjoelker Biosolids Facility</td>
<td></td>
<td>1687 Burk Rd, Blaine, WA 98230</td>
</tr>
<tr>
<td>Lil John Biosolids Facility</td>
<td></td>
<td>9497 Hill Rd, Sumas, WA 98295</td>
</tr>
</tbody>
</table>

Source: Draft EIS Whatcom County 2016 Comprehensive Plan and Development Regulations Update and Urban Growth Areas Review (March 2015, pp. 4-255 and 4-256)

Future Needs

The forecast of municipal solid waste (MSW) generation is based upon the solid waste generation projections in the Draft 2016 Whatcom County Comprehensive Solid and Hazardous Waste Management Plan (Section 2.3.8, pp. 23-26).

The table below shows projected total MSW generated, the amount of this waste anticipated to be disposed, and the amount anticipated to be recycled.
Table 15.2 Solid Waste Generation Forecast

<table>
<thead>
<tr>
<th>Year</th>
<th>Total MSW Generated (tons)</th>
<th>Total MSW Disposed (tons)</th>
<th>Total MSW Recycled (tons)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>249,189</td>
<td>135,134</td>
<td>114,055</td>
</tr>
<tr>
<td>2022</td>
<td>305,000</td>
<td>160,000</td>
<td>145,000</td>
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<tr>
<td>2036</td>
<td>405,000</td>
<td>203,000</td>
<td>202,000</td>
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</tbody>
</table>

Source: The solid waste that was deposited in landfills and recycled for 2013 is from the Draft Whatcom County Comprehensive Solid and Hazardous Waste Management Plan (2016, page 24). The projections for 2022 and 2036 are contained in an e-mail from Jeff Hegedus, Environmental Health Supervisor with the Whatcom County Health Department (March 10, 2016).

The County uses waste generation forecasting as a vital element of solid waste management planning. The County uses this data to help address waste prevention, recycling and special waste issues. The County updates its waste generation models periodically and uses them in conjunction with program and facility planning and evaluation.

Capital Projects and Funding

Currently, the only County capital facility is the Whatcom County Moderate-Risk Waste Facility on Airport Dr. Whatcom County Solid Waste Division has no capital projects for County facilities. However, the Draft 2016 Whatcom County Comprehensive Solid and Hazardous Waste Management Plan states “...The County will continue to work with the private solid waste service providers to ensure that facility capacity is constructed in advance of need...” (Section 2.3.8, p. 25).
Chapter 16 – County Revenue Projections

Whatcom County Capital Facilities Revenue Analysis

This section discusses Whatcom County’s Capital Facilities Revenue for County-provided facilities and services. It assumes the County continues to be responsible for Birch Bay and Columbia Valley.

Introduction

The purpose of this financial analysis is to support the financing plan for the Capital Facilities Plan (CFP) that is required by RCW 36.70A.070(3). These revenue estimates have been developed to assist in project prioritization and planning, and represent realistic, but not exact, estimates of revenue available for the CFP.

Estimated future revenues have been projected for the Plan’s 2017-2036 time period, in year of expenditure dollars. These revenues have been grouped according to the following categories:

- Undedicated Transportation Revenues – are composed of Road Fund revenues from the following sources: county road property tax levy, motor vehicle fuel tax allocations, and other undedicated transportation revenues including state timber sales, County Arterial Preservation Grant, Federal Forest Title I entitlement payments, forest excise tax, and minor miscellaneous sources.

- Dedicated Capital Transportation Revenues – these revenues are required by law to be used for specific types of capital expenditures.

- Other Capital Revenues – these revenues must be used for capital, but they are not transportation specific. They include Real Estate Excise Tax (REET), Rural Counties Public Facilities Tax, Conservation Futures, Parks State Grants, Stormwater State and Federal Grants.

- Potential Policy Options – these policy options may make additional capital revenues available to the County via policy changes.

Some of the funds discussed in this analysis may be used to fund the maintenance and operations of existing capital facilities or to construct new ones. However, if maintenance and operations costs of existing facilities increase faster than the revenues that support them, jurisdictions are confronted with difficult decisions regarding whether to fund these costs, at the expense of building new capital projects, or to adjust Level of Service (LOS) standards. Those decisions will be made by the County Council and executive leadership of the County according to the County’s needs and opportunities.

---

1 The revenue estimates are not intended to be precise forecasts. Exact funding levels are difficult to predict given the uncertainties of funding sources. The estimates discussed in this section are to be used for planning purposes; actual revenues are highly sensitive to local, state, and federal policy decisions; personal choices of residents; economic cycles and other market forces.

2 Year of expenditure dollars have been inflated to the year in which they are expected to be received.
Assumptions

The revenue projections included in this analysis are based on the assumption that all city UGAs in Whatcom County will be annexed by their respective cities by the end of the study period, and that Birch Bay, Cherry Point and Columbia Valley will remain unincorporated for the duration. To the extent that a city’s UGA represents land that is needed to accommodate the next 20 years of projected growth, and that actual patterns of growth are in line with the patterns envisioned in the Comprehensive Plan, one would expect that most or all of these areas will be annexed during the study period. The schedule at which annexations will occur is unknown; therefore, for purposes of this study they are assumed to occur in equal increments each year. Assuming complete annexation also gives this analysis the most conservative estimate of future revenues. A discussion of the implications of more scaled-back levels of annexation follows the base revenue projections.

Undedicated Transportation Revenues

Undedicated transportation revenues are unrestricted Road Fund revenues. These revenues are used to fund administration, engineering, road maintenance & operations, ferry operations and construction. About 19% of unrestricted road revenues are available for construction activities. A discussion of the major sources of these revenues follows:

County Road Property Tax Levy

This property tax is collected by Whatcom County specifically for transportation funding and accounts for a large portion of the County’s transportation funds. Since the passage of Initiative 747 in 2001, property tax increases are restricted to 1.0% of the previous year’s revenues plus new construction. In inflation-adjusted terms, revenues from property tax are actually declining, since the 1.0% allowed increase does not keep pace with inflation (which has averaged 2.53% for the period 1990 - 2015).

If a jurisdiction does not adjust the Property Tax levy rate annually to collect the full 1.0% allowed increase in revenues, the difference between the collected value and the legally-allowed 1.0% increase becomes “banked capacity” which may be collected in future years. Currently Whatcom County has banked capacity of approximately $1.8 million. For this portion of the analysis we have assumed that the County will not increase the levy rate to collect this banked capacity, nor will they collect the allowed 1.0% increase, but will continue to collect funds at a level equal to the previous year’s revenues, plus new construction. By not taking the maximum allowed annual revenue increase, the County’s banked capacity will increase each year.

State Motor Vehicle Fuel Tax

Counties and cities receive a portion of the State Motor Vehicle Fuel Tax (MVF) based on a complex reimbursement formula that includes population, road maintenance and reconstruction costs, and annual needs. The State of Washington increased fuel taxes each year during the period of 2005-2008 but most revenues went to state projects while funding to the County has only increased marginally since 2006 from $3.7 million to $3.9 million. The Legislature increased gas taxes again in 2015, with another increase taking effect in 2016, these increases are also not
expected to significantly impact County revenues. Revenues from this funding source are forecast to increase modestly at 1.89% per year.

Other Undedicated Transportation Revenues

The State Legislature increased the County Arterial Preservation funding to Whatcom County from $420,000 per year to $515,000 in 2012. This funding source has increased in small increments to $577,822 in 2015. It is forecast to increase in line with the Motor Vehicle Fuel Tax at 1.89% per year. Federal Forest – Title I revenue has been decreasing in recent years and is expected to be phased out by the federal government within a few years. Forest excise tax (previously known as private harvest tax) and state timber sale revenues fluctuate based on market conditions. Other undedicated sources include delinquent property taxes, leasehold excise tax, and minor miscellaneous amounts. For purposes of this study, forest excise tax, timber sales and other undedicated sources have been combined and projected based on the average of the amounts received in the last six years from these sources.

Figure 16-1. Whatcom County Undedicated Transportation Revenues 1993-2036*

*1993 – 2015 data represents actual undedicated transportation revenues used for construction and 2016 -2036 projected amounts of undedicated revenues available for construction activities. This study assumes Public Works will utilize 19% of its undedicated transportation revenues for capital projects. Federal and state grants were heavily utilized in the period of 2008 - 2014; therefore, less local funding was consumed. Excess revenues have been reserved in the Road fund balance.
Table 16-1 shows anticipated total Undedicated Transportation Revenues available for capital construction the next six years and the remaining 14 years of the planning period.

Table 16-1. Projected Future Whatcom County Undedicated Transportation Revenues 2017-2036

|---------------------|----------|----------|----------|----------|----------|----------|-----------|-----------|
Dedicated Capital Transportation Revenues

Motor Vehicle Fuel Tax – Paths & Trails Revenues

Beginning in 1997, one percent of the Motor Vehicle Fuel Tax is required by state law to go toward establishing and maintaining paths and trails for pedestrians, equestrians, and bicyclists. Based on average growth rate since inception, we have forecast revenues at an annual increase of 1.5% over the prior year.

Figure 16-2 shows 1.0% of the historical MVF Tax revenue to the left of the dotted line, and projected revenues available for paths and trails capital to the right.

Figure 16-2. Whatcom County MVF Tax Revenue 1993-2036 (Allocated for Capital Projects)

Table 16-2 shows anticipated total Motor Vehicle Fuel Tax revenues available for path and trail capital projects for the next six years and the remaining 14 years of the planning period.

Table 16-2. Projected Future Whatcom County Motor Vehicle Fuel Tax – Paths & Trails Revenues 2017-2036

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<tbody>
<tr>
<td>Estimated Future Revenues</td>
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<td>$41,556</td>
<td>$42,179</td>
<td>$42,812</td>
<td>$43,454</td>
<td>$44,106</td>
<td>$691,871</td>
<td>$946,718</td>
</tr>
</tbody>
</table>
Grants

State Transportation Grants

Grants are an important funding source for transportation capital projects; however, these funds are distributed in a competitive process making it difficult to project future grant funding levels. State grants are primarily funded with the state-levied portion of the MVF Tax.

There have, in recent years, been increases in the State MVF Tax rate. However, many of these additional funds were earmarked for specific large projects, although there was some allocation to local jurisdictions. The Transportation Partnership Act of 2005 provided some additional funds to the Transportation Improvement Board and the County Road Administration Board, for a total of $80 million to be disbursed to local jurisdictions as grants over a 16-year period. However, these increases in funds are very small relative to demand, with requests to the Transportation Improvement Board overreaching available funds. For this analysis, recent historical grant revenue trends were considered.

Assumptions: These revenues have been estimated on a per capita basis on the assumption that over time a jurisdiction will generally receive its “fair share” of available grant revenues. Since 1993 Whatcom County has averaged $6.72 per capita in grant revenues per year. However, this number has been lower in recent years averaging $5.60 per capita since 2006. This analysis assumes $5.60 per capita in the future with no annual increase. Total revenues are therefore expected to change on pace with changes in population.

For this analysis average annual dollars are assumed in each year. However, in reality these dollars will vary greatly from year to year since they are awarded on a project-specific basis.

Figure 16-3 shows historical state grant revenues to the left of the dotted line, and projected revenues to the right.
Table 16-3 shows estimated total state grant revenues for the next six years and the remaining 14 years of the planning period.

### Table 16-3. Projected Future Whatcom County State Transportation Grant Revenues 2017-2036 (Allocated for Capital Projects)

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</thead>
<tbody>
<tr>
<td>Estimated Future Revenues</td>
<td>$508,653</td>
<td>$507,598</td>
<td>$508,105</td>
<td>$510,583</td>
<td>$512,029</td>
<td>$513,419</td>
<td>$7,311,347</td>
<td>$10,370,126</td>
</tr>
</tbody>
</table>

**Federal Transportation Grants**

Federal transportation grants are funded through the federal portion of the fuel excise tax. The federal gas tax rate has fluctuated between $0.183 and $0.184 per gallon since 1993. The majority of these funds are deposited into the Highway Trust Fund and disbursed to the states through the Highway and Mass Transit Accounts.

As with state grants, these funds are distributed in a competitive process making it difficult to determine future grant funding levels.

**Assumptions:** Since 1993 Whatcom County has received an annual average of $26.07 per capita of federal grant funding. Lacking an increase in the federal gas tax rate, future average annual per
capita federal grant dollars are estimated to remain at that rate with no annual increase. As with state grant dollars, changes in total revenues are expected to occur at the rate of change in the population. In addition, average annual dollars are assumed in each year while in reality these dollars will vary greatly from year to year since they are awarded on a project-specific basis.

Figure 16-4 shows historical federal grant revenues to the left of the dotted line, and projected revenues to the right.

![Graph](image)

Table 16-4 shows anticipated total federal grant revenues for the next six years and the remaining 14 years of the planning period.

**Table 16-4. Projected Future Whatcom County Federal Transportation Grant Revenues 2017-2036 (Allocated for Capital Projects)**

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</thead>
<tbody>
<tr>
<td><strong>Estimated Future Revenues</strong></td>
<td>$2,355,857</td>
<td>$2,369,052</td>
<td>$2,370,087</td>
<td>$2,376,849</td>
<td>$2,383,636</td>
<td>$2,390,149</td>
<td>$34,036,932</td>
<td>$48,276,642</td>
</tr>
</tbody>
</table>

Table 16-5 shows total projected transportation revenues for Whatcom County.

**Table 16-5. Projected Total Transportation Revenues 2017-2036 (Allocated for Capital Projects)**

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</thead>
<tbody>
<tr>
<td><strong>Estimated Future Revenues</strong></td>
<td>$7,449,641</td>
<td>$7,494,983</td>
<td>$7,540,443</td>
<td>$7,586,081</td>
<td>$7,615,872</td>
<td>$7,661,463</td>
<td>$113,292,284</td>
<td>$158,540,766</td>
</tr>
</tbody>
</table>
Other Capital Revenues

Real Estate Excise Tax

Real Estate Excise Tax (REET) revenues are levied in two portions and must be expended on capital projects. Since the REET is based on the total value of real estate transactions in a given year, the amount of REET revenues a county receives can vary substantially from year to year based on the normal fluctuations in the real estate market. During years when the real estate market is active, revenues are high, and during softer real estate markets revenues are lower.

REET is levied in two parts, REET I (the first 0.25%), and REET II (the second 0.25%), for a total tax of 0.5% of total assessed value. REET I and REET II revenues must be spent on capital projects that are listed in a county’s current capital facilities plan. The definition of capital facilities, according to RCW 82.46.010, for REET I funding is:

*those public works projects of a local government for planning, acquisition, construction, reconstruction, repair, replacement, rehabilitation, or improvement of streets; roads; highways; sidewalks; street and road lighting systems; traffic signals; bridges; domestic water systems; storm and sanitary sewer systems; parks; recreational facilities; law enforcement facilities; fire protection facilities; trails; libraries; administrative and judicial facilities...*

REET II generally follows the above guidelines, but is more restricted, as it may not be spent on recreational facilities, law enforcement facilities, fire protection facilities, trails not associated with parks, libraries, administrative facilities, or judicial facilities (RCW 82.46.035).

**Assumptions:** This analysis assumes an average annual rate of turn-over of existing property at 6% in 2016. This rate increases at 0.5% per year until the normal turnover rate of 7.0% is reached in 2018. Normal turnover rate is based upon the average actual rate of turnover from the period of 1993 – 2015.

REET revenues generally must be used for capital projects; however, modifications to RCW 82.46.010 and 82.46.035 allow counties to transfer up to $1 million per year for operations and maintenance of existing capital projects through 2016. Whatcom County has opted to transfer $1 million per year to the Parks Department under this provision. For purposes of this study, the $1 million in 2016 is assumed to be withdrawn from the REET II fund balance and will not affect revenue projections. This analysis assumes all REET revenues are available for the capital projects discussed in this plan.

Figure 16- 5 shows historical Real Estate Excise Tax revenue to the left of the dotted line, and projected revenues to the right.
Table 16-6 shows anticipated total Real Estate Excise Tax revenues for the next six years and the remaining 14 years of the planning period.

### Table 16-6. Projected Future Whatcom County Real Estate Excise Tax Revenues 2017-2036

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</thead>
<tbody>
<tr>
<td>Estimated Future Revenues</td>
<td>$4,001,421</td>
<td>$4,348,088</td>
<td>$4,382,913</td>
<td>$4,419,759</td>
<td>$4,456,604</td>
<td>$4,493,450</td>
<td>$88,777,084</td>
<td>$92,977,278</td>
</tr>
</tbody>
</table>

### Rural Counties Public Facilities Tax (Rural Sales Tax)

Washington State allows rural counties to impose a local sales tax to fund capital projects that have an economic development purpose and finance personnel positions in economic development offices. This tax, which is deposited in the County's Public Utilities Improvement Fund, is not an additional sales tax for residents, but rather is given to the jurisdiction in the form of a tax credit against the 6.5% state sales tax. Whatcom County began collecting the tax during 1999. It is currently levied at 0.09% in Whatcom County and is collected countywide. The law (RCW 82.14.370) states “For counties imposing the tax at the rate of .09 percent before August 1, 2009, the tax expires on the date that is twenty-five years after the date that the .09 percent tax rate was first imposed by that county.” Whatcom County’s expiration date is August 1, 2032.
**Assumptions:** Because this tax is collected on retail sales we have based future projections on an assumed increase of 3.3% annual growth in taxable retail sales within the County. This rate is the taxable sales growth rate for Whatcom County for the period of 1994-2015. Revenues are assumed to be collected until August 1, 2032. Executive recommendations adopted by Council designate 30% of the proceeds of the tax revenue be used for County capital facilities. The remaining 70% is designated for economic development loans and grants to other government entities throughout the county (Economic Development Initiative – EDI).

Figure 16-6 shows historical Rural Counties Public Facilities Tax revenue for County capital facilities to the left of the dotted line, and projected revenues to the right.

**Figure 16-6. Whatcom County Rural Counties Public Facilities Tax Revenues 2000-2032 (Available for County Capital Facilities)**

Table 16-7 shows anticipated total Rural Counties Public Facilities Tax revenues for County capital facilities for the next six years and the remaining 14 years of the planning period.

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1 1994 is the first year of taxable sales data available on the Department of Revenue website.
Table 16-7. Projected Future Whatcom County Rural Counties Public Facilities Tax Revenues 2017-2036 (Available for County Capital Facilities)

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<tbody>
<tr>
<td>Estimated Future Revenues</td>
<td>$1,115,334</td>
<td>$1,152,140</td>
<td>$1,190,161</td>
<td>$1,229,436</td>
<td>$1,270,008</td>
<td>$1,311,918</td>
<td>$14,998,035</td>
<td>$22,265,032</td>
</tr>
</tbody>
</table>

Conservation Futures Revenues for Parks

In accordance with RCW 84.34.230, the County can impose a countywide property tax levy of $.0625 per thousand dollars assessed valuation for the purpose of purchasing open space and future development rights. The current levy rate is $.041756 per thousand.

Assumptions: For planning purposes, the amount of the levy to be set aside for park and trail acquisitions is 5% of the current year levy after consideration is made for the purchase of a Lummi Island Heritage Trust conservation and access easement for $400,000. Future property tax levy increases have been projected at the historical 1997 - 2015 growth rate of 2.9% per annum.

Figure 16-7 shows actual usage of Conservation Futures funding for park acquisitions to the left of the dotted line, and projected usage of future revenues to the right.

Figure 16-7. Conservation Futures Revenues 1993 - 2036 (Available for Parks Capital Acquisitions)

Table 16-8 shows anticipated Conservation Futures funding for Parks capital projects for the next six years and the remaining 14 years of the planning period.

*Large percentage increases in 1993 - 1996 assessed valuations precluded using data from those years.*
Table 16-8. Projected Future Conservation Futures Revenues 2017 – 2036 (Available for Parks Capital Projects)

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<tbody>
<tr>
<td>Estimated Future Revenues</td>
<td>$54,204</td>
<td>$55,776</td>
<td>$57,394</td>
<td>$59,059</td>
<td>$60,771</td>
<td>$62,533</td>
<td>$1,092,026</td>
<td>$1,441,784</td>
</tr>
</tbody>
</table>

**Parks State Grants**

Parks grants are applied for through the Washington State Recreation and Conservation Office. These funds have traditionally been quite limited and are distributed in a competitive process making it difficult to determine future grant funding levels. For this analysis, historical grant revenue trends were considered.

**Assumptions:** These revenues have been estimated on a countywide per capita basis on the assumption that over time the County will generally receive its “fair share” of available state grant revenues. Since 1993 Whatcom County has averaged $.16 per capita in grant revenues per year. This analysis assumes that funding level will continue in the future with no annual increase. Total revenues are therefore expected to change on pace with changes in population.

For this analysis average annual dollars are assumed in each year. However, in reality these dollars will vary greatly from year to year since they are awarded on a project-specific basis.

Figure 16-8 shows historical state grant revenues to the left of the dotted line, and projected revenues to the right.
Table 16-9 shows anticipated state grant revenues for Parks capital projects for the next six years and the remaining 14 years of the planning period.


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</thead>
<tbody>
<tr>
<td>Estimated Future Revenues</td>
<td>$34,509</td>
<td>$34,990</td>
<td>$35,478</td>
<td>$35,972</td>
<td>$36,474</td>
<td>$36,983</td>
<td>$575,304</td>
<td>$789,710</td>
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</tbody>
</table>

**Stormwater State Grants**

The Whatcom County Stormwater Fund was established in 2009 to account for projects and programs which protect water resources, improve water quality, and reduce impacts from stormwater runoff in the unincorporated areas of the county. State stormwater grants are applied for through the Washington State Department of Ecology.

**Assumptions:** These revenues have been estimated on a per capita basis on the assumption that over time a jurisdiction will generally receive its “fair share” of available grant revenues. Since 2009 Whatcom County has averaged $3.18 per capita in grant revenues per year. This analysis conservatively assumes that a $3 per capita rate continues in the future with no annual increase. Total revenues are therefore only expected to change on pace with changes in population.
For this analysis average annual dollars are assumed in each year. However, in reality these dollars will vary greatly from year to year since they are awarded on a project-specific basis.

Figure 16-9 shows historical state grant revenues to the left of the dotted line, and projected revenues to the right.

**Figure 16-9. Stormwater State Grant Revenues 2009-2036 (Allocated for Capital Projects)**

Table 16-10 shows anticipated state grant revenues for Stormwater capital projects for the next six years and the remaining 14 years of the planning period.


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<tbody>
<tr>
<td>Estimated Future Revenues</td>
<td>$271,100</td>
<td>$271,928</td>
<td>$272,735</td>
<td>$273,527</td>
<td>$274,296</td>
<td>$275,046</td>
<td>$3,916,793</td>
<td>$5,555,425</td>
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</table>

**Stormwater Federal Grants**

The Whatcom County Stormwater Fund was established in 2009 to account for projects and programs which protect water resources, improve water quality, and reduce impacts from stormwater runoff in the unincorporated areas of the county. Federal stormwater grants are applied for from the Environmental Protection Agency.

**Assumptions:** These revenues have been estimated on a per capita basis on the assumption that over time a jurisdiction will generally receive its “fair share” of available grant revenues. Since 2009 Whatcom County has averaged $.95 per capita in grant revenues per year; however, federal grant
funding has been more sporadic than state funding. This analysis assumes a $.95 per capita rate that continues in the future with no annual increase. Total revenues are therefore only expected to change on a pace with changes in population.

For this analysis average annual dollars are assumed in each year. However, in reality these dollars will vary greatly from year to year since they are awarded on a project-specific basis.

Figure 16-10 shows historical state grant revenues to the left of the dotted line, and projected revenues to the right.

**Figure 16-10. Stormwater Federal Grant Revenues 2009-2036 (Allocated for Capital Projects)**

Table 16-11 shows anticipated federal grant revenues for Stormwater capital projects for the next six years and the remaining 14 years of the planning period.


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<tbody>
<tr>
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<td>$86,366</td>
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<td>$86,861</td>
<td>$87,098</td>
<td>$1,240,318</td>
<td>$1,750,218</td>
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**Total Other Capital Revenues**

Table 16-12 summarizes total other capital revenues for the next six years and the remaining 14 years of the planning period.
Table 16-12. Projected Total Other Capital Revenues

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<tbody>
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<td>Estimated Future Revenues</td>
<td>$5,562,416</td>
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<td>$6,025,047</td>
<td>$6,104,369</td>
<td>$6,185,014</td>
<td>$8,267,027</td>
<td>$88,597,541</td>
<td>$124,888,426</td>
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Total Capital Revenues

Table 16-13 summarizes total capital revenues (transportation and other) available for the next six years and the remaining 14 years of the planning period.

Table 16-13. Projected Total Capital Revenues

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</thead>
<tbody>
<tr>
<td>Estimated Future Revenues</td>
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<td>$13,441,996</td>
<td>$13,505,490</td>
<td>$13,690,449</td>
<td>$13,800,886</td>
<td>$13,928,490</td>
<td>$201,889,825</td>
<td>$283,329,192</td>
</tr>
</tbody>
</table>

Impact of Reduced Levels of Annexation

Based on the structures used for each revenue projection outlined above, if the UGAs in Whatcom County were not completely annexed by the end of the study period, revenues would increase from the base, 100% annexation assumption. All else being equal, Whatcom County would have more assessed value of real property in the unincorporated parts of the County, leading to higher road levy and REET revenues. It would also retain more population in the unincorporated areas of the County, leading to higher state and federal transportation grant revenues.

Potential Policy Options

Road Levy Banked Capacity

As discussed in the first section of this analysis, if a jurisdiction does not increase the Property Tax levy rate annually to collect the full 1.0% allowed increase in revenues, the difference between the collected value and the allowed 1.0% increase becomes “banked capacity” which may be collected in future years. Currently Whatcom County has banked capacity of approximately $1.8 million, which means that the County could increase the levy rate to raise this much additional revenue annually.

If the County chooses not to take this banked capacity, it increases each year. Under this scenario, by the end of the study period (2036), total estimated banked capacity would be about $6.7 million.

Stormwater Management Revenue

Whatcom County’s stormwater management programs address state and federal water quality mandates and localized drainage and flooding problems that affect urbanized landscapes. These include, but are not limited to, design and construction of stormwater facilities, enhanced development standards, aggressive maintenance schedules, and regular facility inspections associated with the Lake Whatcom Total Maximum Daily Load (TMDL) and the County’s
National Pollutant Discharge Elimination System (NPDES) Phase II permit. Stormwater management programs are supported locally by the Road Fund, Real Estate Excise Tax Fund II, Flood Control Zone District Fund, and Birch Bay Watershed and Aquatic Resources Management District. State grants are a substantial revenue source, particularly for the capital program.

Future stormwater management services may require additional revenues between year five and the end of the 20-year planning period. At the present time, it cannot be accurately predicted what the appropriate allocation of local revenues and the availability of state and federal funds will be for that period. New revenues collected explicitly for stormwater management may be needed.

**Transportation Impact Fees**

Impact fees are a financing tool that requires new development to pay a portion of the costs associated with infrastructure improvements that are “reasonably related” to that development. The GMA allows agencies to develop and implement a transportation impact fee program to help fund some of the costs of transportation facilities needed to accommodate growth. State law (Chapter 82.02 RCW) requires that impact fees be related to improvements to serve new developments and not existing deficiencies; assessed proportional to the impacts of new developments; allocated for improvements that reasonably benefit new development; and spent on facilities identified in the Capital Facilities Plan.

Legally, financing for improvements that will serve the new development cannot rely solely on impact fees and must include other sources of public funds, and the fees must be structured in a manner that ensures that funds collected do not exceed a proportionate share of the costs of improvements reasonably related to new development.

The County has studied implementation of a transportation impact fee but no policy direction on this revenue source has been adopted yet. If the County were to implement this fee, revenues would vary based on the chosen fee rate and the types and amount of development that occurs.

**Park Impact Fees**

The same state law that authorizes transportation impact fees described above also authorizes the County to adopt impact fees for parks and recreational facilities. The same rules and conditions for transportation impact fees would apply to park impact fees.

**Existing Fund Balances**

Table 16-14 presents existing fund balances as of 1/1/2016 which are potentially available to support capital projects:
<table>
<thead>
<tr>
<th>Fund Name</th>
<th>Balance</th>
<th>Applicable to:</th>
</tr>
</thead>
<tbody>
<tr>
<td>General</td>
<td>3,000,000</td>
<td>Facilities</td>
</tr>
<tr>
<td>Road</td>
<td>16,000,000</td>
<td>Transportation</td>
</tr>
<tr>
<td>Chemical Depend/Mental Health</td>
<td>3,000,000</td>
<td>Facilities</td>
</tr>
<tr>
<td>Conservation Futures</td>
<td>2,465,082</td>
<td>Parks</td>
</tr>
<tr>
<td>Real Estate Excise Tax I</td>
<td>3,251,460</td>
<td>Facilities</td>
</tr>
<tr>
<td>Real Estate Excise Tax II</td>
<td>1,591,369</td>
<td>Parks &amp; Stormwater</td>
</tr>
<tr>
<td>Rural Sales Tax</td>
<td>414,500</td>
<td>Facilities</td>
</tr>
<tr>
<td>2010 Jail Improvements</td>
<td>733,734</td>
<td>Facilities</td>
</tr>
<tr>
<td>Superior Ct 4th Judge Courtroom</td>
<td>143,897</td>
<td>Facilities</td>
</tr>
<tr>
<td>New Jail Project</td>
<td>1,738,147</td>
<td>Facilities</td>
</tr>
<tr>
<td>Courthouse Building Envelope</td>
<td>250,000</td>
<td>Facilities</td>
</tr>
<tr>
<td>Lummi Nation Lease</td>
<td>1,997,378</td>
<td>Transportation</td>
</tr>
<tr>
<td>Birch Bay Lynden/Portal Way Signal</td>
<td>124,685</td>
<td>Transportation</td>
</tr>
<tr>
<td>Rural Rd Safety Program</td>
<td>38,257</td>
<td>Transportation</td>
</tr>
<tr>
<td>Slater Rd Intersections</td>
<td>388,218</td>
<td>Transportation</td>
</tr>
<tr>
<td>Dakota Creek Bridge No 500</td>
<td>359,860</td>
<td>Transportation</td>
</tr>
<tr>
<td>Lake Whatcom Blvd Re-surfacing</td>
<td>993,863</td>
<td>Transportation</td>
</tr>
<tr>
<td>Hannegan Rd Structural Overlay</td>
<td>595,240</td>
<td>Transportation</td>
</tr>
<tr>
<td>Academy Rd Stormwater</td>
<td>107,107</td>
<td>Stormwater</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>37,192,797</strong></td>
<td></td>
</tr>
</tbody>
</table>
Six-Year Funding Balance

Estimated revenues from transportation sources within the six-year time period (2017-2022) have been compared to capital project costs. The six year Capital Improvement Plan includes $48,708,185 of capital costs and this study presents $45,348,483 of potential revenues plus $18.2 million of available transportation fund balances.

Parks and stormwater capital improvement requests over the next six years total $10,099,000. Funding sources, including grants, REET II, and available fund balance amounts total $17,120,521. In addition, Birch Bay Watershed and Aquatic Resources Management (BBWARM) District, which is an entity separate from Whatcom County, is requesting to use a small amount of REET II funding for their projects. Their projects over the six year period total $3,015,000. They are requesting $40,000 of REET II from available fund balance amounts. The District’s own funding sources will cover the other $2,975,000.

New sheriff’s office facilities are estimated at $19,040,000 to be financed by non-voted bonds and paid back from General Fund sources. New jail facilities are estimated at $112,000,000 to be financed by non-voted bonds and paid back from new voter-approved sales taxes. The County’s current non-voted debt capacity is $365 million.

Regarding other general capital facilities, sources over the 2017-2022 Capital Improvement Plan period total $35,103,842 whereas needs total $26,622,563.

Table 16-15. 2017–2022 Revenues Available to Fund the Six Year CIP

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Transportation Revenues</td>
<td>$7,449,641</td>
<td>$7,494,863</td>
<td>$7,540,443</td>
<td>$7,586,081</td>
<td>$7,615,672</td>
<td>$7,661,463</td>
<td>$45,348,483</td>
<td>$113,292,294</td>
</tr>
<tr>
<td>Real Estate Excise Tax</td>
<td>$4,001,421</td>
<td>$4,346,868</td>
<td>$4,382,913</td>
<td>$4,419,759</td>
<td>$4,456,604</td>
<td>$4,493,450</td>
<td>$26,100,214</td>
<td>$66,777,094</td>
</tr>
<tr>
<td>Rural Sales Tax</td>
<td>$1,115,334</td>
<td>$1,152,140</td>
<td>$1,190,161</td>
<td>$1,229,436</td>
<td>$1,270,008</td>
<td>$1,311,916</td>
<td>$7,288,997</td>
<td>$14,996,005</td>
</tr>
<tr>
<td>Conservation Futures</td>
<td>$54,204</td>
<td>$55,776</td>
<td>$57,394</td>
<td>$59,058</td>
<td>$60,771</td>
<td>$62,533</td>
<td>$349,736</td>
<td>$1,092,028</td>
</tr>
<tr>
<td>Parks State Grants</td>
<td>$34,509</td>
<td>$34,980</td>
<td>$35,478</td>
<td>$35,972</td>
<td>$36,474</td>
<td>$36,983</td>
<td>$214,406</td>
<td>$575,304</td>
</tr>
<tr>
<td>Stormwater Grants</td>
<td>$356,948</td>
<td>$358,038</td>
<td>$359,101</td>
<td>$360,144</td>
<td>$361,157</td>
<td>$362,144</td>
<td>$2,157,532</td>
<td>$5,157,111</td>
</tr>
<tr>
<td>Total Capital Revenues</td>
<td>$13,012,057</td>
<td>$13,441,996</td>
<td>$13,565,490</td>
<td>$13,690,449</td>
<td>$13,800,866</td>
<td>$13,928,490</td>
<td>$81,439,368</td>
<td>$201,889,825</td>
</tr>
</tbody>
</table>

Economic Development Planning

In addition to this CFP and the County’s Comprehensive Plan Economic Element, the County has also engaged in an economic development strategy through the Economic Development Investment (EDI) Program. The program plans for and funds infrastructure including but not limited to roads, bridges, water facilities, sanitary sewer facilities, and storm sewer facilities. Economic development planning efforts also resulted in a report entitled the Whatcom County Comprehensive Economic Development Strategy (CEDS) (March 2015) which identifies goals and strategies for growing the Whatcom County economy without sacrificing its natural assets. The CEDS identifies and prioritizes actions for achieving its goals. It also identifies projects, including their cost and potential funding sources, that are needed to help the County achieve its economic development goals. Executive recommendations adopted by the County Council designate 70% of the Rural
Counties Public Facility Tax be set aside for economic development loans and grants to governmental entities throughout the county.

NOTES:

1. This draft Whatcom County 20-Year Capital Facilities Plan will continue to be updated, as city and special district plans are updated and submitted to the County.

2. The existing Whatcom County 20-Year Capital Facilities Plan will be repealed in its entirety.
APPENDIX F

(PROPOSED TO BE REPLACED IN ITS ENTIRETY WITH THE ATTACHED)
Six-Year
Capital Improvement Program
For Whatcom County Facilities
2017-2022
# Table of Contents

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Chapter 1 – Introduction

The Growth Management Act requires that the County’s Comprehensive Plan include a “capital facilities plan element” (RCW 36.70A.070(3)). The Whatcom County Comprehensive Plan calls for the County to develop and update the Six-Year Capital Improvement Program (CIP) for County projects every two years. The main purpose of the Capital Improvement Program is to identify priority capital improvement projects and estimated costs, outline a schedule for project completion, and designate funding sources for these projects based on a review of existing and projected population and revenue conditions for the six year planning period.

Growth Management Act Requirements

According to the Growth Management Act, a county’s capital facilities plan must include five items, which are shown below.

A. An inventory of existing capital facilities owned by public entities, showing the locations and capacities of the capital facilities.

Current inventories of existing County capital facilities, based upon information provided by various County departments, are included in each chapter of this document.

B. A forecast of the future needs for such capital facilities.

Chapter 4 of the Whatcom County Comprehensive Plan establishes numerical “level of service” standards for County parks and trails and contains policies relating to other County facilities. Capital facility needs are forecasted over the six-year planning period by applying the adopted level of service standards to the expected population in the year 2022 and by considering other relevant factors.

C. Proposed locations and capacities of expanded or new capital facilities.

General locations and capacities (trail miles, jail beds, etc.) of proposed County facilities are indicated in this document.

D. At least a six-year plan that will finance such capital facilities within projected funding capacities and clearly identifies sources of public money for such purposes.

This Six-Year Capital Improvement Program presents costs and funding sources for proposed County capital facilities (all figures are in 2016 dollars). There are a variety of funding sources that the County utilizes to pay for capital facilities, including real estate excise taxes, the Public Utilities Improvement Fund (also known as the Rural Sales Tax Fund, Economic Development Initiative Fund or EDI Fund), Road Fund, state grants, federal grants and a variety of other funds. It is
anticipated that the County’s largest project in the six-year planning period, the new jail, will require voter approval of an additional revenue stream.

E. A requirement to reassess the land use element if probable funding falls short of meeting existing needs and to ensure that the land use element, capital facilities plan element, and financing plan within the capital facilities plan element are coordinated and consistent.

Finally, in accordance with the Growth Management Act, a requirement to reassess the land use element of the Comprehensive Plan if probable funding falls short of meeting existing needs and to ensure consistency between plans already exists in the Comprehensive Plan (Policy 4A-4).

Charter Provisions and the County Budget

In addition to Growth Management Act provisions relating to capital facilities, Section 6.30 of the County Charter also requires the County to include a six-year capital improvement program as part of the budget. Appropriations for 2017-2018 capital projects may be included in the biennial budget or may be adopted through the supplemental budget process. Ultimate funding for capital improvement projects is subject to County Council authorization in the adopted budget. Costs identified for 2019-2022 are included for planning purposes and review of potential future needs, but not for budget authorization at this time.
Chapter 2 – Parks, Trails, and Activity Centers

Parks

The 2016 inventory of County parks and open space areas is over 14,700 acres. This inventory is shown below.

Existing Parks

<table>
<thead>
<tr>
<th>Site No.</th>
<th>Park Name and Location</th>
<th>Acres</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Bay Horizon Park, 7467 Gemini St., Birch Bay</td>
<td>69.8</td>
</tr>
<tr>
<td>2</td>
<td>Boulevard Park, 471 Bayview Dr.</td>
<td>1.8</td>
</tr>
<tr>
<td>3</td>
<td>Broadway Beach Access, 7497 Birch Bay Dr.</td>
<td>0.1</td>
</tr>
<tr>
<td>4</td>
<td>Canyon Lake Community Forest</td>
<td>2,394.4</td>
</tr>
<tr>
<td>5</td>
<td>Chuckanut Mountain Park</td>
<td>973.1</td>
</tr>
<tr>
<td>6</td>
<td>Cottonwood Beach Access, 8191 Birch Bay Dr.</td>
<td>4.6</td>
</tr>
<tr>
<td>7</td>
<td>Deming Eagle Homestead Park, 5615 Truck Rd.</td>
<td>28.5</td>
</tr>
<tr>
<td>8</td>
<td>Hovander Homestead Park and Tennant Lake, 5299 Nielsen Rd.</td>
<td>338.3</td>
</tr>
<tr>
<td>9</td>
<td>Jackson Rd. Beach Access, Birch Bay</td>
<td>0.2</td>
</tr>
<tr>
<td>10</td>
<td>Jensen Family Forest Park, 8051 Stein Rd.</td>
<td>21.7</td>
</tr>
<tr>
<td>11</td>
<td>Josh VanderYacht Park, 4106 Valley Highway</td>
<td>2.2</td>
</tr>
<tr>
<td>12</td>
<td>Lake Whatcom Park, 3220 North Shore Rd.</td>
<td>4,686.5</td>
</tr>
<tr>
<td>13</td>
<td>Lighthouse Marine Park, 811 Marine Dr. In Point Roberts</td>
<td>24.3</td>
</tr>
<tr>
<td>14</td>
<td>Lily Point Marine Park, 2315 APA Rd. in Point Roberts</td>
<td>274.0</td>
</tr>
<tr>
<td>15</td>
<td>Little Squalicum Park, 640 Marine Dr.</td>
<td>13.7</td>
</tr>
<tr>
<td>16</td>
<td>Lookout Mountain Forest Preserve</td>
<td>4,430.3</td>
</tr>
<tr>
<td>17</td>
<td>Lummi Island Beach Access, 2198 N. Nugent Rd.</td>
<td>0.1</td>
</tr>
<tr>
<td>18</td>
<td>Monument Park, 25 Marine Dr. In Point Roberts</td>
<td>7.3</td>
</tr>
<tr>
<td>19</td>
<td>Northwest Soccer Park/Baseball &amp; Softball Complex, 5238 Northwest Dr.</td>
<td>36.5</td>
</tr>
<tr>
<td>20</td>
<td>Nugent's Corner River Access, 3685 Mt. Baker Highway</td>
<td>16.5</td>
</tr>
<tr>
<td>21</td>
<td>Ostrom Conservation Site, 4304 South Pass Rd.</td>
<td>36.3</td>
</tr>
<tr>
<td>22</td>
<td>Point Whitehorn Marine Reserve, 6770 Koehn Rd.</td>
<td>55.3</td>
</tr>
<tr>
<td>23</td>
<td>Redwood Park, 3310 Redwood Ave.</td>
<td>0.2</td>
</tr>
<tr>
<td>24</td>
<td>Samish Park, 673 N. Lake Samish Dr.</td>
<td>26.4</td>
</tr>
<tr>
<td>25</td>
<td>Semiahmoo Park, 9261 Semiahmoo Parkway</td>
<td>304.0</td>
</tr>
<tr>
<td>26</td>
<td>Silver Lake Park, 9006 Silver Lake Rd.</td>
<td>410.4</td>
</tr>
<tr>
<td>27</td>
<td>Squires Lake Park, 2510 Nulle Rd.</td>
<td>82.3</td>
</tr>
<tr>
<td>28</td>
<td>Stimpson Family Nature Reserve, 2076 Lake Louise Rd.</td>
<td>376.1</td>
</tr>
<tr>
<td>29</td>
<td>Sunset Beach, 2580 West Shore Dr. on Lummi Island</td>
<td>5.4</td>
</tr>
<tr>
<td>30</td>
<td>Sunset Farm Park, 7977 Blaine Rd.</td>
<td>70.0</td>
</tr>
<tr>
<td>31</td>
<td>Ted Edwards Park, 4150 Oriental Ave.</td>
<td>3.6</td>
</tr>
<tr>
<td>32</td>
<td>Teddy Bear Cove Park, 1467 Chuckanut Dr.</td>
<td>8.8</td>
</tr>
<tr>
<td>33</td>
<td>Welcome Bridge River Access, 5585 Mosquito Lake Rd.</td>
<td>0.5</td>
</tr>
</tbody>
</table>

TOTAL 14,703.2

Pursuant to RCW 36.87.130, there are also public access properties on right-of-way ends that intersect shorelines.
Future Needs

A level of service of 9.6 acres of developed parkland for every 1,000 people in the County was adopted in the Whatcom County Comprehensive Plan. The County’s existing parks will meet the adopted level of service over the six-year planning period. However, the County is proposing park improvement projects to increase quality of existing park facilities and develop the Birch Bay Community Park to meet the longer term needs of a growing population.

Proposed Improvement Projects

Park improvement projects, totaling more than $2.2 million, are proposed over the six-year planning period. These costs would be paid by real estate excise taxes (REET), state grants, and the Nesset Foundation as shown in the table at the end of this chapter.
Trails

Whatcom County currently has 65.46 miles of trails in various locations throughout the County. This inventory is shown below.

**Existing Trails**

<table>
<thead>
<tr>
<th>Existing Site No.</th>
<th>Trail Name and Location</th>
<th>Miles</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Bay Horizon/Bay Crest Trail</td>
<td>0.75</td>
</tr>
<tr>
<td>2</td>
<td>Bay to Baker Maple Falls-Glacier</td>
<td>4.00</td>
</tr>
<tr>
<td>3</td>
<td>Canyon Lake Community Forest</td>
<td>7.01</td>
</tr>
<tr>
<td>4</td>
<td>Chuckanut Mountain / Pine &amp; Cedar Lakes</td>
<td>15.52</td>
</tr>
<tr>
<td>5</td>
<td>Deming Homestead Eagle Park, Truck Rd.</td>
<td>0.30</td>
</tr>
<tr>
<td>6</td>
<td>Euclid Park</td>
<td>0.05</td>
</tr>
<tr>
<td>7</td>
<td>Hovander Homestead Park</td>
<td>3.20</td>
</tr>
<tr>
<td>8</td>
<td>Interurban, Chuckanut area</td>
<td>2.80</td>
</tr>
<tr>
<td>9</td>
<td>Jensen Family Forest Park, Stein Rd. and Birch Bay Lynden Rd.</td>
<td>0.67</td>
</tr>
<tr>
<td>10</td>
<td>Lake Whatcom Park</td>
<td>4.01</td>
</tr>
<tr>
<td>11</td>
<td>Lily Point, Point Roberts</td>
<td>4.16</td>
</tr>
<tr>
<td>12</td>
<td>Lookout Mountain Forest Preserve</td>
<td>4.11</td>
</tr>
<tr>
<td>13</td>
<td>Maple Creek Park, 7842 Silver Lake Rd., Maple Falls</td>
<td>1.28</td>
</tr>
<tr>
<td>14</td>
<td>Monument Park, 25 Marine Dr. in Point Roberts</td>
<td>0.35</td>
</tr>
<tr>
<td>15</td>
<td>Northwest Soccer Park Trail, Smith Rd. and Northwest Dr.</td>
<td>0.38</td>
</tr>
<tr>
<td>16</td>
<td>Ostrom Conservation Site, 4304 South Pass Rd.</td>
<td>0.56</td>
</tr>
<tr>
<td>17</td>
<td>Point Whitehorn Marine Reserve, 6770 Koehn Rd, Birch Bay</td>
<td>0.81</td>
</tr>
<tr>
<td>18</td>
<td>Samish Park, 673 N. Lake Samish</td>
<td>1.66</td>
</tr>
<tr>
<td>19</td>
<td>Semiahmoo Park</td>
<td>0.63</td>
</tr>
<tr>
<td>20</td>
<td>Silver Lake Park, 9006 Silver Lake Rd.</td>
<td>5.75</td>
</tr>
<tr>
<td>21</td>
<td>Squires Lake, 2510 Nulle Rd.</td>
<td>2.88</td>
</tr>
<tr>
<td>22</td>
<td>Stimpson Family Nature Reserve, 2076 Lake Louise Rd.</td>
<td>4.02</td>
</tr>
<tr>
<td>23</td>
<td>Sunset Farm, 7977 Blaine Rd.</td>
<td>0.56</td>
</tr>
</tbody>
</table>

**TOTAL** 65.46

**Future Needs**

A level of service of 0.60 miles of trails for every 1,000 people in the County was adopted in the Whatcom County Comprehensive Plan. With projected population growth in Whatcom County over the next six years, about 72 additional miles of trails would be needed by the year 2022 to serve the people of Whatcom County.

**Proposed Improvement Projects**

Trail improvement projects and associated facilities, totaling more than $3.5 million, are proposed over the six-year planning period. These costs would be paid by REET and grants as shown in the table at the end of this chapter. These projects would add 32 trail miles (the South Fork Park Trails project would add 4 miles and the Lake Whatcom Re-conveyance Land Trails project would add 28 miles). Potential acquisitions are also being considered that may add another 44 trail miles within the six-year planning.
Activity Centers

There are currently 13 activity centers that provide a variety of year-round programs for various age groups. The activity center inventory is shown below.

Existing Activity Centers

<table>
<thead>
<tr>
<th>Site No.</th>
<th>Activity Center Name and Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Bay Horizon, 7511 Gemini Street</td>
</tr>
<tr>
<td>2</td>
<td>Bellingham Senior Activity Center, 315 Halleck Street</td>
</tr>
<tr>
<td>3</td>
<td>Blaine Community Senior Center, 763 G Street</td>
</tr>
<tr>
<td>4</td>
<td>East Whatcom Regional Resource Center, 8251 Kendall Rd.</td>
</tr>
<tr>
<td>5</td>
<td>Everson Senior Center, 111 W. Main Street</td>
</tr>
<tr>
<td>6</td>
<td>Ferndale Senior Center, 1998 Cherry Street</td>
</tr>
<tr>
<td>7</td>
<td>Lynden Senior Center, 401 Grover Street</td>
</tr>
<tr>
<td>8</td>
<td>Plantation Rifle Range, 5102 Samish Way</td>
</tr>
<tr>
<td>9</td>
<td>Point Roberts Senior Center, 1487 Gulf Road</td>
</tr>
<tr>
<td>10</td>
<td>Roeder Home, 2600 Sunset Dr.</td>
</tr>
<tr>
<td>11</td>
<td>Sumas Senior Center, 461 2nd Street</td>
</tr>
<tr>
<td>12</td>
<td>Van Zandt Community Hall, 4106 Valley Highway</td>
</tr>
<tr>
<td>13</td>
<td>Welcome Senior Center, 5103 Mosquito Lake Rd.</td>
</tr>
</tbody>
</table>

Note: The Blaine, Everson, Lynden and Sumas Centers are owned by these respective cities. The Point Roberts Center is owned by the Point Roberts Park District. Whatcom County provides and/or contracts for senior activities and recreational programming at these centers.

Future Needs

The Whatcom County Comprehensive Plan does not contain a level of service standard for activity centers. Rather, Comprehensive Plan Policy 4F-5 states:

Continue to provide and support activity centers, including senior centers, to serve the growing population of Whatcom County by the following methods, as needed, which are listed in priority order: (1) implementing programming changes, (2) adding space to existing centers, and/or (3) establishing new centers.

The County will budget for improvements to such facilities as needed.

Proposed Improvement Projects

One activity center improvement project, costing $125,000, is proposed over the six-year planning period. These costs would be paid by REET and a state grant as shown in the table below.
Six-Year Capital Improvement Program

The park, trail and activity center projects planned over the next six years are shown below.

<table>
<thead>
<tr>
<th>Parks</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
<th>Total Cost</th>
<th>Funding Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Birch Bay Community Park Development</td>
<td></td>
<td></td>
<td>30,000</td>
<td>470,000</td>
<td></td>
<td></td>
<td>500,000</td>
<td>3</td>
</tr>
<tr>
<td>Hovander Park Buildings Demo &amp; Site Restoration</td>
<td>100,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>100,000</td>
<td>2</td>
</tr>
<tr>
<td>Hovander Park Maintenance Building</td>
<td></td>
<td>50,000</td>
<td>125,000</td>
<td></td>
<td></td>
<td></td>
<td>175,000</td>
<td>2</td>
</tr>
<tr>
<td>Hovander Park Slough Bridge</td>
<td></td>
<td></td>
<td>30,000</td>
<td>100,000</td>
<td></td>
<td></td>
<td>130,000</td>
<td>2</td>
</tr>
<tr>
<td>Lighthouse Marine Park Boat Ramp Replacement</td>
<td></td>
<td></td>
<td>10,000</td>
<td>115,000</td>
<td></td>
<td></td>
<td>125,000</td>
<td>2,3</td>
</tr>
<tr>
<td>Lummi Island Overlook Stairs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>100,000</td>
<td>2</td>
</tr>
<tr>
<td>Maple Creek Bridge Replacement</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>115,000</td>
<td>2</td>
</tr>
<tr>
<td>Nessett Restroom &amp; Bridge Improvements</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>180,000</td>
<td>4</td>
</tr>
<tr>
<td>Parks Headquarters Water Distribution System</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>50,000</td>
<td>2</td>
</tr>
<tr>
<td>Samish Park Lodge Deck Replacement</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>50,000</td>
<td>2</td>
</tr>
<tr>
<td>Semiahmoo Facility Remodel</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>50,000</td>
<td>2</td>
</tr>
<tr>
<td>Silver Lake Park Bridge Replacement</td>
<td></td>
<td></td>
<td>35,000</td>
<td>175,000</td>
<td></td>
<td></td>
<td>210,000</td>
<td>2</td>
</tr>
<tr>
<td>Silver Lake Park Improvements</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>20,000</td>
<td>200,000</td>
<td>200,000</td>
<td>420,000</td>
</tr>
<tr>
<td>Tennant Lake/Fragrance Garden Walk &amp; Irrigation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>30,000</td>
<td>2</td>
</tr>
</tbody>
</table>
### Trails

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Lake Whatcom Re-conveyance Land Trails</td>
<td>200,000</td>
<td>343,000</td>
<td>233,000</td>
<td>363,000</td>
<td>246,000</td>
<td>380,000</td>
<td>1,765,000</td>
<td></td>
<td>2,3</td>
</tr>
<tr>
<td>Lake Whatcom Trailhead Improvements</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>195,000</td>
<td>780,000</td>
</tr>
<tr>
<td>Lake Whatcom Trailhead Restrooms</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>110,000</td>
<td></td>
</tr>
<tr>
<td>Maple Falls Trailhead</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>70,000</td>
<td>400,000</td>
</tr>
<tr>
<td>South Fork Park Trails</td>
<td>209,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Activity Centers**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Plantation Indoor Range Renovations</td>
<td>125,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>125,000</td>
</tr>
</tbody>
</table>

**Total**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1,139,000</td>
<td>698,000</td>
<td>603,000</td>
<td>2,423,000</td>
<td>446,000</td>
<td>580,000</td>
<td>5,889,000</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Chapter 3 – Maintenance and Operations

Existing Maintenance and Operations Space

The 2016 inventory of maintenance & operations/facilities management space that serves the County is 44,411 square feet. This inventory is shown below.

<table>
<thead>
<tr>
<th>Site No.</th>
<th>Facility Name</th>
<th>Square Feet</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Central Shop, 901 W. Smith Rd. (Maintenance and Operations)</td>
<td>35,773</td>
</tr>
<tr>
<td>2</td>
<td>316 Lottie St. (Facilities Management)</td>
<td>4,978</td>
</tr>
<tr>
<td>3</td>
<td>Minimum Security Correction Facility - 2030 Division St. (Facilities Management Storage)</td>
<td>3,660</td>
</tr>
<tr>
<td></td>
<td><strong>TOTAL</strong></td>
<td><strong>44,411</strong></td>
</tr>
</tbody>
</table>

Future Needs

The Whatcom County Comprehensive Plan does not contain a level of service standard for maintenance and operations. The County will budget for improvements to such facilities as needed.

Proposed Improvement Projects

Improvement projects at the Central Shop, totaling $400,000, are proposed over the six-year planning period. These costs would be paid by the road fund and shop services mark-ups as shown in the table below.

<table>
<thead>
<tr>
<th>Central Shop</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
<th>Total Cost</th>
<th>Funding Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vector Truck Garage</td>
<td>300,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>300,000</td>
<td>1</td>
</tr>
<tr>
<td>Central Shop Exhaust</td>
<td></td>
<td>100,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>100,000</td>
<td>2</td>
</tr>
<tr>
<td>System</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>300,000</td>
<td>100,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td><strong>400,000</strong></td>
<td></td>
</tr>
</tbody>
</table>

Funding Sources
1. Road Fund
2. Shop Services Mark-ups
Chapter 4 – General Government Buildings and Sites

Existing Office Space

The 2016 inventory of County government office space is 306,691 square feet at eight locations. This inventory is shown below.

<table>
<thead>
<tr>
<th></th>
<th>Building Description</th>
<th>Square Feet</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Civic Center Annex (322 North Commercial)</td>
<td>30,000</td>
</tr>
<tr>
<td>2</td>
<td>Central Plaza Building (215 N. Commercial)</td>
<td>10,307</td>
</tr>
<tr>
<td>3</td>
<td>County Courthouse (311 Grand Avenue)</td>
<td>200,000</td>
</tr>
<tr>
<td>4</td>
<td>Forest St. Annex (1000 North Forest St.)</td>
<td>14,000</td>
</tr>
<tr>
<td>5</td>
<td>509 Girard St.</td>
<td>13,189</td>
</tr>
<tr>
<td>6</td>
<td>3373 Mt. Baker Highway</td>
<td>2,110</td>
</tr>
<tr>
<td>7</td>
<td>1500 N. State St.</td>
<td>16,820</td>
</tr>
<tr>
<td>8</td>
<td>Northwest Annex (5280 Northwest Dr.)</td>
<td>20,265</td>
</tr>
<tr>
<td></td>
<td><strong>TOTAL</strong></td>
<td><strong>306,691</strong></td>
</tr>
</tbody>
</table>

Future Needs

The Whatcom County Comprehensive Plan does not contain a level of service standard for general government buildings. The County will budget for improvements to such facilities as needed.

Proposed Improvement Projects

Improvement and maintenance projects on existing buildings and sites over the six-year planning period total approximately $23.2 million as shown below.
<table>
<thead>
<tr>
<th></th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
<th>Total Cost</th>
<th>Funding Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Courthouse</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Courthouse Projects</td>
<td>404,500</td>
<td>200,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>604,500</td>
<td>1,2</td>
</tr>
<tr>
<td>(Alarm Upgrades, etc.)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exterior Maintenance</td>
<td>770,000</td>
<td>200,000</td>
<td>200,000</td>
<td>200,000</td>
<td>200,000</td>
<td>200,000</td>
<td>1,770,000</td>
<td>1</td>
</tr>
<tr>
<td>Chambers Remodel</td>
<td>140,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>140,000</td>
<td>1,2</td>
</tr>
<tr>
<td><strong>509 Girard</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Remodel</td>
<td></td>
<td>3,644,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3,644,000</td>
<td>2,3,4</td>
</tr>
<tr>
<td><strong>1500 N. State St.</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Remodel</td>
<td></td>
<td>2,035,000</td>
<td>1,750,000</td>
<td></td>
<td></td>
<td></td>
<td>3,785,000</td>
<td>2,4,5</td>
</tr>
<tr>
<td><strong>Civic Center</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Remodel</td>
<td></td>
<td>2,253,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2,253,000</td>
<td>6,7</td>
</tr>
<tr>
<td>Mental Health Triage Center</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>New Facility</td>
<td>700,000</td>
<td>6,300,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>7,000,000</td>
<td>4,8,9</td>
</tr>
<tr>
<td><strong>Northwest Annex</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Demolition</td>
<td></td>
<td>1,000,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1,000,000</td>
<td>1,7</td>
</tr>
<tr>
<td><strong>Multiple Locations</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maintenance Projects</td>
<td></td>
<td>500,000</td>
<td>500,000</td>
<td>500,000</td>
<td>500,000</td>
<td>500,000</td>
<td>2,000,000</td>
<td>1,2</td>
</tr>
<tr>
<td>Direct Digital Control System Upgrades</td>
<td>336,063</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>336,063</td>
<td>1</td>
</tr>
<tr>
<td>Carpet Replacements</td>
<td>65,000</td>
<td>65,000</td>
<td>65,000</td>
<td>65,000</td>
<td>65,000</td>
<td>65,000</td>
<td>390,000</td>
<td>1</td>
</tr>
<tr>
<td>Interior Painting</td>
<td>50,000</td>
<td>50,000</td>
<td>50,000</td>
<td>50,000</td>
<td>50,000</td>
<td>50,000</td>
<td>300,000</td>
<td>1</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>4,382,500</td>
<td>12,830,063</td>
<td>3,565,000</td>
<td>815,000</td>
<td>815,000</td>
<td>815,000</td>
<td>23,222,563</td>
<td></td>
</tr>
</tbody>
</table>

**Funding Sources**

1. REET I
2. EDI
3. Girard Fund
4. Inter-fund Loan
5. State Street Fund
6. Civic Center Fund
7. Road Fund
8. Chemical Dependency/Mental Health Fund
9. Grants
Chapter 5 – Sheriff’s Office

Existing Sheriff’s Office Space

The 2016 inventory of Sheriff’s office space is 23,326 square feet. This inventory is shown below.

**EXISTING SHERIFF’S FACILITIES**

<table>
<thead>
<tr>
<th>Site No.</th>
<th>Facility Name</th>
<th>Square Feet</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Public Safety Building (311 Grand Ave)</td>
<td>15,102</td>
</tr>
<tr>
<td>2</td>
<td>Minimum Security Correction Facility (2030 Division St.)</td>
<td>6,000</td>
</tr>
<tr>
<td>3</td>
<td>Laurel Substation (194 W. Laurel Rd.)</td>
<td>1,800</td>
</tr>
<tr>
<td>4</td>
<td>East Whatcom Regional Resource Center (8251 Kendall Road)</td>
<td>144</td>
</tr>
<tr>
<td>5</td>
<td>Birch Bay Fire Hall</td>
<td>192</td>
</tr>
<tr>
<td>6</td>
<td>Nugent’s Corner Fire Hall</td>
<td><strong>88</strong></td>
</tr>
</tbody>
</table>

**TOTAL** 23,326

Notes:

The Sheriff’s Office also has storage facilities at various locations in Whatcom County.

The County has two mobile homes and an old detention facility in Point Roberts. The resident deputies operate out of their homes or utilize space at the U.S. Customs office at the border.

Sheriff’s Office facilities include shared space at local fire districts, which is rented or leased space not solely dedicated to Sheriff’s Office use. This space is available depending on Fire District needs and is generally subject to change with short notice.

Future Needs

The Whatcom County Comprehensive Plan does not contain a level of service standard for Sheriff’s Office facilities. Rather, Comprehensive Plan Policy 4D-2 is to:

Maintain Sheriff’s Office adult corrections facilities and headquarters to provide a safe environment for the community, staff and inmates... Existing facilities may be expanded or new facilities developed in response to increasing need.

Most Sheriff’s Office functions are currently based in the Public Safety Building adjacent to the Courthouse and are remote from the majority of Sheriff’s Office Bureau of Law Enforcement and Investigative Services functions that take place in unincorporated Whatcom County. This results in inefficiencies and delays. Space and design factors in current facilities preclude consolidating various functions performed throughout the agency (reception, finance, etc.) and result in redundancies. Because of these issues, existing Sheriff’s Office facilities and
associated functions will be consolidated (except for “Resident Deputy” program facilities), and co-located on the site of the proposed new jail.

**Proposed Improvement Projects**

A new Sheriff’s Headquarters facility, co-located with the proposed new jail on LaBounty Rd. in Ferndale, is proposed within the six-year planning period. The Sheriff’s Headquarters facility would cost approximately $19 million, paid with bond proceeds that would be repaid from the General Fund, as shown below.

<table>
<thead>
<tr>
<th></th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
<th>Total</th>
<th>Funding Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>New Sheriff’s</td>
<td>3,808</td>
<td>3,808</td>
<td>3,808</td>
<td>3,808</td>
<td>3,808</td>
<td>3,808</td>
<td>19,040</td>
<td>1</td>
</tr>
<tr>
<td>Office</td>
<td>000</td>
<td>000</td>
<td>000</td>
<td>000</td>
<td>000</td>
<td>000</td>
<td>000</td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>3,808</td>
<td>3,808</td>
<td>3,808</td>
<td>3,808</td>
<td>3,808</td>
<td>3,808</td>
<td>19,040</td>
<td></td>
</tr>
</tbody>
</table>

**Funding Source**

1. Bonds (General Fund)
Chapter 6 – Emergency Management

Existing Emergency Management Space

The 2016 inventory of Sheriff’s Office, Division of Emergency Management space is 24,000 square feet, located at the Whatcom Unified Emergency Coordination Center (WUECC). Rented by and shared between both Whatcom County and the City of Bellingham, the WUECC is comprised of 2,000 square feet of office space and an additional 22,000 square feet of support facilities (used for meetings, training, exercises, and during emergencies). The WUECC serves as the Emergency Operations Center for both the County and the City.

EXISTING EMERGENCY MANAGEMENT/EOC FACILITIES

<table>
<thead>
<tr>
<th>Site No.</th>
<th>Facility Name</th>
<th>Square Feet</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Whatcom Unified Emergency Coordination Center</td>
<td>24,000</td>
</tr>
<tr>
<td></td>
<td>3888 Sound Way, Bellingham</td>
<td></td>
</tr>
</tbody>
</table>

Future Needs

The Whatcom County Comprehensive Plan does not contain a level of service standard for emergency management facilities. Rather, Comprehensive Plan Policy 4D-4 is to:

Maintain adequate facilities for daily emergency management activities and, during an emergency or disaster, for the emergency operations center. The facilities will provide sufficient space for activities relating to emergency/disaster planning, mitigation, response and recovery. Existing facilities may be expanded or new facilities developed in response to increasing need.

The County will budget for improvements to such facilities as needed.

Proposed Improvement Projects

There are no capital improvement projects planned or needed in the six-year planning period.
Chapter 7 – Adult Corrections

Existing Jail Facilities

The County’s Main Jail was designed and originally built to hold 148 beds, although with some limited remodeling and the use of double bunking, the operational capacity of the main jail should be for the use of 212 beds. Additionally, the jail is currently not in compliance with the Building/Fire Codes for double bunking, although a plan has been approved to bring it into compliance. Whatcom County completed construction of a 150 bed minimum security correction facility on Division St. in 2006. The Main Jail is located in the Public Safety Building next to the County Courthouse in downtown Bellingham and the Minimum Security Correction Facility is located in the Bakerview Rd. industrial area.

<table>
<thead>
<tr>
<th>Site No.</th>
<th>Facility Name</th>
<th>Jail Beds</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Public Safety Building (311 Grand Ave.)</td>
<td>283</td>
</tr>
<tr>
<td>2</td>
<td>Minimum Security Correction Facility (2030 Division St.)</td>
<td>150</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td>433</td>
</tr>
</tbody>
</table>

Future Needs

There are serious concerns among law and justice officials relating to jail facility needs in the community. This need has been documented by recommendations from the Whatcom County Law and Justice Plan Phase II Report (June 2000), in a report entitled Operational Review of the Whatcom County, Washington Jail (March 2004), in the Whatcom County Jail Planning Task Force Recommendations (Dec. 2011 and March 2012), and in the Whatcom County Adult Corrections Facilities & Sheriff’s Headquarters Pre-Design Report (Sept. 2013).

The Whatcom County Comprehensive Plan does not contain a level of service standard for jail facilities. Rather, Comprehensive Plan Policy 4D-2 is to:

Maintain Sheriff’s Office adult corrections facilities and headquarters to provide a safe environment for the community, staff and inmates. The number of jail beds in adult corrections facilities will be determined after review of multiple factors, including projected population growth, State sentencing laws, alternative programs, treatment diversion programs, early release programs, the need to separate violent inmates, the need to separate inmates by gender, the need to separate inmates by other classification considerations, average length of stay, peak inmate populations and available funding. Existing facilities may be expanded or new facilities developed in response to increasing need.
Proposed Improvement Projects

In an effort to meet the community need, the County plans to construct a new Adult Corrections Facility on LaBounty Rd. in Ferndale, tentatively scheduled to open with 521 beds. At the time this new jail is opened, the offenders at the minimum-security corrections facility would be relocated to the new facility.

As an interim measure, existing correction facility improvements are planned so that these buildings can continue to function until the new jail is completed.

The cost of the proposed new jail is approximately $112,000,000. The cost of the improvements to the existing jail facilities is approximately $3,000,000. These costs would be paid with bond proceeds that would be repaid with a new sales tax, the jail improvement fund, and the general fund as shown below.

<table>
<thead>
<tr>
<th></th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
<th>Total Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>New Jail</td>
<td>22,400,000</td>
<td>22,400,000</td>
<td>22,400,000</td>
<td>22,400,000</td>
<td>22,400,000</td>
<td>112,000,000</td>
<td>1</td>
</tr>
<tr>
<td>Existing Correction Facilities Interim Fixes</td>
<td>1,200,000</td>
<td>1,800,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3,000,000</td>
</tr>
<tr>
<td>Totals</td>
<td>1,200,000</td>
<td>24,200,000</td>
<td>22,400,000</td>
<td>22,400,000</td>
<td>22,400,000</td>
<td>22,400,000</td>
<td>115,000,000</td>
</tr>
</tbody>
</table>

Funding Sources

1. Bonds (New Sales Tax)
2. Jail Improvement Fund
3. General Fund
Chapter 8 – Juvenile Detention

Existing Juvenile Detention Facilities

The 2016 inventory of County juvenile detention facilities includes 32 beds serving the county-wide population. The juvenile detention facility is located on the sixth floor of the County Courthouse at 311 Grand Avenue.

**EXISTING JUVENILE DETENTION BEDS**

<table>
<thead>
<tr>
<th>Site No.</th>
<th>Facility Name</th>
<th>Beds</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>County Courthouse (311 Grand Ave.)</td>
<td>32</td>
</tr>
</tbody>
</table>

Future Needs

The Whatcom County Comprehensive Plan does not contain a level of service standard for juvenile detention facilities. Rather, Comprehensive Plan Policy 4D-3 is to:

Maintain juvenile detention facilities and alternative corrections programs to provide safe and secure methods to provide accountability and support for minors who break the law. Existing facilities may be expanded or new facilities developed in response to increasing need.

The County will budget for improvements to such facilities as needed.

Proposed Improvement Projects

There are no capital improvement projects planned or needed in the six-year planning period.
Chapter 9 – Transportation

Existing Roads

The 2015 inventory shows a total of 938.55 miles of County roads. Additionally, there are 217.5 miles of state highways in Whatcom County (including I-5). Therefore, there are approximately 1,156 miles of public roads in Whatcom County.

Future Needs

The Whatcom County Comprehensive Plan sets level of service (LOS) standards for County roads. Future traffic and the level of service for roads can be forecasted using computer-modeling software. The Whatcom Council of Governments forecasts future traffic utilizing a computer transportation model. This modeling effort will inform transportation planning in Whatcom County.

Whatcom County accomplishes planning for County road improvements by approving a Six-Year Transportation Improvement Program each year, as required by RCW 36.81.121.

Proposed Improvement Projects

The Whatcom County Six-Year Transportation Improvement Program includes preliminary planning for three proposed new road projects:

- Horton Road Connector (between Northwest Drive and Aldrich Road);
- Slater Road Connector (between Northwest Drive and Aldrich Road); and
- Lincoln Road extension (between Harborview Road and Blaine Road).

While these three projects are on the Six-Year Transportation Improvement Program, construction is not anticipated within the six-year planning period. Rather, preliminary engineering to determine project feasibility may be initiated within this time frame.

The six-year plan also includes bridge replacements, reconstruction projects, and the Birch Bay Drive & Pedestrian Facility improvements, which include pedestrian and non-motorized enhancements along Birch Bay Dr.
Existing Ferry Facilities

Whatcom County currently has one ferry vessel serving Lummi Island. The ferry runs between Lummi Island and Gooseberry Point on a daily basis.

Future Needs

Whatcom County Comprehensive Plan Policy 6A-1 is to establish the following levels of service (LOS) for purposes of maintaining transportation concurrency:

The Lummi Island Ferry Advisory Committee (LIFAC) is cooperating with Public Works to develop an updated LOS standard. LIFAC will present a revision to this section when that work is complete. The interim LOS is calculated using the scheduled trips, the estimated car units of the ferry and the Small Area Estimates Program (SAEP) population figure. The interim standard is established at 439 (LOS = (Scheduled one way trips X estimated car units for the boat) X 2/ Small Area Estimates Program Population figure from OFM for Lummi Island).

The Special Programs Manager for the County Public Works Department confirmed that the ferry service currently meets and, over the six-year planning period, should continue to meet the interim LOS standard.

Proposed Improvement Projects

The Six-Year Transportation Improvement Program includes construction of ferry dock improvements and preliminary engineering for upgrading the Whatcom Chief and replacing the Whatcom Chief.

Total Transportation Costs

The County plans to expend $48.4 million on transportation projects, including road and ferry projects, over the six-year planning period. In addition to these local funds, it is anticipated that funding will be received from the State and Federal governments.
Chapter 10 – Stormwater Facilities

Existing Stormwater Management Facilities

The Public Works Department is responsible for design, engineering, and construction of county-owned stormwater facilities. Many stormwater facilities are road-related stormwater conveyance systems such as culverts and ditches on and adjacent to county roads. Others are off right-of-way facilities that control storm flows and improve water quality.

In response to increasing federal and state mandates to manage stormwater and the public’s desire to improve stewardship of sensitive watersheds, Whatcom County established a Stormwater group in the Surface Water Division of the Public Works Department in 2005. The Stormwater group is responsible for planning, designing, engineering, and construction of stormwater facilities. Inventories of existing stormwater facilities are maintained by the Public Works Department. The Engineering Services Division maintains an inventory of all road-related facilities. The Stormwater group maintains an inventory of public and private stormwater facilities in the area covered by the County’s NPDES Phase II permit for Municipal Separate Storm Sewer Systems. This inventory includes ditches, culverts, catch basins, vaults, ponds, and swales. Completed stormwater construction projects since the Public Works-Stormwater group was created in 2005 are listed below.

<table>
<thead>
<tr>
<th></th>
<th>Facility Name</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Lake Whatcom Steamboat Lake Retrofits</td>
<td>2006</td>
</tr>
<tr>
<td>2</td>
<td>Lake Whatcom Cable Street Reconstruction &amp; Stormwater Improvements</td>
<td>2007</td>
</tr>
<tr>
<td>3</td>
<td>Lake Whatcom Lahdi Drive Stormwater Improvements</td>
<td>2010</td>
</tr>
<tr>
<td>4</td>
<td>Lake Whatcom Silver Beach Creek Improvements - Brownsville Drive to E. 16th Place</td>
<td>2011</td>
</tr>
<tr>
<td>5</td>
<td>Lake Whatcom Silver Beach Creek Improvements - West Tributary</td>
<td>2012</td>
</tr>
<tr>
<td>6</td>
<td>Lake Whatcom Coronado-Fremont Stormwater Improvements</td>
<td>2014</td>
</tr>
</tbody>
</table>

Lake Whatcom Coronado-Fremont Stormwater Improvements
Whatcom County Public Works received an award for the West Tributary of Silver Beach Creek Stormwater Improvements (Existing Site No. 5 above). Silver Beach Creek experiences increased stormwater runoff and greater peak flows due to its developed landscape. This project was designed to substantially improve water quality and reduce flooding in an especially problematic reach of the creek. The project included reshaping and stabilizing the stream channel, installing water quality treatment swales, and installing stormwater vaults. These improvements filter phosphorus-containing sediment, alleviate flooding, reduce erosion, and promote infiltration. Project construction cost was approximately $500,000 and shared between local real estate excise tax (REET) revenues, a State of Washington Department of Ecology grant, and a federal EPA grant.

**Future Needs**

An increasing emphasis on the protection of sensitive watersheds has resulted in the adoption of comprehensive stormwater plans, including plans for Lake Whatcom and Birch Bay. The adopted plans identify work towards planning, design, engineering, and construction of capital projects intended to address stormwater issues.

**Proposed Improvement Projects**

Stormwater improvement projects, totaling more than $7.2 million, are proposed over the six-year planning period as shown below. These costs would be paid by the flood fund, REET, state grants, and Birch Bay Watershed and Aquatic Resources Management (BBWARM) District funds.
<table>
<thead>
<tr>
<th></th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
<th>Total Cost</th>
<th>Funding Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Lake Whatcom</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agate Heights Estate/Bay Lane Water Quality Improvements</td>
<td>1,000,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1,000,000</td>
<td>1,2,3</td>
</tr>
<tr>
<td>Sudden Valley Drainage System Upgrades and Outfall Retrofits</td>
<td>115,000</td>
<td>25,000</td>
<td>520,000</td>
<td></td>
<td></td>
<td></td>
<td>660,000</td>
<td>2</td>
</tr>
<tr>
<td>Silver Beach Creek Channel Restoration</td>
<td>150,000</td>
<td>50,000</td>
<td>550,000</td>
<td></td>
<td></td>
<td></td>
<td>750,000</td>
<td>2</td>
</tr>
<tr>
<td>Northshore Rd, East of City Limits Water Quality Improvements</td>
<td>150,000</td>
<td>50,000</td>
<td>600,000</td>
<td></td>
<td></td>
<td></td>
<td>800,000</td>
<td>2</td>
</tr>
<tr>
<td>Lowell Dr. and Cedarbrook Court Stormwater Improvements</td>
<td>150,000</td>
<td>50,000</td>
<td>600,000</td>
<td></td>
<td></td>
<td></td>
<td>800,000</td>
<td>2</td>
</tr>
<tr>
<td>Glen Cove Lane/Lakeside St. Water Quality Improvements</td>
<td>150,000</td>
<td>50,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>200,000</td>
<td>2</td>
</tr>
<tr>
<td><strong>Birch Bay</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Harborview Phase I Drainage Improvements</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>700,000</td>
<td>2,4</td>
</tr>
<tr>
<td>Harborview Phase II Drainage Improvements</td>
<td>700,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>700,000</td>
<td>2,4</td>
</tr>
<tr>
<td>Cottonwood Dr. Inlet Upgrade</td>
<td>80,000</td>
<td></td>
<td>585,000</td>
<td></td>
<td></td>
<td></td>
<td>665,000</td>
<td>2,4</td>
</tr>
<tr>
<td>Richmond Park Drainage Improvements</td>
<td>100,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>100,000</td>
<td>2,4</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>1,295,000</td>
<td>1,175,000</td>
<td>1,355,000</td>
<td>1,950,000</td>
<td>800,000</td>
<td>650,000</td>
<td>7,225,000</td>
<td></td>
</tr>
</tbody>
</table>

**Funding Sources**
1. Flood Fund
2. REET II
3. State Grant
4. BBWARM

Whatcom County Comprehensive Plan  F- 24
Chapter 11 – Total Costs

Total Costs for the six-year planning period are shown below.

<table>
<thead>
<tr>
<th>Category</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
<th>Total Cost</th>
<th>% of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parks, Trails, and Activity Centers</td>
<td>1,139,000</td>
<td>698,000</td>
<td>693,000</td>
<td>2,423,000</td>
<td>446,000</td>
<td>580,009</td>
<td>5,819,000</td>
<td>2.65%</td>
</tr>
<tr>
<td>Maintenance and Operations</td>
<td>300,000</td>
<td>100,000</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>400,000</td>
<td>0.18%</td>
</tr>
<tr>
<td>General Government Buildings and Sites</td>
<td>4,382,500</td>
<td>12,830,063</td>
<td>3,565,000</td>
<td>815,000</td>
<td>815,000</td>
<td>815,000</td>
<td>23,222,563</td>
<td>10.55%</td>
</tr>
<tr>
<td>Sheriff’s Office</td>
<td>0</td>
<td>3,808,000</td>
<td>3,808,000</td>
<td>3,808,000</td>
<td>3,808,000</td>
<td>3,808,000</td>
<td>19,040,000</td>
<td>8.69%</td>
</tr>
<tr>
<td>Emergency Management</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0.00%</td>
</tr>
<tr>
<td>Adult Corrections</td>
<td>1,200,000</td>
<td>24,200,000</td>
<td>22,400,000</td>
<td>22,400,000</td>
<td>22,400,000</td>
<td>22,400,000</td>
<td>115,000,000</td>
<td>52.47%</td>
</tr>
<tr>
<td>Juvenile Detention</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0.00%</td>
</tr>
<tr>
<td>Transportation</td>
<td>7,465,016</td>
<td>7,598,432</td>
<td>7,935,021</td>
<td>8,181,007</td>
<td>8,434,618</td>
<td>8,696,091</td>
<td>48,498,185</td>
<td>22.09%</td>
</tr>
<tr>
<td>Stormwater Facilities</td>
<td>1,295,000</td>
<td>1,175,000</td>
<td>1,355,000</td>
<td>1,050,000</td>
<td>800,000</td>
<td>650,000</td>
<td>7,225,000</td>
<td>3.30%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>15,781,516</strong></td>
<td><strong>50,507,495</strong></td>
<td><strong>39,666,021</strong></td>
<td><strong>39,577,027</strong></td>
<td><strong>36,703,618</strong></td>
<td><strong>36,949,091</strong></td>
<td><strong>219,184,748</strong></td>
<td><strong>100.00%</strong></td>
</tr>
</tbody>
</table>

The County plans to undertake capital improvement projects costing more than $219 million between 2017 and 2022. The Whatcom County Capital Facilities Revenue Analysis contains a plan to finance these capital facilities within the County’s projected funding capacities.
APPENDIX G

(Proposal – delete the existing Appendix G and replace with a description of the County’s water resource and salmon recovery programs)
Appendix G

Whatcom County Water Resource
and Salmon Recovery Programs

Note: This is a new appendix describing the County’s various water resource and
salmon recovery programs and efforts. Originally proposed to be included in
Chapter 11 (Environment), the P/C felt it made the chapter too long, and that given
that the programs are evolving, it would best be located in an appendix.

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  WRIA 1 Joint Board ......................................................................................... 2
  WRIA 1 Joint Policy Boards ............................................................................ 2
  Local Integrating Organization (LIO) ................................................................. 2
  WRIA 1 Planning Unit .................................................................................... 3
  WRIA 1 Watershed Management Plan .............................................................. 3
  Lake Whatcom Watershed Management .......................................................... 4
  Lake Whatcom Watershed Management Program ........................................... 7
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Whatcom County Water Resource Programs

Reason for Change: The following text describing County water programs has been
added to describe the current environment and activities.

WRIA 1 Watershed Management Project

The WRIA 1 Watershed Management Project is the result of the 1998 Washington
State Watershed Management Act, which required all participating local
governments to address water quantity, with the option of addressing water
quality, instream flows, and fish habitat. The WRIA 1 Watershed Management
Project has brought together citizens, local governments, tribes, and state and
federal agencies to address these issues.

Whatcom County Comprehensive Plan

Apx G - 1
The framework for watershed management in the state is based on geographic areas known as Water Resource Inventory Areas (WRIAs). WRIA 1 includes the Nooksack River basin and several adjoining smaller watersheds, such as the coastal drainages of Dakota and California Creeks, as well as Lake Whatcom.

Watershed planning in WRIA 1 started in 1998 with the signing of a Memorandum of Agreement (MOA) between the Initiating Governments. In the WRIA 1 the Initiating Governments are Whatcom County, City of Bellingham, Public Utility District No. 1, Lummi Nation, and Nooksack Tribe (the latter joining slightly later through a Letter of Agreement). The role of the Initiating Governments was to review a recommended Watershed Plan and take it to their governments’ councils for adoption.

**WRIA 1 Joint Board**

In 1999, an Interlocal Agreement further formalized the government-to-government relationship essential to the tribes’ participation in the process by creating a Joint Board. The Joint Board is comprised of the Initiating Governments, including the mayor of the City of Bellingham, executive for Whatcom County, manager of Public Utility District No. 1, and designated policy representatives of Lummi Nation and Nooksack Tribe. The Board manages the project’s administrative functions such as contracts and budgets. Members of the Joint Board also sit on the Joint Policy Boards.

**WRIA 1 Joint Policy Boards**

The WRIA 1 Joint Policy Boards are comprised of members of the WRIA 1 Joint Board and Salmon Recovery Board. This organizational level interacts with federal, state, and regional organizations at a policy-level and provides policy-related direction to staff for purposes of incorporating regional issues into work plans, programs, etc. Additionally, the Joint Policy Boards:
- Endorse programs/actions to forward to Legislative Bodies, as applicable
- Provide WRIA 1 programs policy direction
- Meet and discuss watershed and salmon program topics as joint policy boards with decision-making of each policy board retained.

**Local Integrating Organization (LIO)**

The Whatcom Local Integrating Organization (LIO) is a function of the WRIA 1 Watershed Joint Board and WRIA 1 Salmon Recovery Board (Joint Policy Boards). Local integrating organizations are designated by the Puget Sound Partnership. The two WRIA 1 Boards accepted the function of the Whatcom LIO in October 2010 under the integrated program structure, and was officially recognized by the Puget Sound Partnership’s Leadership Council in November 2010. The purpose of the Whatcom LIO is to coordinate implementation of Puget Sound Action Agenda priorities that are consistent with or complement local priorities. One of its functions...
is to provide a local update to the Action Agenda for Puget Sound. Local updates are intended to identify local priorities in the form of near-term actions (NTAs), which are priority actions with measurable outcomes that can be implemented in the next two years and that align with strategies in the Action Agenda for Puget Sound.

**WRIA 1 Planning Unit**

The Initiating Governments established the Planning Unit to ensure representation of a broad range of water resource interests. The Planning Unit’s role is to recommend actions for a Watershed Plan and to contribute knowledge, interests, technical expertise, and other resources to its development. The Planning Unit is made up of representatives from the Initiating Governments, other governments, and various caucuses. There are 16 total caucuses on the WRIA 1 Planning Unit.

Reason for Change: The P/C felt that the PU deserved mentioning.
Note: Staff does not support the addition of this language. The PU is a subcommittee of the Joint Boards, as are the Watershed Management Team, the Watershed Staff Team, and the Salmon Staff Team. Staff purposefully left all but the highest levels of the organization out. Furthermore, the organization of the WRIA 1 is currently undergoing potential change, and the status of the PU is unknown.

**WRIA 1 Watershed Management Plan**

The WRIA 1 Watershed Management Plan was completed in 2005 through the cooperation of local stakeholders and governments. It provides a roadmap for addressing water quantity, water quality, instream flow, and fish habitat challenges. The goals of the WRIA 1 Watershed Management Project are to have water of sufficient quantity and quality to meet the needs of current and future human generations, including the restoration of salmon, steelhead, and trout populations to healthy harvestable levels, and the improvement of habitats on which fish and shellfish rely. These goals are addressed more specifically below:

- **Water Quantity** – To assess water supply and use, and develop strategies to meet current and future needs. The strategies should retain or provide adequate amounts of water to protect and restore fish habitat, provide water for future out-of-stream-uses, and ensure that adequate water supplies are available for agriculture, energy production, and population and economic growth under the requirements of the state’s Growth Management Act.

- **Water Quality** – To ensure that the quality of our water is sufficient for current and future uses, including restoring and protecting water quality to meet the needs of salmon and shellfish, contact recreational uses, cultural uses, protection of wildlife, providing affordable, safe domestic water
supplies, and other beneficial uses. The initial objectives of the water quality management strategy will be to meet the water quality standards.

- **Instream Flow** – To supply water in sufficient quantities to restore salmon, steelhead, and trout populations to healthy and harvestable levels and improve habitats on which fish rely.

- **Fish Habitat** – To protect or enhance fish habitat in the management area and to restore salmon, steelhead, and trout populations to healthy and harvestable levels and improve habitats on which fish rely.

In 2010, the WRIA 1 Joint Board adopted a work plan, budget and financing strategy, called the Lower Nooksack Strategy, to advance a negotiated settlement of Tribal and state in-stream flow water rights on the mainstem of the Nooksack River, while maximizing the economic and environmental benefits of out-of-stream water use in the Lower Nooksack sub-basin. The Joint Board adopted the Lower Nooksack Strategy consistent with WRIA 1 Watershed Management Plan priorities. The Lower Nooksack Strategy Objectives:

- Develop and implement a process for negotiating settlement of water rights on the Mainstem Nooksack River.
- Update and verify the Lower Nooksack River sub-basin water budget and develop a groundwater model.
- Determine out-of-stream water user needs:
  - Public water system needs determined by updated the Whatcom County Coordinated Water System Plan (CWSP).
  - Other out-of-stream user needs (e.g., agriculture, private domestic wells, industrial, etc.) determined through a regional water supply planning process.
- Continue and, if appropriate, enhance targeted streamflow and water quality sampling.
- Advance work on tools that foster water resource allocations consistent with long-term economic and environmental land-use goals for implementation in five years.

**Lake Whatcom Watershed Management**

Reason for Change: The below text regarding Lake Whatcom was moved from Chapter 2 to this chapter.

Lake Whatcom is a large multi-purpose reservoir that is the source of drinking water for the City of Bellingham, Lake Whatcom Water and Sewer District, several other smaller water districts/associations, and about 250 homes that draw water directly from the lake. All told, the lake provides water to about half the population of Whatcom County.
Lake Whatcom is a multiple use lake and watershed. In addition to providing water for drinking, commercial and industrial uses, the lake is used for boating, swimming, and fishing. The majority of the watershed is forested, mainly surrounding the large southernmost portion of the lake. Other land uses include residential development (approximately 5,030 homes are located within the watershed), limited agriculture and commercial development, parks, and other public facilities. The on-going management challenge is trying to determine the extent to which these practices can occur while maintaining safe, clean drinking water. The challenge is further complicated by possible requirements related to the Endangered Species Act, tribal water rights, and the potential impact these issues may have on how the City’s diversion from the Nooksack River is operated.

The watershed contains four developed areas: the City of Bellingham, which straddles the upper portion of the northern-most basin of the lake; Geneva, which is immediately south and east of Bellingham’s city limits and is part of the city’s urban growth area; Hillsdale, which is immediately north and east of Bellingham’s city limits and is also part of the city’s urban growth areas; and the Sudden Valley Rural Community. In addition, it includes a variety of other zones, including resource, rural, and residential rural zones. Over Outside the Bellingham City limits, approximately 70%-75% of the watershed is in Forestry zoning and more than 75%-73% of the current land use is forestry.

In 2003, there were approximately 2,730 existing dwelling units in the Lake Whatcom watershed located outside of the Bellingham UGA. Under the zoning adopted in January 2004, the gross potential build-out in this area is about 6,507 total dwelling units. Therefore, even under the more restrictive zoning adopted in January of 2004, there could be a significant amount of new development in the watershed. Water and sewer service are provided by the Lake Whatcom Water and Sewer District Water District 10. Capacity problems in the district’s sewer line, which serves Geneva and Sudden Valley, have caused overflows into the lake in the past. An aggressive program to preclude stormwater infiltration has eliminated the overflow problems to a large extent. In addition, the district has a contractually limited flow capacity to Bellingham. The Lake Louise Road sewage interceptor was constructed in January 2003 to carry waste water from Sudden Valley and Geneva and serves as a complement to the Lake Whatcom Boulevard trunk line. The interceptor was designed to service full build-out of Sudden Valley and Geneva.

The City of Bellingham and Lake Whatcom Water and Sewer District are responsible for ensuring drinking water standards are met for their customers. To date water supplies have consistently met standards. The ability to continue to economically meet drinking water standards requires maintaining source water that requires minimal treatment. For this reason the City of Bellingham maintains an ongoing source water-monitoring program. Other agencies including Western Washington University, Department of Natural Resources, Department of Fish and Wildlife, Department of Ecology, Lake Whatcom Water and Sewer District, and
Whatcom County, have also conducted monitoring, studies, and/or evaluations of
the lake and watershed.

Lake Whatcom is the drinking water source for approximately half of Whatcom
County. Recent studies on Lake Whatcom conducted over a number of years
indicate water quality in the lake has declined. Oxygen levels in Lake Whatcom are
decreasing to lower levels, and are declining faster than in the past. In 1997, 1998,
the Washington State Department of Ecology listed Lake Whatcom as an impaired
water body and placed Lake Whatcom on the Federal Clean Water Act 303(d) list
because of low oxygen levels in the lake and high bacteria levels in streams that
flow into the Lake. The 303(d) listing requires the establishment of a Total
Maximum Daily Loads (TMDLs), that designate loading capacity of the lake such
that there will be no measurable change in oxygen levels from natural-lake
conditions. The TMDL goals will require a variety of planning, pollution-prevention,
pollution-reduction, and technical approaches. Meeting the TMDL goals will be
required in order to stabilize water quality in Lake Whatcom. The Department of
Ecology issued the “Lake Whatcom Watershed Total Phosphorus and Bacteria Total
Maximum Daily Loads: Volume 1, Water Quality Study Findings” in 2008. This study
documented that Lake Whatcom is impaired for dissolved oxygen due to
phosphorus loading and that streams flowing into Lake Whatcom do not meet fecal
coliform bacteria standards. Loading capacities for total phosphorus and bacteria
reduction targets were set forth in this document. In 2013, The Department of
Ecology issued a draft “Lake Whatcom Watershed Total Phosphorus and Bacteria
Total Maximum Daily Loads: Volume 2, Water Quality Improvement Report and
Implementation Strategy.” in 2013. This report identifies how much phosphorus can
be discharged to the lake and identifies how the bacteria load should be allocated
between the County and City of Bellingham, in order to meet water quality
standards.

A significant cause of declining oxygen levels has been from residential
development in the watershed. Past development permitted by the City of
Bellingham and Whatcom County has led to increased phosphorus loading into the
lake, which stimulates algae growth. Bacteria that consume the dying algae deplete
the dissolved oxygen, leading to in-turn has led to lower oxygen levels in the lake.
Past poorly managed forest practices may have led to significant increases in
phosphorus loading to the lake.

There are several pending subdivisions in the area which are being proposed at less
than full-density but which will increase the overall development level outside of
urban areas to a significant degree. Whatcom County has taken a number of
actions to reduce phosphorus and otherwise address Lake Whatcom water quality.
These include rezoning land to allow less development in the watershed, adoption
of the Lake Whatcom Comprehensive Stormwater Management Plan, revising
stormwater management standards for private development to significantly reduce
potential phosphorus runoff, construction of stormwater capital improvement
projects and adoption of regulations that restrict the application of commercial
fertilizers.

In 2014, approximately 8,800 acres of forest lands around Lake Whatcom were
transferred to Whatcom County from the Washington Department of Natural
Resources through reconveyance. These lands will provide passive recreation
opportunities with hiking and biking trails connecting various communities,
neighborhoods and parks throughout the watershed. Under County ownership, the
forests will be allowed to mature to an older growth environment benefiting the
watershed and helping to stabilize steep slopes that surround the lake. In 2006 the
Whatcom County Council approved funding to study reconveyance of DNR managed
County-Forest-Board-Lands.

There are still state forest lands in the Lake Whatcom watershed. In 2004, the
Department of Natural Resources (DNR) Board on Natural Resources adopted the
Lake Whatcom Landscape Plan. This plan provides additional protections on
remaining state managed lands within the Lake Whatcom watershed. The plan
provides additional protections on streams and potentially unstable slopes not
normally included in forest practices in Washington State. If the DNR exchanges
land from the watershed the protections provided by the plan would not be
applicable to the new owner.

Lake Whatcom Watershed Management Program

A variety of agencies, organizations, and individuals play a role in managing and
protecting Lake Whatcom. In an effort to coordinate efforts of these various
players, in 1990, the City of Bellingham, Whatcom County, and Water District 10
(now known as the Lake Whatcom Water and Sewer District) began meeting to
develop a joint management strategy for the Lake Whatcom watershed.

In November/December 1992, a joint resolution was passed by the Bellingham City
Council, Whatcom County Council, and the Lake Whatcom Water and Sewer District
(formerly Water District 10). Commissioners, which reaffirmed this position with six
general goal statements and a set of specific goal statements in various categories.
The specific goal statements for urbanization were the following:

- Prevent water quality degradation associated with development within the
  watershed.
- Review and recommend changes in zoning and development potential that
  are compatible with a drinking-water reservoir environment.
- In addition to zoning identify and promote other actions to minimize potential
  for increased development in the watershed (i.e. land trust, development
  rights, cost incentives, etc.).
- Develop specific standards which reduce the impacts of urbanization, such as
  minimal lot clearing; clustered development to reduce infrastructure;
  collection and treatment of stormwater before entering the lake.
- Develop appropriate interlocal agreements with governing agencies to prohibit the potential for additional development once an agreed upon level is set.

The joint resolution included goals for watershed management that extended beyond urbanization. Goals were included for stormwater management, on-site waste systems, conservation, forest management, spill response, hazardous materials transport and handling, data/information management, education/public involvement, and other topics. A joint strategy was agreed to for developing specific plans to meet the adopted goals. Eight high priority goals were selected first and plans have been completed and jointly adopted for each of the goals.

In 1998, the City, County, and District 10 formalized their joint commitment to protect and manage the lake through the joint adoption of an interlocal agreement and allocation of funding toward protection and management efforts in the watershed. A five-year program plan was developed for ten program areas. Specific priority was placed on activities related to watershed ownership, stormwater management, and urbanization/land development.

The resulting Lake Whatcom Management Program guides actions to protect Lake Whatcom as a long-term supply of drinking water for the City of Bellingham and portions of Whatcom County. The program emphasizes protection over treatment in managing Lake Whatcom and its watershed. The structure of the Lake Whatcom Management Program includes legislative bodies, a management team, an interjurisdictional coordinating team, agency staff, and advisory committees.

The Lake Whatcom Watershed Management Program website (http://www.lakewhatcom.whatcomcounty.org/resources) contains the management plans, reports, and work programs, as well as the jurisdictions’ pertinent regulations and brochures on the different programs aimed at the various efforts to improve water quality.

**Sudden Valley Recreational-Subdivision**

Reason for Change: The following text was moved from Chapter 2, and edited for brevity.

Sudden Valley is a community within the Lake Whatcom Watershed. It was established in the early 1970s as a recreation/resort area located in the Lake Whatcom Watershed. But over the last thirty years it has developed into an urban significant residential area. Sudden Valley has private paved roads, all underground utilities (electricity, gas, cable and telephone), and a public water and sewer system provided by Lake Whatcom Water and Sewer District. Fire District #2, strategically located in Sudden Valley, provides fire and ambulance service. Sudden Valley’s 1,724 total acres originally included 4,648 platted single-family lots/condominiums, a limited commercial area, community facilities, a marina, and a golf course. Of the 1,545 acres, 835 acres of open space and 140 acres of golf course (63%) are
community association-owned. The remaining 749 acres (43%) are private property. 2000 US Census data indicates that approximately 26% of the existing housing in Sudden Valley is either seasonal or vacant.

Sudden Valley contributes to a high volume of vehicle trips on Lake Whatcom Boulevard and Lake Louise Road. Right-of-way and alignment studies have been proposed for the 6-year TIP to study alternatives, cost and location relative to addressing the growing volume of vehicular trips on Lake Whatcom Boulevard and Lake Louise Road. Public transportation services are provided by the Whatcom Transportation Authority (WTA).

Sudden Valley lies within the Lake Whatcom Watershed where limiting development has been identified as desirable. The Sudden Valley Community Association (SVCA) has a Board of Directors mandated lot consolidation program with a targeted density reduction of 1,400 lots, reducing the total lots for development from 4,648 to 3,248. To date approximately 75% (1,047 lots) have been placed into density reduction of which 452 are voluntary private lot consolidation. SVCA funding has been set aside to purchase additional lots for density reduction. In accordance with the 2000 Lake Whatcom Management Program, the County and Lake Whatcom Water and Sewer District have also assisted Sudden Valley with their density reduction program through several joint agreements and exchanges of property and restrictive covenants. To date, the SVCA, County, and Lake Whatcom Water and Sewer District have acquired 115 undeveloped lots in Sudden Valley at annual tax foreclosure auctions. The Lot Consolidation Covenant to Bind process has also increased voluntary private lot consolidation. The County Council has exempted Sudden Valley from the Lake Whatcom Transfer of Development Rights (TDR) program because Sudden Valley's density reduction plan meets the intent of the TDR program.

Since 1985, Sudden Valley has mandated the use of appropriate stormwater best management practices through standards for individual stormwater detention for all new construction. Any new building permits on existing lots must be able to demonstrate that stormwater detention is included on the plan as a precondition to issuance of a permit. Sudden Valley is also subject to additional regulatory protections that apply to the Lake Whatcom watershed under the Water Resource Protection Overlay District, Stormwater Special District, and Water Resource Special Management Area requirements. Under the provisions of these special districts, potential impacts from impervious surfaces, stormwater runoff, and clearing activities are required to be addressed either on-site or through a community-wide process.

Sudden Valley has implemented a 10-year Forest and Wildlife Stewardship (FAWS) plan with the State of Washington Department of Natural Resources (DNR). This plan provides environmental education and guidance to the Sudden Valley community, on a continuing basis, to assure sound environmental health and safety.
for plants, animals, and residents with an emphasis on properly managing flora and fauna indigenous to the region.

**Groundwater Protection & Management**

Groundwater is contained in aquifers, which are subterranean layers of porous rock or soil. Most aquifers are replenished by rainwater, though some may contain water trapped during glacial periods. Aquifers are often integrally linked with surface water systems and are essential for meeting in-stream and out-of-stream water needs such as for drinking water, agriculture, and industry. Whatcom County residents rely heavily on groundwater for drinking water, agriculture, and commercial and industrial needs. Groundwater also plays an important role in maintaining stream flows.

Many studies have been conducted related to groundwater quality in Whatcom County documenting water quality issues such as exceedances of standards for nitrate, ethylene dibromide (EDB) and 1,2-dichloropropane (1,2-D), pesticides, iron and other agricultural-related contaminants, particularly in the northern portion of the County. In general, groundwater in Whatcom County is very vulnerable to contamination because much of the County’s groundwater lies within a shallow unconfined aquifer. Activities that occur on the surface of the ground directly affect groundwater quality. Shallow wells that draw water from unconfined water table aquifers are at highest risk.

Whatcom County’s Critical Areas Regulations protect Critical Aquifer Recharge Areas (CARAs) during the development process, by precluding certain uses in CARAs and/or requiring certain precautions be taken in handling certain chemicals.

**Flood Hazard Management**

A comprehensive approach to flood hazard management planning provides for a better understanding of the river and floodplain system and ensures that flooding and channel morphology problems are not simply transferred to another location within the basin, but are addressed in a comprehensive, basinwide manner. This approach directs future flood hazard management expenditures in the most efficient and cost effective manner.

Whatcom County Public Works coordinates with the Flood Control Zone District Advisory Committee (FCZDAC) to identify and characterize flooding problems and provide recommendations for achieving consistent long-term flood hazard reduction strategies. Some activities typically involved in developing a Comprehensive Flood Hazard Management Plan (CFHMP) include data collection, hydraulic modeling, alternatives analysis, floodplain mapping, and meander limit identification. In addition to the technical components in comprehensive flood planning, extensive coordination with the public and other agencies is required throughout the planning process.
Other County flood management programs include:

**Early Flood Warning** – Work with the United States Geological Survey (USGS) to maintain a network of early flood warning stations to help citizens prepare and take appropriate measures to protect lives and property from flood damages.

**Flood Hazard Reduction Program** – Implement projects to reduce future flood damages and public expenditures to repair damaged areas. Examples include construction of setback levees and overflow spillways, and designation of overflow corridors in overbank areas. Two alluvial fan studies have been completed for Jones Creek and Canyon Creek. For Jones Creek, review of potential mitigation measures and concept design of a preferred approach has also been completed.

**Comprehensive Flood Hazard Management Planning** – Identify flooding problems and provide recommendations for achieving long-term flood hazard reduction strategies. The Lower Nooksack River Comprehensive Flood Hazard Management Plan was adopted in 1999. Implementation of the plan is ongoing.

**Preparedness and Response** – Plan for and implement a coordinated response during flood events to ensure public safety and minimize flood damages.

**National Flood Insurance Program** – Participate in the Congress-initiated National Flood Insurance Program (NFIP) of 1968, to make affordable flood insurance available to citizens of communities that adopt approved flood management regulations.

**Repair and Maintenance Program** – Address problem areas with rivers, streams, and coastlines of Whatcom County, and mitigates future flood damages in a proactive and cost-effective manner.

**Technical Assistance** – Provide technical assistance regarding drainage and flood issues to private citizens and businesses located along the many water bodies within Whatcom County.

**Organization**

**Flood Control Zone District Advisory Committee (FCZDAC)**

Following the severe floods of 1989 and 1990, in 1992 Whatcom County created the countywide Flood Control Zone District (FCZD), including both incorporated and unincorporated areas of the County. The FCZD is a quasi-municipal corporation that is a separate legal entity from the Whatcom County government. Even though this legal separation exists, the Whatcom County Council and the County Executive (Board of Supervisors) and the Public Works Department (staff) perform the governance and administrative support for the district.
The primary purpose of the FCZD is flood hazard management. Revenue generated to for this purpose is accomplished in two ways: (1) a county-wide uniformly applied service charge; and, (2) supplemental revenue generated within localized Diking Districts and Sub-Flood Districts where specific local project activity is planned.

While the primary purpose of the FCZD is flood hazard management, the district is allowed to address a wide variety of water resource issues. Due to this ability, revenue generated by the district is currently used to finance additional water supply and water quality related improvement projects.

Pertinent Documents

Lower Nooksack River Comprehensive Flood Hazard Management Plan (CFHMP)

In 1999, the county adopted the Lower Nooksack River Comprehensive Flood Hazard Management Plan (CFHMP). The CFHMP identifies projects, programs, and other recommendations aimed at reducing future flood damages along the Lower Nooksack River.

Critical Areas Regulations (WCC 16.16)

Whatcom County’s Critical Areas Regulations aim to protect people and property in Frequently Flooded Area (FFAs) by requiring that any development conforms to WCC Title 17, Flood Damage Prevention.

Stormwater Management

Stormwater runoff occurs when precipitation from rain or snowmelt flows over the land surface. The addition of roads, driveways, parking lots, rooftops and other surfaces that prevent water from soaking into the ground to our landscape greatly increases the runoff volume created during storms. This runoff is swiftly carried to our local streams, lakes, wetlands and rivers and can cause flooding and erosion. Stormwater runoff also picks up and carries with it many different pollutants that are found on paved surfaces such as sediment, nitrogen, phosphorus, bacteria, oil and grease, trash, pesticides and metals.

County Stormwater Management Programs

National Pollutant Discharge and Elimination System (NPDES) Phase II Permit

Stormwater runoff picks up pollutants as it travels over our developed landscapes and is a major source of water quality problems. In 1987, the Federal Clean Water Act was amended to address stormwater pollution. As a result, the United States
Environmental Protection Agency (EPA) created the National Pollutant Discharge Elimination System (NPDES) to address stormwater runoff. States are then required to administer permits to local jurisdictions to regulate runoff as part of the NPDES Program. The Permit is referred to as the "NPDES Phase II Permit" or "Phase II Municipal Stormwater Permit".

In February of 2007, the Washington State Department of Ecology issued Whatcom County’s Phase II Municipal Stormwater Permit. This permit regulates discharges from Small Municipal Separate Storm Sewers, and is part of the National Pollutant Discharge and Elimination System (NPDES) and State Waste Discharge General Permit. It sets forth requirements of municipalities to address stormwater runoff in areas determined to have population densities reaching urban standards. Whatcom County is required to implement various stormwater management strategies to comply with this State permit.

The current Permit boundary covers approximately 15,000 acres and generally includes the following areas (Figure 1):

- Bellingham Urban Growth Area
- Sudden Valley
- Portions of the Hillsdale and Emerald Lake area
- Portions along North Shore Drive on Lake Whatcom and Lake Whatcom Boulevard
- Ferndale Urban Growth Area
- Portions along Chuckanut Drive and Chuckanut Bay
- Birch Bay Urban Growth Area (Beginning August 1, 2013)
- The entire Lake Whatcom watershed is subject to illicit discharge detection and elimination requirements of the Permit.

Jurisdictions are allowed to discharge runoff into water bodies of the State (such as rivers, lakes, and streams) as long as they implement programs that protect water quality by reducing pollutants to the maximum extent possible through requirements of the NPDES Phase II Permit. Those requirements are reported and submitted to the Department of Ecology through the Stormwater Management Program (SWMP) and the Annual Compliance Report.

The Western Washington Phase II Municipal Stormwater Permit is required by the State of Washington Water Pollution Control Law Chapter 90.48 RCW, and the Federal Water Pollution Control Act Title 33 United States Code (Clean Water Act). The Permit is administered by the Washington State Department of Ecology.
Figure 1. NPDES Phase II Boundaries

Pollution Identification and Correction (PIC) Program

Everyone wants clean water to support healthy drinking water, safe recreational uses, quality water for irrigation and livestock, healthy fish, and shellfish that are safe to consume. Currently, many streams in Whatcom County do not meet water quality standards for fecal coliform bacteria. Fecal coliform bacteria are found in the intestinal tract of warm-blooded animals and when found in streams are an indicator of human or animal waste in the water. The higher the bacteria level, the greater the public health risk to people drinking, wading, fishing, or consuming shellfish. The Pollution Identification and Correction (PIC) Program has been created to help implement community solutions to clean water.

Pollution - The key potential sources of bacteria that have been identified in Whatcom County coastal drainages are (1) animal waste from agricultural...
operations, domestic pets, waterfowl, and wildlife, and (2) human sewage from failing on-site sewage systems (OSS), leaking sewers, or cross-connections.

Identification - Whatcom County coordinates a routine water quality monitoring program at approximately 90 stations in watersheds that discharge to marine waters. Samples are collected on at least a monthly basis and analyzed for fecal coliform bacteria. Results are evaluated annually to identify focus areas with the largest bacteria problems. Within the focus areas, stream segments are monitored and potential bacteria sources are identified.

Correction - Technical and financial resources are offered to landowners to identify and implement solutions on their property. Residents can help improve the community's water quality by inspecting and maintaining septic systems and by fencing animals out of streams, ditches and swales. By actively managing pastures, creating protected heavy use areas, and covering manure storage areas, residents can prevent manure-contaminated mud from polluting surface water. Planting shrubs and trees along stream banks and picking up after dogs also contributes to better water quality.

Salmon Recovery Program

In the Nooksack basin, abundances of several salmonid stocks have diminished substantially from historical levels. The declines in local salmonid stocks, especially Chinook salmon, have had profound economic, cultural and social impacts on the greater WRIA 1 community. Direct impacts include reduced jobs and income for commercial fisherman, severe curtailment of tribal and subsistence catch, and loss of tourism associated with recreational fishing. In addition, ESA listings impose constraints on the activities of local and tribal governments, businesses, the agricultural community, and citizens, who must seek to avoid or minimize take of listed species. Nonetheless, salmon remain an integral part of the natural and social landscape of Whatcom County and the Nooksack River watershed. Recent watershed recovery planning and restoration efforts by federal, state, local and tribal governments, non-profit organizations, businesses, and private citizens demonstrate a commitment to salmon recovery in WRIA 1.

The WRIA 1 Salmon Recovery Program is a multi-government planning effort with a WRIA-wide scope to address salmon recovery and protection of ESA and non-ESA listed salmonids.

WRIA 1 Salmon Recovery Strategy

The ultimate goal for salmon recovery in WRIA 1 is to recover self-sustaining salmonid runs to harvestable levels through the restoration of healthy rivers and natural stream, river, estuarine, and nearshore marine processes, careful use of hatcheries, and responsible harvest, and with the active participation and support of local landowners, businesses, and the larger community. The purpose of the
WRIA 1 Salmonid Recovery Plan is to identify the actions necessary to recover WRIA 1 salmonid populations, especially listed species, and to outline the framework for implementation of recommended actions that have been agreed to by local, state, tribal, and federal governments and stakeholders in WRIA 1. In the near term, the objectives are to:

1. Focus and prioritize salmon recovery efforts to maximize benefit to the two Nooksack early chinook populations;
2. Address late-timed Chinook through adaptive management, focusing in the near-term on identifying hatchery- versus naturally-produced population components;
3. Facilitate recovery of WRIA 1 bull trout and steelhead by implementing actions with mutual benefit to both early chinook, and bull trout and steelhead and by removing fish passage barriers in presumed bull trout and steelhead spawning and rearing habitats in the upper Nooksack River watershed; and
4. Address other salmonid populations by (a) protecting and restoring WRIA 1 salmonid habitats and habitat-forming processes through regulatory and incentive-based programs; and (b) encouraging and supporting voluntary actions that benefit other WRIA 1 salmonid populations without diverting attention from early chinook recovery.

Focusing efforts on early chinook is consistent with regional salmon recovery—current abundance and productivity for the two populations is very low and recovery of both populations is critical to delisting and recovery of the Puget Sound Evolutionarily Significant Unit (ESU) for Chinook salmon.

Salmon Recovery Board (SRB)

WRIA 1 Salmon Recovery Board membership includes the County Executive, Bellingham Mayor, Mayors of the Small Cities of Whatcom County, the regional director of the Washington Department of Fish and Wildlife, and policy representatives from Lummi Nation and Nooksack Indian Tribe.

The WRIA 1 Salmonid Recovery Plan (2005), a chapter of the Puget Sound Salmon Recovery Plan, guides restoration in the Nooksack River and adjacent watersheds. This plan was developed in partnership with Nooksack Tribe, Lummi Nation, Washington Department of Fish and Wildlife, Bellingham, and the small cities of Whatcom County. Chinook salmon populations (listed as threatened with extinction under the Federal Endangered Species Act) are prioritized, yet the plan also provides the template for recovery of threatened steelhead and bull trout and the other salmon and trout populations native to Whatcom County.

The salmon plan was developed in parallel with the WRIA 1 Watershed Management Plan. Salmon habitat is intricately linked to watershed management; salmon recovery will be most successful when fish habitat objectives are carefully coordinated with watershed management objectives. Integrating salmon recovery
with flood hazard management and restoring fish passage under County roads are two primary areas of focus.
Proposed Council Changes to Comprehensive Plan

Appendix G – Water Resources and Salmon Recovery Programs

Page and line numbers reflect Planning Commission Recommended Draft dated 1/14/16 (http://whatcomcounty.civicplus.com/DocumentCenter/View/15163). To improve clarity of Councilmember requested changes, previous edits (i.e. staff and Planning Commission) are included, but not show as edits.

1) Return all of Appendix G to Chapter 11 (Brenner)

2) p. G-2; lines 27-35: The WRIA 1 Joint Policy Boards are comprised of members of the WRIA 1 Joint Board and Salmon Recovery Board. This organizational level interacts with federal, state, and regional organizations at a policy-level and provides policy related direction to staff to coordinate the implementation and management of the WRIA 1 Watershed Management Plan – Phase 1, the WRIA 1 Salmonid Recovery Plan and other related activities. For purposes of incorporating regional issues into work plans, programs, etc. Additionally, the Joint Policy Boards:

- Endorse programs/actions to forward to Legislative Bodies, as applicable
- Provide WRIA 1 programs policy direction
- Meet and discuss watershed and salmon program topics as joint policy boards with decision making of each policy board retained.

(Brenner)

3) p. G-3; lines 24-28: 2005 WRIA 1 Watershed Management Plan – Phase One

The 2005 WRIA 1 Watershed Management Plan was completed approved in 2005 through the cooperation of local stakeholders and governments by the Joint Administrative Board, Planning Unit (by consensus), and the County Council. Pursuant to subsequent state requirements, a WRIA1 Watershed Detailed Implementation Plan was approved by the Joint Administrative Board, Planning Unit, and County Council in 2007. It provides a roadmap for addressing water quantity, water quality, instream flow, and fish habitat challenges. (Brenner)

4) p. G-5; line 29-32: Capacity problems in the district's sewer line, which serves Geneva and Sudden Valley, have caused overflows into the lake in the past. An aggressive program to preclude stormwater infiltration has eliminated reduced the overflow problems to a large extent. (Brenner)
5) p. G-6; line 30-36: A significant cause of declining oxygen levels has been from residential development in the watershed. Past development permitted by the City of Bellingham and Whatcom County has led to increased phosphorus loading into the lake, which stimulates algae growth. Bacteria that consume the dying algae deplete the dissolved oxygen, leading to lower oxygen levels in the lake. Past poorly managed forest practices may have led to significant increases in phosphorus loading to the lake. (Brenner)

6) p. G-8; lines 5-10: The joint resolution included goals for watershed management that extended beyond urbanization. Goals were included for stormwater management, on-site waste systems, conservation, forest management, spill response, hazardous materials transport and handling, data/information management, education/public involvement, and other topics. A joint strategy was agreed to approved for developing specific plans to meet the adopted goals. (Brenner)

7) p. G-12; line 1-5: The primary purpose of the FCZD is flood hazard management. Revenue generated to for this purpose is accomplished in two ways: (1) a county-wide uniformly applied service charge tax; and, (2) supplemental revenue generated within localized Diking Districts and Sub-Flood Districts where specific local project activity is planned.

8) p. G-12; lines 24-26: Whatcom County’s Critical Areas Regulations aim to protect people and property in Frequently Flooded Area (FFAs) by requiring that any development in these areas conforms to WCC Title 17, Flood Damage Prevention. (Brenner)

9) p. G-13; lines 15-26: The current Permit boundary covers approximately 15,000 acres and generally includes the following areas (Error! Reference source not found.):
   - Bellingham Urban Growth Area
   - Sudden Valley
   - Portions of the Hillsdale and Emerald Lake area
   - Portions along North Shore Drive on Lake Whatcom and Lake Whatcom Boulevard
   - Ferndale Urban Growth Area
   - Portions along Chuckanut Drive and Chuckanut Bay
   - Birch Bay Urban Growth Area (Beginning August 1, 2013)

   Additionally, though not within the NPEDS permit area, the County has made the entire Lake Whatcom watershed subject to the illicit discharge detection and elimination requirements of the Permit through ordinance and agreement with the Department of Ecology. (Brenner)

10) p. G-16; lines 34-38: The WRIA 1 Salmonid Recovery Plan (2005), a chapter of the Puget Sound Salmon Recovery Plan, guides restoration in the Nooksack River and adjacent
watersheds. This plan was developed in partnership with Nooksack Tribe, Lummi Nation, Washington Department of Fish and Wildlife, Bellingham, Whatcom County Government and the small cities of Whatcom County. (Brenner)

Items 11 through 35 concern comma use and other grammatical changes and may be considered in a single motion.

11) p. G-3; lines 29-33: The goals of the WR1A 1 Watershed Management Project; are to have water of sufficient quantity and quality to meet the needs of current and future human generations, including the restoration of salmon, steelhead, and trout populations to healthy harvestable levels, and the improvement of habitats on which fish and shellfish rely. (Brenner)

12) p. G-3; lines 35-40: Water Quantity – To assess water supply and use, and develop strategies to meet current and future needs. The strategies should retain or provide adequate amounts of water to protect and restore fish habitat, provide water for future out-of-stream-uses, and ensure that adequate water supplies are available for agriculture, energy production, and population, and economic growth under the requirements of the state’s Growth Management Act. (Brenner)

13) p. G-3; lines 42- p. G-4, line 2: Water Quality – To ensure that the quality of our water is sufficient for current and future uses, including restoring and protecting water quality to meet the needs of salmon and shellfish, contact recreational uses, cultural uses, protection of wildlife, providing affordable, safe, domestic water supplies, and other beneficial uses. The initial objectives of the water quality management strategy will be to meet the water quality standards. (Brenner)

14) p. G-4; lines 12-17: In 2010, the WR1A 1 Joint Board adopted a work plan, budget, and financing strategy, called the Lower Nooksack Strategy, to advance a negotiated settlement of Tribal and state in-stream flow water rights on the mainstem of the Nooksack River, while maximizing the economic and environmental benefits of out-of-stream water use in the Lower Nooksack sub-basin. The Joint Board adopted the Lower Nooksack Strategy, consistent with WR1A 1 Watershed Management Plan priorities. (Brenner)

15) p. G-4; lines 40-44: Lake Whatcom is a large multi-purpose reservoir that is the source of drinking water for the City of Bellingham, Lake Whatcom Water and Sewer District, several other smaller water districts/associations, and about 250 homes that
draw water directly from the lake. The lake provides water to about half the population of Whatcom County. (Brenner)

16) p. G-5; lines 1-3: Lake Whatcom is a multiple use lake and watershed. In addition to providing water for drinking, commercial, and industrial uses, the lake is used for boating, swimming, and fishing. (Brenner)

17) p. G-6; lines 18-21: This study documented that Lake Whatcom is impaired for dissolved oxygen due to phosphorus loading and that streams flowing into Lake Whatcom do not meet fecal coliform bacteria standards. (Brenner)

18) p. G-7; lines 6-8: These lands will provide passive recreation opportunities with hiking and biking trails connecting various communities, neighborhoods, and parks throughout the watershed. (Brenner)

19) p. G-7; lines 40-42: In addition to zoning, identify and promote other actions to minimize potential for increased development in the watershed (i.e. land trust, development rights, cost incentives, etc.). (Brenner)

20) p. G-9; lines 32-35: Any new building permits on existing lots must be able to demonstrate that stormwater detention is included in the plan as a precondition to issuance of a permit. Sudden Valley is also subject to additional regulatory protections that apply to the Lake Whatcom Watershed... (Brenner)

21) p. G-10; lines 8-10: Aquifers are often integrally linked with surface water systems and are essential for meeting in-stream and out-of-stream water needs, such as for drinking water, agriculture, and industry. (Brenner)

22) p. G-10; lines 14-18: Many studies have been conducted related to groundwater quality in Whatcom County documenting water quality issues, such as exceedances of standards for nitrate, ethylene dibromide (EDB) and 1,2-dichloropropane (1,2-D), pesticides, iron, and other agricultural-related contaminate, particularly in the northern portion of the County. (Brenner)

23) p. G-10; lines 30-33: A comprehensive approach to flood hazard management planning provides for a better understanding of the river and floodplain system. It also and ensures that flooding and channel morphology problems are not simply transferred to another location within the basin, but are addressed in a comprehensive, basinwide manner. (Brenner)

24) p. G-10; lines 39-40: Whatcom County Public Works coordinates with the Flood Control Zone District Advisory Committee (FCZDAC) to identify and characterize flooding problems and provide recommendations for achieving consistent, long-term, flood hazard reduction strategies. (Brenner)
25) p. G-11; lines 27-29: **Repair and Maintenance Program** – Address problem areas with rivers, streams, and coastlines of Whatcom County, and mitigates future flood damages in a proactive and cost-effective manner. *(Brenner)*

26) p. G-11; lines 41-42: The FCZD is a quasi-municipal corporation that is a separate legal entity from the Whatcom County government. *(Brenner)*

27) p. G-12; lines 30-37: Stormwater runoff occurs when precipitation from rain or snowmelt flows over the land surface. The addition of roads, driveways, parking lots, rooftops, and other surfaces that prevent water from soaking into the ground to our landscape greatly increases the runoff volume created during storms. This runoff is swiftly carried to our local streams, lakes, wetlands, and rivers, and can cause flooding and erosion. Stormwater runoff also picks up and carries with it many different pollutants that are found on paved surfaces, such as sediment, nitrogen, phosphorus, bacteria, oil and grease, trash, pesticides, and metals. *(Brenner)*

28) p. G-12; line 46 – p. G-13, line 4: As a result, the United States Environmental Protection Agency (EPA) created the National Pollutant Discharge Elimination System (NPDES) to address stormwater runoff. States are then required to administer permits to local jurisdictions to regulate runoff as part of the NPDES Program. *(Brenner)*

29) p. G-14; lines 6-14: **Everyone wants clean water** to support healthy drinking water, safe recreational uses, quality water for irrigation and livestock, healthy fish, and shellfish that are safe to consume. Currently, many streams in Whatcom County do not meet water quality standards for fecal coliform bacteria. Fecal coliform bacteria are found in the intestinal tract of warm-blooded animals and when found in streams are an indicator of human or animal waste in the water. The higher the bacteria level, the greater the public health risk to people drinking water, wading, fishing, or consuming shellfish. The Pollution Identification and Correction (PIC) Program has been created to help implement community solutions to clean water. *(Brenner)*

30) p. G-15; lines 23-25: The declines in local salmonid stocks, especially Chinook salmon, have had profound economic, cultural, and social impacts on the greater WRIA 1 community. *(Brenner)*

31) p. G-15; lines 30-34: Nonetheless, salmon remain an integral part of the natural and social landscape of Whatcom County and the Nooksack River Watershed. Recent recovery watershed planning and restoration efforts by federal, state, local, and tribal governments, non-profit organizations, businesses, and private citizens demonstrate a commitment to salmon recovery in WRIA 1. *(Brenner)*
32) p. G-15; lines 42-46: The ultimate goal for salmon recovery in WRIA 1 is to recover self-sustaining salmonid runs to harvestable levels through the restoration of healthy rivers and natural stream, river, estuarine, and nearshore marine processes; careful use of hatcheries; and responsible harvest, and with the active participation and support of local landowners, businesses, and the larger community. 
(Brenner)

33) p. G-16; lines 2-4: ...and to outline the framework for implementation of recommended actions that have been agreed to by local, state, tribal, and federal governments, and stakeholders in WRIA 1. 
(Brenner)

34) p. G-16; lines 8-10: Address late-timed Chinook through adaptive management, focusing in the near-term on identifying hatchery-[remove hyphen] versus naturally-produced population components; 
(Brenner)

35) p. G-16; lines 11-15: Facilitate recovery of WRIA 1 bull trout and steelhead by implementing actions with mutual benefit to both early chinook, and bull trout, and steelhead, and by removing fish passage barriers in presumed bull trout and steelhead spawning and rearing habitats in the upper Nooksack River watershed; 
(Brenner)
Bellingham International Airport
Airport Overlay Zones

Appendix H

Legend:
- Airport Overlay Zones
- Incorporated City

Note: Airport overlay zones are derived from the Safety Compatibility Zones in the California Airport
APPENDIX I
Bellingham International Airport
FAR Part - 77 Imaginary Surfaces
Appendix I
Proposed Council Changes to Comprehensive Plan

Appendix B – List of Acronyms

Page and line numbers reflect Planning Commission Recommended Draft (http://wa-whatcomcounty.civicplus.com/DocumentCenter/View/18677). To improve clarity of Councilmember requested changes, previous edits (i.e. staff and Planning Commission) are included, but not show as edits.

1) **ADU** Accessory Dwelling Unit (Brenner)

2) **AG** Agricultural zone (Brenner)

3) **CF** Commercial Forestry zone (Brenner)

4) **CTAC** Citizens’ Transportation Advisory Committee (Brenner)

5) **L&I** Washington State Department of Labor and Industries (Brenner)

6) **DOC** Department of Corrections (Brenner)

7) **DUI** Driving Under the Influence (Brenner)

8) **FIS** Environmental Impact Statement (Brenner)

9) **GC** General Commercial Zoning (Brenner)

10) **GM** General Manufacturing Zoning (Brenner)

11) **HII** Heavy Impact Industrial Zoning (Brenner)

12) **HUD** United States Department of Housing and Urban Development (Brenner)

13) **LID** Local Improvement District (Brenner)

14) **LII** Light Impact Industrial Zoning (Brenner)
15) MW  Megawatt (Brenner)

16) NC  Neighborhood Commercial Zoning (Brenner)

17) R   Rural Zoning (Brenner)

18) RC  Rural Commercial Zoning (Brenner)

19) RF  Rural Forestry Zoning (Brenner)

20) RR-I Rural Residential – Island Zoning (Brenner)

21) RR  Rural Residential Zoning (Brenner)

22) R2A  Rural Zoning; 1 Unit / 2 Acres (Brenner)

23) R5A  Rural Zoning; 1 Unit / 5 Acres (Brenner)

24) SMAC  Surface Mining Advisory Committee (Brenner)

25) SR9  State Route 9 (Brenner)

26) SR547  State Route 547 (Brenner)

27) SVCA  Sudden Valley Community Association (Brenner)

28) TC  Tourist Commercial Zoning (Brenner)

29) TDR  Transfer of Development Rights (Brenner)

30) UR  Urban Residential Zoning (Brenner)

31) WCC  Whatcom Community College (Brenner)

32) WCCP  Whatcom County Comprehensive Plan (Brenner)

33) WWU  Western Washington University (Brenner)