Skagit County Industrial Land Study

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Prepared for:

Port of Skagit
15400 Airport Drive
Burlington, WA 98233

Final Report

ECONorthwest
ECONOMICS • FINANCE • PLANNING

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Technical Advisory Committee (TAC)

The Technical Advisory Committee (TAC) provided technical input in the inventory and demand analysis. The TAC included the following people:

Sara Young, Port of Skagit, Director of Planning and Facilities
Kevin Murphy, Skagit Council of Governments (SCOG), Executive Director
Kirk Johnson, Skagit County, Senior Planner
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The Project Steering Committee included:

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Tim Holloran, Skagit County, Administrator
Ken Dahlstedt, Skagit County, Commissioner
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John Coleman – Sedro-Woolley
John Doyle – La Conner
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Executive Summary

This report presents the results of a countywide inventory of industrial lands in Skagit County. It describes the methods used to compile the inventory, detailed results of the inventory, and policy implications for Skagit County and its municipalities. The inventory data were gathered in 2013; the employment forecasts were developed by Berk & Associates in conjunction with the Skagit Council of Governments in early 2014.

The key objectives of this study were to:

- Develop a detailed and accurate inventory of industrial land for Skagit County
- Establish a methodology for conducting subsequent inventories
- Develop estimates of demand for industrial land countywide and by urban growth area (UGA), using the draft 2014 employment forecast prepared for the regional transportation plan[1]
- Determine, at a high level, if Skagit County has an adequate supply of industrial land to accommodate forecast growth and economic aspirations

FINDINGS

The buildable lands inventory is intended to identify lands that are available and suitable for development within Skagit County. The inventory is sometimes characterized as the *supply* of land that is available to accommodate growth. Population and employment growth drive *demand* for land. The amount of land needed depends on the density of development.

The executive summary is organized to be consistent with the report and provides an overview of the buildable lands inventory, demand for industrial land for the 2012-to-2036 period, and key implications of the study.

[1] The employment forecasts used in this analysis are preliminary and subject to change. In discussions with the TAC, we determined that the draft 2014 forecasts would provide a higher level of accuracy than the previous forecasts.

Industrial Land Supply

The first step in the buildable lands inventory was to identify which lands to include. The next step was to classify each parcel by development status (e.g., developed, unbuildable, partially vacant, or vacant). Finally, the inventory evaluated the extent to which industrial lands are impacted by development constraints such as floodways/plains, steep slopes, wetlands, and other constraints.

The inventory included 2,555 tax lots that encompass 8,272 total acres. Of the total acres, 5,298 were classified as developed (64%), 998 acres (12%) were classified as unbuildable, and 1,976 acres (24%) were classified as partially vacant or vacant.

Table S-1 shows vacant and partially vacant land by UGA. The results show that Skagit County has 1,767 buildable industrial acres.[2] Of these, 307 acres are in tax lots that are partially vacant, and 1,461 acres are in vacant tax lots. Bayview Ridge, Anacortes, and Mount Vernon have the largest shares of buildable industrial land.

Table S-1. Vacant and partially vacant industrial land by UGA, Skagit County, 2013

	Partially Vacant Land		Vacant Land		All Buildable Land		
UGA	Number of Tax Lots	Buildable Acres	Number of Tax Lots	Buildable Acres	Number of Tax Lots	Buildable Acres	Percent of Total Buildable Acres
Anacortes	25	97	114	309	139	407	23%
Bayview Ridge	7	89	98	635	105	724	41%
Burlington	2	1	48	122	50	123	7%
Concrete	0	0	7	25	7	25	1%
Hamilton	0	0	9	28	9	28	2%
La Conner	0	0	1	2	1	2	0%
Mt. Vernon	13	39	154	227	167	267	15%
Sedro-Woolley	7	18	20	60	27	77	4%
Unincorporated	9	62	11	53	20	116	7%
Total	63	307	462	1,461	525	1,767	100%

[2] Buildable acres are vacant or partially vacant parcels with prohibitive constraints (slopes over 15% and floodways) removed.

Industrial Land Demand

Table S-2 shows that Skagit County will need between between 523 and 1,703 acres for employment during the 2012 to 2036 period. The table shows land demand by UGA for two employment forecast scenarios. The primary difference between the two forecast scenarios is how employment is allocated by UGA. Alternative 4 allocates more employment to smaller cities and Bayview Ridge. Note that low EPA[3] assumptions correspond with higher land demand (e.g., lower density equals more land needed).

Table S-2. Estimated land demand for employment forecast alternative 1 and alternative 4 by UGA, Skagit County, 2012 to 2036

	Emp Forecast Alt 1		Emp Forecast Alt 4 (corridor share)	
UGA	**High**	**Low**	**High**	**Low**
Anacortes	293	92	166	51
Burlington	349	106	372	113
Mount Vernon	452	137	375	113
Sedro-Woolley	138	43	126	39
Concrete	4	1	13	4
Hamilton	13	4	26	9
La Conner	17	5	38	12
Lyman	1	-	2	1
Bayview Ridge	122	39	378	119
Swinomish	10	3	24	8
Rural	304	91	183	55
Total	**1,703**	**521**	**1,703**	**524**

Source: ECONorthwest, based on the Skagit County Regional Transportation Plan
Notes: EPA is Employees Per Acre. Low EPAs correspond with higher land needs.

Comparison of Land Supply and Demand

At the highest level, the results suggest that Skagit County has enough land to meet forecast employment growth for the 2015-to-2035 period. While a county-level comparison is useful, it does not address the issue of location of industrial land within the County. Table S-3 shows a comparison of land supply for the moderate land demand scenario for each Urban Growth Area in Skagit County.

[3] EPA is employees per acre.

The results suggest that industrial land deficits may exist in Burlington, La Conner, Swinomosh, for both employment forecasts. Under employment forecast alternative 4, the rural areas show a small land surplus.

Table S-3. Comparison of industrial land supply and demand for employment forecast alternative 1 and alternative 4, moderate land demand scenario, by UGA, 2015-2036

		Emp Forecast Alt 1		Emp Forecast Alt 4	
UGA	Land Supply	Land Need (Moderate Scenario)	Surplus (deficit)	Land Need (Moderate Scenario)	Surplus (deficit)
Anacortes	407	147	260	82	325
Burlington	123	175	(52)	186	(63)
Mount Vernon	267	226	41	188	79
Sedro-Woolley	77	69	8	63	14
Concrete	25	2	23	6	19
Hamilton	28	6	22	13	15
La Conner	2	8	(6)	19	(17)
Lyman	0	-	-	1	(1)
Bayview Ridge	724	62	662	190	534
Swinomish	0	4	(4)	13	(13)
Rural	116	153	(37)	92	24
Total	**1,767**	**852**	**915**	**853**	**914**

Source: ECONorthwest, land need is based on the Skagit County Regional Transportation Plan

Implications

- **Skagit County has industrial sites in a broad range of sizes**. As a broad observation, the County has many smaller tax lots that account for a relatively smaller share of the buildable industrial lands, while a few large lots account for a large share. The results show that the County has around 190 industrial tax lots less than 1 acre. These tax lots include about 90 buildable acres, or 5% of the total buildable land supply. The County has 34 lots that are 10 acres or larger, and that account for 6% of all tax lots, and 42% of the buildable land (738 acres).
- **Skagit County has a limited number of parcels over 20 acres**. The inventory shows a total of 11 separate tax parcels between 20 and 50 acres, and only two parcels over 50 acres in the entire county. Eight of the nine parcels between 20 and 50 acres are located at Bayview Ridge, and one of the two parcels over 50 acres is located at Bayview Ridge. All combined, these 11 parcels sized 20 acres and greater represent 411 acres of developable land.
- **Few major industrial sites have direct access to I-5**. While the relative importance of direct access to I-5 varies from business to business,

proximity to state and interstate highways is an important location criterion for many businesses. With the exception of sites in Bayview Ridge, Burlington, and Mount Vernon, most industrial land in the County is more than 6 miles or 12 minutes from I-5.

- **Many industrial sites have development constraints**. The inventory shows that 14% of all industrial lands in Skagit County have slope or floodway constraints that likely prohibit development. The results show that 37% of all vacant industrial land in the County (546 of 1,461 acres) has some type of non-prohibitive development constraint (e.g., wetlands, floodplains, or critical natural resource areas). The results also show that for many UGAs (Burlington, Concrete, Hamilton, and Mount Vernon), a majority of vacant industrial acres has some type of development constraint.

  While non-prohibitive constraints do not preclude development, they may add time and expense to the entitlement process as well as for site preparation and development. Because of the unique aspects of each industrial site, ECO cannot comment on the importance of non-prohibitive constraints to developers. Such a determination would require a site-by-site evaluation.

- **Ownership and availability of industrial sites may be an issue**. While the issue of site availability was outside the scope of this study (and is constantly changing), ECO did review ownership. For the 11 tax lots with buildable areas over 20 acres, we found 10 individual ownerships. Only one entity owned more than one tax lot over 20 acres. This owner, a private entity, controlled 31% of the 412 acres in lots with buildable areas over 20 acres and 4 of the 13 tax lots over 20 acres.

This study establishes a baseline dataset for the industrial land supply in Skagit County, and provides a forecast of future demand. Subsequent work needs to be done to understand the readiness of industrial land for target growth industries . Potential follow-up steps to this study could include:

- **Further evaluation of large sites**. This step has already been initiated. ECO identified potential large sites for further evaluation in all UGAs with industrial lands. ECO also developed a questionnaire that may be used by the Port or others to gather additional information on serviceability, constraints, access, and other opportunities and limitations.
- **Update the 2003 Comprehensive Economic Development Strategy (CEDS)**. While the 2003 CEDS is a solid study, it is now 11 years old and considerable changes have occurred since that time. ECO believes it is worth revisiting the countywide economic development vision and

reviewing the list of target industries. The CEDS update would inform needed site characteristics for target industries.

- **Further analysis of needed site characteristics in light of target industries.** The analysis of needed site characteristics in this report is general and based on target industries that were identified in the 2003 CEDS. A more detailed analysis of site requirements based on a more specific list of target industries will allow the region to better evaluate whether the existing industrial land base is adequate to achieve regional aspirations.
- **Review of industrial land demand by UGA.** The estimates of land demand presented in this report are based on rule-of-thumb employment densities that are intended to be conservative in the sense that they represent high demand scenarios. We suggest refining the analysis with special consideration for the target industries. This will result in employee-per-acre assumptions that are more specific to the types of industries the County wants to target.

  It is worth noting that Burlington has expressed intent to remain within its current city/UGA boundary which would mean that Burlington's deficit (which is a part of the county's overall demand) would need to be met elsewhere. Mount Vernon is prohibited by state law from expanding into the floodplain, and it appears that there is nowhere else available to the city for viable industrial expansion.
- **Track site inquiries.** This study raises potential issues around development constraints and transportation access—proximity to I-5 and rail. The degree to which these issues discourage industrial development in Skagit County can be tested by tracking inquiries from firms that are potentially interested in locating or expanding in Skagit County. The Economic Development Association of Skagit County (EDASC) already collects this type of data. EDASC can now compare inquiries with the inventory to help make these determinations.

Chapter 1. Introduction

This report presents the results of a countywide inventory of industrial lands in Skagit County. It describes the methods used to compile the inventory, detailed results of the inventory, and policy implications for Skagit County and its municipalities. The inventory data were gathered in 2013; the employment forecasts were developed by Berk & Associates in conjunction with the Skagit Council of Governments in early 2014.

BACKGROUND

The Port of Skagit contracted with ECONorthwest (ECO) to conduct a countywide buildable lands inventory and demand assessment. The major element of the project is the preparation of an industrial buildable lands inventory.

The buildable lands inventory is intended to identify industrial lands (including selected commercial lands that allow industrial uses) that are available for development for employment uses within the County. The inventory is sometimes characterized as the *supply* of land that is available to accommodate anticipated employment growth. Population and employment growth drive *demand* for land. The amount of land needed depends on the type of development and other factors.

The purpose of the Skagit County industrial lands study goes beyond a basic supply analysis—the real intent is to inform policy decisions related to economic development in the County. Long-term objectives are to determine: (1) the amount and type of economic growth that may occur in the County without public interventions, (2) the amount of inventory and characteristics of industrial land, and (3) what public interventions or policies (if any) will be helpful for the region to achieve its vision for economic development, given the supply of employment land and the potential for employment growth.

Public interventions can take numerous forms, such as policies to encourage redevelopment of underutilized employment land, or strategies to attract specific types of businesses to the region through the provision of land with specific characteristics (e.g., large, flat, serviced parcels).

The key parts of an industrial land study are: developing a *vision*, a *supply* analysis, a *demand* analysis, and a *policy* analysis. This study focuses on the supply and demand analysis.

- The *supply* analysis describes the supply of buildable industrial land by location within the County. Through a series of tables and maps, it describes the characteristics of industrial land (i.e., parcel size and configuration, topography, proximity to key employment centers, constraints, and other factors). This analysis describes the supply of employment land in the context of sites and the characteristics of sites where employment could locate.
- The *demand* analysis builds from the long-range employment forecasts for Skagit County prepared by Berk & Associates.[4] The demand analysis takes a broad look at the balance between forecast employment growth, characteristics of land that are typical of potential employment growth, and location.

ORGANIZATION OF THIS REPORT

The rest of this document is organized as follows:

- **Chapter 2. Industrial Lands Inventory** presents county-level results from the inventory. The data are presented in tabular format; accompanying maps are included in separate files due to size.
- **Chapter 3. Demand for Industrial Land** presents estimates of the amount of land (in acres) needed to accommodate forecasted employment growth in industrial sectors for the 2015-to-2035 period.
- **Chapter 4. Conclusions and Implications** summarizes the key findings of the documents and discusses key land supply and policy implications.
- **Appendix A. Industrial Buildable Lands Inventory Methods** provides a detailed overview of the methods and assumptions used in the inventory.
- **Appendix B. Industrial Buildable Land Inventory Summary Tables by Urban Growth Area (UGA)** presents detailed tables of the results for each UGA.
- **Appendix C. Buildable Land Maps by UGA** presents small-scale maps of the inventory results for each UGA.

[4] The forecasts were developed as part of the regional transportation plan and include sector-level allocations of employment growth as well as estimates of employment growth by UGA.

Chapter 2. Industrial Buildable Lands Inventory

This chapter presents the buildable lands inventory for Skagit County. The results are based on analysis of Geographic Information System (GIS) data provided by County GIS staff. To validate the inventory, the analysis also used aerial orthophotographs and reviews by City staff. Appendix A provides a detailed summary of the buildable land inventory methods. Appendix B provides summary tables of the inventory for each Urban Growth Area (UGA) in the county.

Appendix C includes three maps for each UGA that summarize the results of the industrial land base:

- **Map 1: Land Classification** shows the industrial lands included in the inventory as well as land classifications (e.g., development status) for each tax lot.
- **Map 2: Land Classification and Prohibitive Constraints** shows the industrial lands included in the inventory by classification with prohibitive constraints.
- **Map 3: Vacant and Partially Vacant Land with Constraints** shows only the land that was classified as vacation or partially vacant and both prohibitive and non-prohibitive constraints.

The small-scale maps included with this document are intended for reference purposes only. The maps include considerable detail some of which is sacrificed in a small-scale format.

DEFINITIONS

This section provides the definitions used for land classifications and constraints.

Land Classification

A key step in the buildable lands analysis was to classify each tax lot into a set of mutually exclusive categories. Land classifications refer to the development status of the land (e.g., is it vacant or does it have improvements). All tax lots included in the land base County were classified into one of the following categories:

- *Vacant land.* Tax lots that have no structures, or have buildings with very little value. For the purpose of this inventory, employment lands with improvement values under $10,000 were considered vacant.

- *Partially vacant land.* Partially vacant tax lots are those that are occupied, but which contain enough land to be further subdivided without rezoning. This determination was made through review of aerial photographs and review by local planners.

- *Developed land.* Land that is developed at densities consistent with zoning, and has improvements that make it unlikely to redevelop during the analysis period. Lands not classified as vacant, partially-vacant, or undevelopable are considered developed.

- *Unbuildable land.* Land that is impacted by constraints that preclude development. In general, if a parcel was more than 90% constrained or had less than 0.25 acres of buildable land, it was classified as unbuildable. This includes many parcels in tidal flats that clearly have no development potential.

ECO initially classified land using a rule-based methodology based on the above definitions. ECO then generated maps showing the results of the application of those rules, with adjustments made through a validation step based on review of aerial photos. The preliminary classification maps were provided to Port staff, the TAC, local planners, and others for review and comment. ECO went through two rounds of map review and made many changes based on input received during the validation process.

Development Constraints

Based on discussions with the TAC and the Steering Committed, ECO grouped constraints into two categories: (1) prohibitive; and (2) non-prohibitive. Prohibitive constraints were deducted from the inventory as areas that cannot be developed or built upon. Non-prohibitive constraints were not deducted from buildable acres, but are identified as constraints that can make development more complicated or expensive.

Following is a list of constraints used in the inventory:

Prohibitive Constraints

- **Slopes**: Slopes over 15% were considered "prohibitive" constraints.

- **Floodway**: Floodways identified on the FEMA FIRM maps were considered prohibitive constraints.

Non-Prohibitive Constraints

- **Liquefaction Zones**: The extent of the liquefaction constraint depends on the type of structure being created and may require some additional engineering to address instability at the site.

- **Critical Natural Resource Areas/Buffers:** Critical natural resource areas and buffers were considered a non-prohibitive constraint.

- **Port of Skagit Constraints:** Areas identified by the Port as potential constraints (including areas in the Port's wetland inventory and the airport approach zone) were included as non-prohibitive constraints.

- **FEMA FIRM 100-year floodplain:** Floodplains present a constraint, but do not generally prohibit development and are included as a non-prohibitive constraint.

- **Wetlands:** Wetlands present a constraint, but unless they are identified as a critical natural resource area, they were not considered prohibitive. For most areas, the inventory used the National Wetlands Inventory. In instances where local data existed, we used local data.

Note that in the summary tables that follow, **prohibitive constraints were deducted from buildable acres and non-prohibitive constraints were not**.

FINDINGS

Table 2-1 shows the number of acres within the Urban Growth Areas (UGAs) and city limits for all established UGAs in Skagit County. The results show that the County has over 37,000 acres in UGAs and about 25,500 acres in city limits. The amount of incorporated land within UGAs varies considerably. For example, the Bayview Ridge and Swinomish UGAs have no incorporated areas while La Conner and Lyman have city limits that extend outside of their established UGAs.[5]

Table 2-1. Acres in Urban Growth Areas and City Limits, Skagit County, 2013

City	Acres in UGA	Acres in City Limit	% in City Limit
Anacortes	13,537	10,058	74%
Bayview Ridge	2,725		0%
Burlington	3,149	2,824	90%
Concrete	954	758	79%
Hamilton	918	662	72%
La Conner	272	324	119%
Lyman	340	488	144%
Mount Vernon	10,400	7,955	76%
Sedro-Woolley	3,653	2,432	67%
Swinomish	1,116		0%
Total	**37,063**	**25,502**	**69%**

Source: Skagit County GIS Department

Table 2-2 shows tax lots by UGA and land classification for industrial lands within Skagit County. The results show that 2,555 tax lots were included in the inventory that encompass 8,272 total acres. Of total acres, 5,298 were classified as developed (64%), 998 acres (12%) were classified as unbuildable, and 1,976 acres (24%) were classified as partially vacant or vacant.

Reviewing the results by UGA shows that Mount Vernon has 40% of the tax lots included in the inventory, while Anacortes has 24%. Bayview Ridge has

[5] This is due to differences in the data sources. The GMA does not allow city limits to extend outside of UGAs. The County maintains the city limit data while we obtained the UGA data from the Washington Department of Ecology. The differences are largely due to the inclusion of portions of water bodies (or the exclusion thereof). They do not affect the results of the industrial land inventory. We suggest that the County work with local jurisdictions to rectify the differences if possible.

the largest share of total acres, with 37%, followed by Anacortes with 34%. These results suggest that Bayview Ridge and Anacortes have larger tax lots on average than Mount Vernon.

Review of the results by classification (e.g., development status) shows that the majority of tax lots (77%) and acres (64%) were classified as developed. About 12% of the land was classified as unbuildable, and 24% was classified as vacant or partially vacant.

Table 2-2. Tax Lots and Acres by UGA and Classification, Skagit County, 2013

	All Acres in Tax Lots					
UGA	Developed	Unbuildable	Partially Vacant	Vacant	Total	Percent of Total
Tax Lots						
Anacortes	453	17	25	114	609	24%
Bayview Ridge	159	39	7	98	303	12%
Burlington	226	4	2	48	280	11%
Concrete	15	0	0	7	22	1%
Hamilton	27	0	0	9	36	1%
La Conner	26	0	0	1	27	1%
Mt. Vernon	867	0	13	154	1034	40%
Sedro-Woolley	85	0	7	20	112	4%
Unincorporated	112	0	9	11	132	5%
Total	1,970	60	63	462	2,555	100%
Percent of Tax Lots	77%	2%	2%	18%	100%	
Acres						
Anacortes	2,315	67	138	319	2,839	34%
Bayview Ridge	1,306	928	163	635	3,033	37%
Burlington	368	3	14	122	507	6%
Concrete	45	0	0	25	69	1%
Hamilton	92	0	0	34	125	2%
La Conner	30	0	0	2	32	0%
Mt. Vernon	804	0	61	228	1,093	13%
Sedro-Woolley	110	0	28	60	198	2%
Unincorporated	229	0	90	58	377	5%
Total	5,298	998	494	1,482	8,272	100%
Percent of Acres	64%	12%	6%	18%	100%	

Source: ECONorthwest

Table 2-3 shows industrial land by classification and constraint status. It is organized by all land in the inventory and further shown by land that is inside UGAs and land that is in unincorporated areas. Not surprisingly, the results show that the majority (7,895 of 8,272 acres or 95%) of industrial land is within designated UGAs.

Looking at acres by classification, lands outside UGAs have a higher percentage (39% compared to 23% inside UGAs) of land classified as vacant or partially vacant.

Reviewing the total land base by constraint status shows that 14% of all lands in the inventory and lands in UGAs are prohibitively constrained (e.g., they were excluded from buildable acres). About 21% (1,767 acres) of all land inventoried was identified as buildable (either vacant or partially vacant). Notably, 36% of all land inventoried had some type of non-prohibitive constraint, and 74% of unincorporated lands had some type of non-prohibitive constraint.

Table 2-3. Industrial land by classification and constraint status, Skagit County, 2013

Classification	Tax Lots	Developed Acres	Prohibitively Constrained Acres	Non-Prohibitively Constrained Acres	Buildable Acres	Total Acres	Percent of Total Acres
All Land							
Developed	1,970	5,247	51	2,177	0	5,298	64%
Unbuildable	60	0	998	63	0	998	12%
Partially Vacant	63	122	65	176	307	494	6%
Vacant	462	0	21	546	1,461	1,482	18%
Total	2,555	5,369	1,135	2,962	1,767	8,272	100%
Percent of Acres		65%	14%	36%	21%	100%	
Land in UGAs							
Developed	1,858	5,038	31	2,013	0	5,069	64%
Unbuildable	60	0	998	63	0	998	13%
Partially Vacant	54	95	64	104	244	403	5%
Vacant	451	0	17	503	1,407	1,424	18%
Total	2,423	5,133	1,111	2,682	1,652	7,895	100%
Percent of Acres		65%	14%	34%	21%	100%	
Land In Unincorporated Areas							
Developed	112	209	19	164	0	229	61%
Unbuildable	0	0	0	0	0	0	0%
Partially Vacant	9	28	1	73	62	90	24%
Vacant	11	0	4	43	53	58	15%
Total	132	237	24	280	116	377	100%
Percent of Acres		63%	6%	74%	31%	100%	

Source: ECONorthwest
Note: Partially constrained acres can be developed or buildable.

Table 2-4 shows industrial land by development classification and *total* lot size (e.g., prohibitively constrained lands were *not* deducted from the acreages shown). The results show that 61% of the land area (in acres) is included in 8% of the tax lots. In short, the County has a lot of small industrial lots that do not include a lot of acres.

Table 2-4. Industrial land development classification by total lot size, Skagit County, 2013

	Total Acres in Tax Lot									
Classification	<0.25	>=0.25 and <0.50	>=0.50 and <1.00	>=1.00 and <2.00	>=2.00 and <5.00	>=5.00 and <10.00	>=10.00 and <20.00	>=20.00 and <50.00	50 and Over	Total
ALL LAND										
Total Acres in Tax Lot										
Developed	74	131	282	459	740	468	315	491	2,339	5,298
Unbuildable	0	3	5	6	34	57	92	224	0	422
Partially Vacant	0	0	5	4	69	128	134	153	577	1,070
Vacant	6	16	65	176	290	303	249	262	117	1,482
Total Acres	**80**	**150**	**357**	**644**	**1,133**	**956**	**790**	**1,130**	**3,033**	**8,272**
Percent of Total Acres	**1%**	**2%**	**4%**	**8%**	**14%**	**12%**	**10%**	**14%**	**37%**	**100%**
Number of Tax Lots										
Developed	529	365	390	327	24	237	15	72	11	1,970
Unbuildable	2	8	8	5	7	10	8	7	5	60
Partially Vacant	0	0	6	2	10	21	5	19	0	63
Vacant	48	43	84	122	17	93	8	45	2	462
Total Tax Lots	**579**	**416**	**488**	**456**	**58**	**361**	**36**	**143**	**18**	**2,555**
Percent of Total Tax Lots	**23%**	**16%**	**19%**	**18%**	**2%**	**14%**	**1%**	**6%**	**1%**	**100%**
LAND IN UGAs										
Total Acres in Tax Lot										
Developed	71	124	267	436	658	407	276	491	2,339	5,069
Unbuildable	0	3	5	6	34	57	92	224	0	422
Partially Vacant	0	0	4	4	56	122	86	132	577	980
Vacant	6	15	63	172	290	289	211	262	117	1,424
Total Acres	**77**	**142**	**340**	**618**	**1,038**	**874**	**665**	**1,109**	**3,033**	**7,895**
Percent of Total Acres	**1%**	**2%**	**4%**	**8%**	**13%**	**11%**	**8%**	**14%**	**38%**	**100%**
Number of Tax Lots										
Developed	510	347	370	311	-2	227	12	72	11	1,858
Unbuildable	2	8	8	5	7	10	8	7	5	60
Partially Vacant	0	0	5	2	7	20	2	18	0	54
Vacant	47	41	82	120	17	91	6	45	2	451
Total Tax Lots	**559**	**396**	**465**	**438**	**29**	**348**	**28**	**142**	**18**	**2,423**
Percent of Total Tax Lots	**23%**	**16%**	**19%**	**18%**	**1%**	**14%**	**1%**	**6%**	**1%**	**100%**
LAND IN UNINCORPORATED AREAS										
Total Acres in Tax Lot										
Developed	2	7	14	23	82	61	39	0	0	229
Unbuildable	0	0	0	0	0	0	0	0	0	0
Partially Vacant	0	0	1	0	14	7	48	21	0	90
Vacant	0	1	2	3	0	14	37	0	0	58
Total Acres	**2**	**8**	**17**	**26**	**96**	**82**	**125**	**21**	**0**	**377**
Percent of Total Acres	**1%**	**2%**	**4%**	**7%**	**25%**	**22%**	**33%**	**6%**	**0%**	**100%**
Number of Tax Lots										
Developed	19	18	20	16	26	10	3	0	0	112
Unbuildable	0	0	0	0	0	0	0	0	0	0
Partially Vacant	0	0	1	0	3	1	3	1	0	9
Vacant	1	2	2	2	0	2	2	0	0	11
Total Tax Lots	**20**	**20**	**23**	**18**	**29**	**13**	**8**	**1**	**0**	**132**
Percent of Total Tax Lots	**15%**	**15%**	**17%**	**14%**	**22%**	**10%**	**6%**	**1%**	**0%**	**100%**

Source: ECONorthwest

Table 2-5 shows land classified as vacant or partially vacant and *buildable* lot size (e.g., prohibitively constrained lands *were* deducted from the acreages shown). The results show that Skagit County has 11 tax lots over 20 acres which include more than 400 acres. All of these large lots are in UGAs, with nine of them in the Bayview Ridge UGA. The results also show that 101 of the 116 buildable acres in unincorporated areas are in tax lots between five and 20 acres.

Table 2-5. Vacant and partially vacant industrial land by buildable lot size, Skagit County, 2013

	Buildable Acres in Tax Lots									
Classification	<0.25	>=0.25 and <0.50	>=0.50 and <1.00	>=1.00 and <2.00	>=2.00 and <5.00	>=5.00 and <10.00	>=10.00 and <20.00	>=20.00 and <50.00	50 and Over	Total
ALL LAND										
Buildable Acres in Tax Lots										
Partially Vacant	0	1	3	10	80	95	85	33	0	307
Vacant	6	17	64	170	283	301	242	262	117	1,461
Total Acres	6	18	67	180	363	395	326	295	117	1,767
Percent of Total Acres	0%	1%	4%	10%	21%	22%	18%	17%	7%	100%
Number of Tax Lots										
Partially Vacant	3	3	4	7	24	15	6	1	0	63
Vacant	51	46	83	119	91	45	17	8	2	462
Total Tax Lots	54	49	87	126	115	60	23	9	2	525
Percent of Total Tax Lots	1%	2%	4%	8%	14%	12%	10%	14%	37%	100%
LANDS IN UGAs										
Buildable Acres in Tax Lots										
Partially Vacant	0	1	3	10	71	84	42	33	0	244
Vacant	6	16	62	167	283	286	209	262	117	1,407
Total Acres	6	17	65	177	354	371	251	295	117	1,652
Percent of Total Acres	1%	2%	4%	8%	14%	12%	10%	14%	37%	100%
Number of Tax Lots										
Partially Vacant	3	2	4	7	21	13	3	1	0	54
Vacant	50	44	81	117	91	43	15	8	2	451
Total Tax Lots	53	46	85	124	112	56	18	9	2	505
Percent of Total Tax Lots	1%	2%	4%	8%	14%	12%	10%	14%	37%	100%
LAND IN UNINCORPORATED AREAS										
Buildable Acres in Tax Lots										
Partially Vacant	0	0	0	0	9	10	42	0	0	62
Vacant	0	1	2	3	0	14	33	0	0	53
Total Acres	0	1	2	3	9	25	76	0	0	116
Percent of Total Acres	1%	2%	4%	8%	14%	12%	10%	14%	37%	100%
Number of Tax Lots										
Partially Vacant	0	1	0	0	3	2	3	0	0	9
Vacant	1	2	2	2	0	2	2	0	0	11
Total Tax Lots	1	3	2	2	3	4	5	0	0	20
Percent of Total Tax Lots	1%	2%	4%	8%	14%	12%	10%	14%	37%	100%

Source: ECONorthwest

Chapter 3. Demand for Industrial Land

This chapter presents estimates of demand for industrial land, based on employment forecasts prepared for the *Skagit-Island Counties Metropolitan and Regional Transportation Plan*. The employment forecast provides a foundation upon which to develop a forecast of demand for employment land. Employment is converted to acres of employment land using employee-per-acre assumptions. ECO presents high and low land demand scenarios based on typical employee-per-acre ratios for industries.

This chapter provides a baseline estimate of employment land needs based on assumptions about the amount of employment growth that will require new land, employment densities, and land-need by site size. It provides a *demand-based* approach to estimating employment land needs, which projects employment land need based predominantly on the forecast of employment growth, using recent employment densities (e.g., the number of employees per acre) to estimate future commercial and industrial land demand.

DEMAND FOR INDUSTRIAL LAND

Employment growth in Skagit County will drive demand for industrial land. ECO used the draft employment forecasts developed in 2014 for the *Skagit-Island Counties Metropolitan and Regional Transportation Plan* as the basis for the estimate of needed industrial land.[6]

Because the focus of this report is on industrial land, we focus on the forecast for employment growth in "industrial" employment sectors, such as manufacturing, transportation and warehousing, construction, and utilities. However, businesses make locational choices based on considerations beyond zoning.

- Some businesses in industrial employment sectors locate on land zoned for commercial or other uses. Common examples of industrial businesses locating on land zoned for commercial or other uses include small-scale manufacturing (e.g., computer assembly or custom apparel), post offices, gasoline stations, or construction businesses operated from home.
- Some employment on land zoned for industrial uses is in non-industrial sectors. Common examples of non-industrial businesses locating on industrial land include retailers (both those connected with manufacturing

[6] Note that the 2014 employment forecasts used for this study were in draft form at the time this study was completed and are subject to change.

or small-scale retail like convenience stores), restaurants, or offices of businesses that prefer to locate in industrial areas.

The employment forecast was converted to an estimate of employment land need based on the following steps:

1. Identify growth in industrial sectors for the 2012-to-2036 period.
2. Determine a reasonable range of future employment density for industrial employment growth.
3. Convert from employment growth to land need based on the range of employment densities.

The forecast of industrial land demand builds from the forecast of employment growth developed as part of the update of the Regional Transportation Plan (RTP). At the time this project was completed, the RTP project team was still evaluating employment forecast alternatives. At the request of the TAC, we used two forecast scenarios – Alternative 4 and a Manual Alternative that used locally preferred targets. The total employment increase is the same for both forecasts; the two Alternatives allocate the employment differently by UGA. Both alternatives forecast that employment in Skagit County will grow by about 17,763 jobs between 2012 and 2036 and 16,000 jobs between 2015 and 2036. Nearly one-third of employment growth will be in industrial employment sectors.

Table 3-1 shows the results of the Alternative 4 forecast. This scenario allocates about two thirds of forecast employment to the Anacortes, Burlington, and Mount Vernon UGAs.

Table 3-1. Employment forecast (Alternative 4) by UGA by employment category, Skagit County, 2012 to 2036

UGA	2012 Employment	Resource	Retail	Industrial	Services	GovEdu	Total	Percent
Anacortes	8,166	0	155	1,141	1,041	564	2,900	16.3%
Burlington	9,467	0	332	1,148	971	449	2,900	16.3%
Mount Vernon	16,024	0	274	1,441	2,529	2,010	6,254	35.2%
Sedro-Woolley	4,594	0	59	508	720	599	1,886	10.6%
Concrete	347	0	13	13	17	94	137	0.8%
Hamilton	214	0	1	63	1	1	67	0.4%
La Conner	1,053	0	36	74	101	116	327	1.8%
Lyman	28	0	1	5	2	1	8	0.0%
Bayview Ridge	1,434	0	0	485	82	5	572	3.2%
Swinomish	925	0	13	33	185	120	350	2.0%
Rural	7,749	0	78	940	674	670	2,362	13.3%
Growth 2012-2036	50,000	0	961	5,850	6,323	4,629	17,763	
2012-2015 Growth		0	223	614	677	249	1,763	
Total 2015-2036		0	738	5,237	5,646	4,379	16,000	100.0%
Percent		0.0%	4.6%	32.7%	35.3%	27.4%	100.0%	

Source: Skagit County Regional Transportation Plan, BERK and Associates

Table 3-2 shows the results of the Manual Alternative with Locally Preferred Assumptions forecast. This scenario allocates more employment to Bayview Ridge and less to Anacortes.

Table 3-2. Employment forecast (Manual Alternative, using Locally Preferred Assumptions) by UGA by employment category, Skagit County, 2012 to 2036

UGA	2012 Employment	Resource	Retail	Industrial	Services	GovEdu	Total	Percent
Anacortes	8,166	0	94	618	675	355	**1,742**	9.8%
Burlington	9,467	0	360	1,169	1,087	510	**3,126**	17.6%
Mount Vernon	16,024	0	235	1,126	2,359	1,832	**5,551**	31.3%
Sedro-Woolley	4,594	0	55	444	761	590	**1,851**	10.4%
Concrete	347	0	35	38	51	253	**376**	2.1%
Hamilton	214	0	3	130	3	4	**140**	0.8%
La Conner	1,053	0	96	163	278	314	**852**	4.8%
Lyman	28	0	2	10	4	4	**19**	0.1%
Bayview Ridge	1,434	0	1	937	228	14	**1,179**	6.6%
Swinomish	925	0	35	83	494	333	**945**	5.3%
Rural	7,749	0	44	560	382	421	**1,408**	7.9%
Growth 2012-2036	50,000	**0**	**961**	**5,850**	**6,323**	**4,629**	**17,763**	
2012-2015 Growth		0	223	**614**	**677**	**249**	**1,763**	
Total 2015-2036		**0**	**738**	**5,237**	**5,646**	**4,379**	**16,000**	100.0%
Percent		0.0%	4.6%	32.7%	35.3%	27.4%	100.0%	

Table 3-3 shows details of the Alternative 4 forecast of industrial employment growth for Manufacturing and for Warehouse, Transportation, Construction, and Utilities (WTCU). Of the 5,850 new industrial jobs, about 3,996 will be in WTCU (69% of industrial jobs) and 1,854 will be in manufacturing (31% of industrial jobs).

All parts of the County are forecast to have some employment growth in industrial sectors, with industrial employment concentrated in Mount Vernon, Burlington, Anacortes, and Rural portions of the County. It is notable that the Alternative 4 forecasts allocate 64% of countywide employment growth to Anacortes, Burlington, and Mount Vernon.

Table 3-3. Alternative 4 employment forecast for industrial sectors by UGA, Skagit County, 2012 to 2036

UGA	WTCU	Manuf	Total	Percent
Anacortes	485	656	1,141	19%
Burlington	893	255	1,148	20%
Mount Vernon	1,230	210	1,441	25%
Sedro-Woolley	277	231	508	9%
Concrete	13	0	13	0%
Hamilton	0	63	63	1%
La Conner	14	59	74	1%
Lyman	0	5	5	0%
Bayview Ridge	190	295	485	8%
Swinomish	20	13	33	1%
Rural	874	67	940	16%
Growth 2012-2036	**3,996**	**1,854**	**5,850**	
2012-2015 Growth	393	220	614	
Total 2015-2036	**3,603**	**1,634**	**5,237**	
Percent	69%	31%		

Source: Skagit County Regional Transportation Plan, BERK and Associates
Note: WTCU is Warehouse, Transportation, Construction, and Utilities

Table 3-4 shows details of the Manual Alternative forecast of industrial employment growth for Manufacturing and for Warehouse, Transportation, Construction, and Utilities (WTCU). This alternative allocates 26% of WTCU and Manufacturing employment to Bayview Ridge.

Table 3-4. Manual Alternative employment forecast for industrial sectors by UGA, Skagit County, 2012 to 2036

UGA	WTCU	Manuf	Total	Percent
Anacortes	315	316	631	11%
Burlington	1,031	139	1,170	20%
Mount Vernon	1,121	0	1,121	19%
Sedro-Woolley	278	219	497	8%
Concrete	41	0	41	1%
Hamilton	0	0	0	0%
La Conner	45	137	181	3%
Lyman	0	11	11	0%
Bayview Ridge	571	973	1,544	26%
Swinomish	62	29	91	2%
Rural	532	30	562	10%
Growth 2012-2036	**3,996**	**1,854**	**5,850**	
2012-2015 Growth	393	220	614	
Total 2015-2036	**3,603**	**1,634**	**5,237**	100.0%
Percent	68.8%	31.2%	100.0%	

Source: Skagit County Regional Transportation Plan, BERK and Associates
Note: WTCU is Warehouse, Transportation, Construction, and Utilities

The next set of assumptions needed to estimate non-residential land need addresses employees per acre (EPA). This variable is defined as the number of employees per acre on industrial land that is developed to accommodate employment growth. There are few empirical studies of the number of employees per acre, and these studies report a wide range of results. Ultimately the employees-per-acre assumptions reflect a judgment about average densities and typically reflect a desire for increased density of development.

General rules of thumb for industrial employment growth maintain that there will be between 10 to 20 EPA for light industrial, and 5 to 10 EPA for heavy industrial, and about 3 to 6 EPA for warehouse and distribution. These rules of thumb are consistent with ECO's research and experience on other project.[7] Table 3-3 presents an estimate of industrial land demand based on the following assumptions:

- **WTCU**: A low of 3 EPA and a high of 10 EPA. The low assumes that the majority of WTCU development is warehouse and distribution, which typically has very low employment densities. The high assumes that WTCU employment is a mixture of moderate-density warehousing and transportation employment, and construction employment that is consistent with light industrial densities.
- **Manufacturing**: A low of 5 EPA and a high of 15 EPA. The low assumes that the majority of manufacturing development is heavy industrial development. The high assumes that manufacturing employment is predominantly light industrial, with some heavy industrial employment.

Table 3-5 shows that under the Alternative 4 employment forecast Skagit County will need between approximately 400 to 1,300 acres of land for WTCU employment and between approximately 125 and 375 acres of manufacturing employment. Note that low EPA assumptions correspond with higher land demand (e.g., lower density equals more land needed).

[7] This information is based on ECONorthwest's empirical research about industrial densities in cities like Reno, Nevada, and Eugene, Oregon, as well as our experience working in cities across the Pacific Northwest.

Table 3-5. Alternative 4 estimated land demand for industrial sectors by UGA, Skagit County, 2012 to 2036

	WTCU (Acres)			Manufacturing (Acres)		
UGA	High Land Need (3 EPA)	Moderate Land Need (6 EPA)	Low Land Need (10 EPA)	High Land Need (5 EPA)	Moderate Land Need (10 EPA)	Low Land Need (15 EPA)
Anacortes	162	81	48	131	66	44
Burlington	298	149	89	51	26	17
Mount Vernon	410	205	123	42	21	14
Sedro-Woolley	92	46	28	46	23	15
Concrete	4	2	1	-	-	-
Hamilton	-	-	-	13	6	4
La Conner	5	2	1	12	6	4
Lyman	-	-	-	1	-	-
Bayview Ridge	63	32	19	59	30	20
Swinomish	7	3	2	3	1	1
Rural	291	146	87	13	7	4
Total	**1,332**	**666**	**398**	**371**	**186**	**123**

Source: ECONorthwest, based on the employment forecast from the Skagit County Regional Transportation Plan
Note: Low EPAs correspond with higher land needs.

Table 3-6 shows estimated land demand for the Manual Alternative. Overall land demand is similar to Alternative 4; the key difference is how land demand is allocated to UGA. Under the Manual Alternative total land demand in Bayview Ridge is 62 acres compared with 20 acres under Alternative 4.

Table 3-6. Manual Alternative estimated land demand for industrial sectors by UGA, Skagit County, 2012 to 2036

	WTCU (Acres)			Manufacturing (Acres)		
UGA	High Land Need (3 EPA)	Moderate Land Need (6 EPA)	Low Land Need (10 EPA)	High Land Need (5 EPA)	Moderate Land Need (10 EPA)	Low Land Need (15 EPA)
Anacortes	162	81	48	131	66	44
Burlington	298	149	89	51	26	17
Mount Vernon	410	205	123	42	21	14
Sedro-Woolley	92	46	28	46	23	15
Concrete	4	2	1	-	-	-
Hamilton	-	-	-	13	6	4
La Conner	5	2	1	12	6	4
Lyman	-	-	-	1	-	-
Bayview Ridge	63	32	19	59	30	20
Swinomish	7	3	2	3	1	1
Rural	291	146	87	13	7	4
Total	**1,332**	**666**	**398**	**371**	**186**	**123**

Source: ECONorthwest, based on the employment forecast from the Skagit County Regional Transportation Plan.
Note: Low EPAs correspond with higher land needs.

POTENTIAL GROWTH INDUSTRIES

An analysis of growth industries in Skagit County should address two main questions: (1) Which industries are most likely to be attracted to Skagit County? and (2) Which industries best-meet the County's economic objectives? The 2003 *Skagit County Comprehensive Economic Development Strategy* (CEDS) suggests that Skagit County wants to attract businesses that have the following attributes: family-wage, stable jobs with benefits; jobs requiring skilled and unskilled labor; employers in a range of industries that will contribute to a diverse economy; and compatibility with Skagit County's agricultural and natural resource context.

While the County's CEDS does not specifically identify potential growth industries, it does discuss the County's economic development goals and implementation strategy. Based on the information in the CEDS, potential growth industries include:

- **Value-added natural resource industries**. Value-added natural resource businesses that diversify the economy, help preserve traditional agricultural and forest lands, and provide a more stable source of family-wage jobs than commodity businesses. Examples of value-added natural resource businesses include food processing (berry-freezing facilities; sauerkraut production), and wood product furniture manufacturing.
- **High-tech industries.** High-tech firms play a major role in the economy of the Seattle region, and attracting high-tech firms to Skagit County would help diversify the County's economy away from natural resources. Some high-tech firms require flex-space industrial parks.
- **Aviation-related industries.** The Skagit Regional Airport in the Bayview Industrial Park provides opportunities for growth in aviation-related industries, such as corporate air service, manufacturing of aviation products, air cargo freight shipments, and supporting businesses.
- **Industries related to trade and commerce.** The deep draft marine terminal at the Port of Anacortes provides opportunities for businesses in trade and commerce industries. Interstate-5 runs through Skagit County, providing opportunities for warehouse and transportation. In addition, BNSF and UP freight lines provide opportunities for rail freight shipments for businesses that ship large, bulky goods.
- **Specialty manufacturing.** Skagit County's location (about an hour drive from the Seattle metropolitan area), high quality of life, and low operating costs may make it attractive to a range of specialty manufacturers, such as makers of specialty apparel, high-tech electronics, recreational equipment, or advanced manufacturing.

SITE CHARACTERISTICS FOR POTENTIAL GROWTH INDUSTRIES

There is little information in the literature about industrial real estate development on the characteristics of sites needed to accommodate industrial businesses, including the potential growth industries discussed in the previous section. The following information is based on research and interviews with real estate professionals that ECO has done over the course of the last decade and before. The specific site needs and locational issues for industrial businesses, including firms in potential growth industries, include the following issues:[8]

Table 3-5. Summary of site attributes in Skagit County

Site Attribute	Comments
Site sizes. Industrial activity occurs on sites of all sizes. In general, industrial businesses need sites between 10 and 50 acres, with some businesses needing sites up to 100 acres or more. The size of industrial sites varies for different industrial uses. In general, competitively sized sites are as follows: ○ General manufacturing businesses need sites between 10 to 15 acres, with food processors needing sites of about 10 to 20 acres, and high-tech or heavy manufacturers needing sites of about 25 to 100 acres. ○ Large-scale clean tech manufacturers need sites between 50 to 100 acres. ○ Warehouse and distribution businesses need sites about 25 acres in size, with multistate warehouse and distribution centers requiring 200 acre sites.	Nearly 60% of Skagit County's vacant and partially vacant industrial land is on sites smaller than 10 acres. The County has about 620 acres (on 32 tax lots) between 10 and 50 acres in size and nearly 120 acres (on two tax lots) larger than 50 acres. Anacortes, Mt. Vernon, Sedro-Woolley, and Bayview Ridge have at least one site each between 10 and 50 acres. The sites larger than 50 acres are located in Bayview Ridge and Burlington.
Flat sites. Flat topography (slopes with grades below 10%) is desirable to all firms in every industry except certain retail and services firms. Flat sites are particularly important for industrial firms in manufacturing and warehousing.	The majority of Skagit County's vacant or partially vacant industrial land is relatively flat.
Development constraints. While sites with development constraints such as wetlands and the 100-year FEMA floodplain designation are still developable, such constraints create additional steps in the entitlement process that can take time and money.	Large sites in the Anacortes and Bayview Ridge UGAs are largely free of development constraints. The single large site in Burlington is in the 100-year floodplain. Overall, 14% of industrial land in Skagit County has prohibitive constraints (e.g., constraints that likely preclude development) and 36% has non-prohibitive constraints.

[8] The following discussion is taken in part from previous industrial land studies conducted by ECONorthwest. It includes information from the following sources:
Industrial Development Competitiveness Matrix by Business Oregon;
Development Profile for High Technology Manufacturing Sites and *Development Profile for Warehouse/Distribution/Logistics Center Sites*, State of New York
Industrial/Business Park Standards: Rural Regions by Deloitte and Touche Fantus, for the Nebraska Department of Economic Development.

Site Attribute	Comments
Parcel configuration and parking. Larger industrial businesses that require on-site parking or truck access are attracted to sites that offer adequate flexibility in site circulation and building layout. Parking ratios of 0.5 to 2 spaces per 1,000 square feet for industrial typical ratios for these firms.	Nearly 60% of Skagit County's vacant and partially vacant industrial sites are smaller than 10 acres and one-third are five acres or smaller. Skagit County only has two sites larger than 50 acres: a 62-acre site in Burlington and a 55-acre site in Bayview Ridge. Given the scarcity of very large, unconstrained employment sites in Skagit, certain firms may have difficulties finding sites with the right parcel configuration or that are large enough to meet the firms' needs without assembling multiple small parcels.
Soil type. Soil types can be important for the types of firms likely to locate or expand in Skagit County—many areas of the county have soils that are subject to liquefaction. Soils may be important to industries that have vibration-sensitive equipment or manufacturing processes.	The soil type and drainage issues may limit the type and intensity of development on some employment sites.
Road transportation. All firms are heavily dependent upon surface transportation for efficient movement of goods, customers, and workers. Access to an adequate highway and arterial roadway network is needed for all industries. Close proximity to a highway or arterial roadway is critical for firms that generate a large volume of truck or auto trips or firms that rely on visibility from passing traffic to help generate business.	Businesses in Burlington, Mt. Vernon, and Bayview Ridge have relatively direct access to I-5. However, distance and travel time from I-5 may be longer than is desirable for some industries. Businesses in Anacortes, Sedro Wooley, Concrete, and Hamilton have direct access to Highway 20. Businesses in La Conner have to travel about four miles to Highway 20.
Rail transportation. Rail access can be very important to certain types of heavy industries. The region has good rail access to many industrial sites.	Demand for sites with rail access may increase if fuel prices continue to increase, especially for firms that need to ship bulky items that do not need to be transported rapidly. Some industrial sites in Anacortes and along Highway 20 have rail access.
Air transportation. Proximity to air transportation is important for some firms engaged in manufacturing, finance, or business services.	The Skagit Regional Airport in the Bayview Industrial Park provides opportunities for air transportation in Skagit County.
Fiber optics and telephone. Most if not all industries expect access to multiple phone lines, a full range of telecommunication services, and high-speed internet communications.	ECO did not evaluate telecommunications infrastructure.
Potable water and wastewater. Potable water and wastewater needs range from domestic levels to 1,000,000 gallons or more per day for some manufacturing firms. However, emerging technologies are allowing manufacturers to rely on recycled water with limited on-site water storage and filter treatment. The demand for water for fire suppression also varies widely.	ECO did not evaluate water and wastewater infrastructure
Power requirements. Electricity power requirements range from redundant (uninterrupted, multi-sourced supply) 115 kva to 230 kva. Average daily power demand (as measured in kilowatt hours) generally ranges from approximately 5,000 kwh for small business service operations to 30,000 kwh for very large manufacturing operations. The highest power requirements are associated with manufacturing firms, particularly fabricated metal and electronics. For comparison, the typical household requires 2,500 kwh per day.	ECO did not evaluate electrical supply infrastructure

Site Attribute	Comments
Land-use buffers. According to the public officials and developers/brokers that ECO has interviewed, Industrial areas have operational characteristics that do not blend as well with residential land uses as they do with Office and Commercial areas. Generally, as the function of industrial use intensifies (e.g., heavy manufacturing) so too does the importance of buffering to mitigate impacts of noise, odors, traffic, and 24-hour 7-day week operations. Adequate buffers may consist of vegetation, landscaped swales, roadways, and public use parks/recreation areas. Depending upon the industrial use and site topography, site buffers range from approximately 50 to 100 feet. Selected commercial office, retail, lodging and mixed-use (e.g., apartments or office over retail) activities are becoming acceptable adjacent uses to light industrial areas.	The need for land use buffers should be evaluated on a site-by-site basis and will be greatest in areas where heavier industrial uses mix with commercial and retail uses.

In summary, the site requirements for industries have many common elements. Firms in all industries rely on efficient transportation access and basic water, sewer, and power infrastructure, but may have varying need for parcel size, slope, configuration, and buffer treatments.

Chapter 4. Conclusions and Implications

This chapter provides a brief summary of the implications of the Skagit County Industrial Land Study. It includes a general comparison of land supply and demand. The industrial land sufficiency analysis is followed by a discussion of the key implications of the study for local governments in Skagit County.

COMPARISON OF INDUSTRIAL LAND SUPPLY AND DEMAND

At the highest level, the results suggest that Skagit County has enough land to meet forecast employment growth for the 2012 to 2036 period. Table 4-1 shows a comparison of industrial land supply and demand for the forecast period. Note that in the aggregate, the results are the same for all of the employment forecast scenarios. This is because the only differences in the employment forecast alternatives are allocation of employment to UGAs. The results show that even under the high land need (low density) scenario, a surplus of land exists at the county level. Note that ECO considers it unlikely that all new industrial development will occur at such low employment densities.

Table 4-1. Comparison of industrial land supply and demand by land demand scenario, 2012-2036

	Result (acres)
Land Supply	1,767
Land Demand	
High	1,703
Moderate	852
Low	521
Comparison of Land Demand and Need	
High	64
Moderate	915
Low	1,246

Source: ECONorthwest, based on the employment forecast from the Skagit County Regional Transportation Plan

While a county-level comparison is useful, it does not address the issue of location of industrial land within the County. Table 4-2 shows a comparison of land supply and the low, moderate, and high land demand scenarios for each Urban Growth Area in Skagit County for the Alternative 4 Employment forecast. Note that the UGA estimates are based on the countywide employment forecast developed by Berk & Associates for transportation planning purposes.

The results suggest that industrial land deficits may exist in Burlington, La Conner, Swinomosh, and Rural areas under the moderate scenario. Under the low land need scenario (which uses relatively low employee-per-acre ratios—e.g., employment density could be higher), La Conner and Swinomish have small deficits (approximately three acres each).

Table 4-2. Alternative 4 Employment Forecast: comparison of industrial land supply and demand by Urban Growth Area (UGA), 2015-2036

	Land Need				Comparison of Demand and Supply		
UGA	High Land Need	Moderate Land Need	Low Land Need	Land Supply	High Land Need	Moderate Land Need	Low Land Need
Anacortes	293	147	92	407	114	260	315
Burlington	349	175	106	123	(226)	(52)	17
Mount Vernon	452	226	137	267	(185)	41	130
Sedro-Woolley	138	69	43	77	(61)	8	34
Concrete	4	2	1	25	21	23	24
Hamilton	13	6	4	28	15	22	24
La Conner	17	8	5	2	(15)	(6)	(3)
Lyman	1	-	-		(1)	-	-
Bayview Ridge	122	62	39	724	602	662	685
Swinomish	10	4	3		(10)	(4)	(3)
Rural	304	153	91	116	(188)	(37)	25
Total	**1,703**	**852**	**521**	**1,767**	**64**	**915**	**1,246**

Source: ECONorthwest, based on the employment forecast from the Skagit County Regional Transportation Plan
Note: Land supply numbers may not add exactly to the total due to rounding.

Table 4-3 shows a comparison of land supply and the low, moderate, and high land demand scenarios for each Urban Growth Area in Skagit County for the Manual Alternative employment forecast.

The results suggest that industrial land deficits may exist in Burlington, La Conner, and Swinomosh UGAs areas under the moderate scenario.

Table 4-3. Manual Alternative Employment Forecast: comparison of industrial land supply and demand by Urban Growth Area (UGA), 2015-2036

	Land Demand				Comparison of Demand and Supply		
UGA	High Land Need	Moderate Land Need	Low Land Need	Land Supply	High Land Need	Moderate Land Need	Low Land Need
Anacortes	166	82	51	407	241	325	356
Burlington	372	186	113	123	(249)	(63)	10
Mount Vernon	375	188	113	267	(108)	79	154
Sedro-Woolley	126	63	39	77	(49)	14	38
Concrete	13	6	4	25	12	19	21
Hamilton	26	13	9	28	2	15	19
La Conner	38	19	12	2	(36)	(17)	(10)
Lyman	2	1	1		(2)	(1)	(1)
Bayview Ridge	378	190	119	724	346	534	605
Swinomish	24	13	8		(24)	(13)	(8)
Rural	183	92	55	116	(67)	24	61
Total	**1,703**	**853**	**524**	**1,767**	**64**	**914**	**1,243**

Source: ECONorthwest, based on the employment forecast from the Skagit County Regional Transportation Plan
Note: Land supply numbers may not add exactly to the total due to rounding.

CONCLUSIONS AND IMPLICATIONS

Before discussing the implications of the study, it is useful to revisit the purposes of the study. These included:

- Develop a detailed and accurate inventory of industrial land for Skagit County
- Establish a methodology for conducting subsequent inventories
- Develop estimates of demand for industrial land countywide and by UGA using the draft 2014 employment forecast prepared for the regional transportation plan
- Determine, at a high level, if Skagit County has an adequate supply of industrial land to accommodate forecast growth and economic aspirations

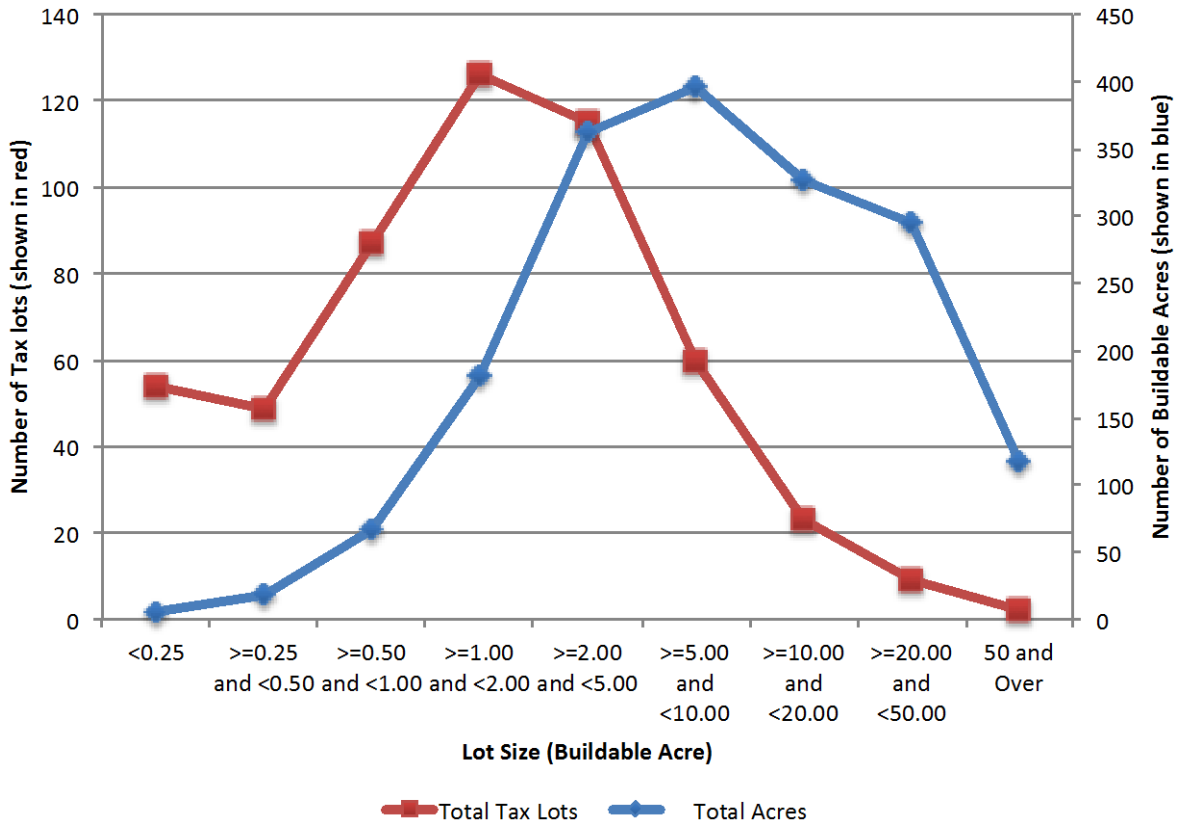
The results of the inventory and demand analysis have several implications for local governments in Skagit County. A key conclusion is that the County appears to have enough land to accommodate forecast employment growth. While the inventory suggests the county has enough land, it is worthwhile exploring the relationship of land supply and demand in the context of site characteristics that are likely to be desirable to prospective industries that may want to locate or expand in Skagit County.

- **Skagit County has industrial sites in a broad range of sizes**. Figure 4-1 shows the number of tax lots (left axis) and the number of acres (right axis) by lot size (buildable acres in tax lot). As a broad observation, the

County has many smaller tax lots that account for a relatively smaller share of the buildable industrial lands, while a few large lots account for a large share.

The results show that the County has around 190 industrial tax lots less than 1 acre. These tax lots include about 90 buildable acres, or 5% of the total buildable land supply. The County has 34 lots that are 10 acres or larger that account for 6% of all tax lots, and 42% of the buildable land (738 acres).

Figure 4-1. Tax lots and buildable acres by lot size, Skagit County industrial lands, 2013



The data suggest that Skagit County has a range of buildable industrial site sizes. However, the distribution of sites by size, leaves out important details about location and development constraints.

- **Skagit County has a limited number of parcels over 20 acres**. The inventory shows a total of only 11 separate tax parcels between 20 and 50 acres, and only 2 parcels over 50 acres in the entire county. Eight of the 9 parcels between 20 and 50 acres are located at Bayview Ridge, and 1 of the 2 parcels over 50 acres is located at Bayview Ridge. All combined these 11 parcels sized 20 acres and greater represent 412 acres of developable land.

- **Few major industrial sites have direct proximity to I-5**. While the relative importance of direct access to I-5 varies from business to business, proximity to transportation corridors is an important location criterion for many businesses. Table 4-3 shows estimated distance and travel time from Interstate 5 to industrial sites in UGAs in Skagit County. With exception of sites in Bayview Ridge, Burlington and Mount Vernon, most industrial land in the County is more than six miles or 10 minutes from Interstate 5.

Table 4-3. Estimated distance and travel time from Interstate 5 by UGA

UGA	Avg Distance from I-5	Approximate Travel Time (minutes)
Anacortes	11 miles (Tounge Point); 17 miles (downtown)	15 - 20 minutes
Bayview Ridge	6 miles	9 minutes
Burlington	<1 mile	<5 minutes
Concrete	30 miles	40 minutes
Hamilton	18 miles	25 minutes
La Conner	11 miles	16 minutes
Mt. Vernon	< 1 mile	<5 minutes
Sedro-Woolley	7 miles	12 minutes

Source: Google Maps

While proximity and direct access to Interstate 5 may be important for some (or possibly many) businesses looking to locate or expand in Skagit County, the distances may not be a major factor for businesses that ship over long distances. For such businesses, the extra travel time would be a small fraction of the overall trip. That said, it is worth continuing to track business inquiries and whether firms making those inquiries find sites to be too distant from I-5.

- **Many industrial sites have development constraints**. The inventory shows that 14% of all industrial lands in Skagit County have slope or floodway constraints that likely prohibit development. After deducting prohibitive constraints, the inventory identifies 555 tax lots that are vacant or partially vacant. These tax lots account for 1,767 buildable acres.

  The inventory, however, shows that many buildable acres include constraints such as floodplains, soils that are subject to liquefaction, wetlands and others. Table 4-4 shows buildable acres and non-prohibitive constraints in vacant industrial tax lots by UGA. The results show that 37% of all vacant industrial land in the County (546 of 1,461 acres) has some type of non-prohibitive development constraint. The

results also show that for many UGAs (Burlington, Concrete, Hamilton, and Mount Vernon), a majority of vacant industrial acres have some type of development constraint.

Table 4-4. Buildable acres and non-prohibitive constraints in *vacant* industrial tax lots by UGA, Skagit County, 2013

UGA	Number of Tax Lots	Non-Prohibitive Constrained Acres	Buildable Acres	Percent of Land with Non-Prohibitive Constraints
Anacortes	114	46	309	15%
Bayview Ridge	98	36	635	6%
Burlington	48	117	122	96%
Concrete	7	25	25	100%
Hamilton	9	28	28	100%
La Conner	1	0	2	9%
Mt. Vernon	154	223	227	98%
Sedro-Woolley	20	27	60	46%
Unincorporated	11	43	53	81%
Total	462	546	1,461	37%

Note: Results do not include partially-vacant tax lots.

While non-prohibitive constraints do not preclude development, they may add time and expense to the entitlement process as well as for site preparation and development. Because of the unique aspects of each industrial site, ECO cannot comment on how big of an issue non-prohibitive constraints are to developers. Such a determination would require a site-by-site evaluation.

- **Ownership and availability of industrial sites may be an issue**. While the issue of site availability was outside the scope of this study (and is constantly changing), ECO did review ownership. For tax lots with buildable areas over 20 acres, we found 10 individual ownerships. Only one entity owned more than one tax lot over 20 acres. This owner, a private entity, controlled 31% of the 412 acres in lots with buildable areas over 20 acres and 4 of the 13 tax lots over 20 acres.

  We further analyzed ownership for all vacant and partially vacant sites over 5 acres. The results show that a total of 61 separate ownerships exist on 131 individual tax lots. The Port of Skagit owns 15 of the tax lots and the Port of Anacortes owns 7 tax lots. Based on this analysis, it does not appear that ownership is a significant constraining factor in market availability.

The Skagit County Industrial Land Study establishes a baseline data set for the industrial land supply in Skagit County, and provides a forecast of future demand. Subsequent work needs to be done to understand the readiness of

industrial land for target growth industries. Potential follow up steps to this study could include:

- **Further evaluation of large sites**. This step is in has already been initiated. ECO identified potential large sites for further evaluation in all UGAs with industrial lands. We also developed a questionnaire that can be used by the Port or others to gather additional information on serviceability, constraints, access, and other opportunities and limitations.
- **Update the 2003 Comprehensive Economic Development Strategy (CEDS)**. While the 2003 CEDS is a solid study, it is now 11 years old and considerable changes have occurred since that time. ECO believes it is worth revisiting the countywide economic development vision and reviewing the list of target industries. The CEDS update would also inform the needed site characteristics for target industries.
- **Further analysis of needed site characteristics in light of target industries.** The analysis of needed site characteristics in this report is general and based on target industries identified in the 2003 Comprehensive Economic Development Strategy. A more detailed analysis of site requirements based on a more specific list of target industries will allow the region to better evaluate whether the existing industrial land base is adequate to achieve regional aspirations.
- **Review of industrial land demand by UGA.** The estimates of land demand presented in this report are based on rule-of-thumb employment densities that are intended to be conservative in the sense that they represent high land demand scenarios. We suggest refining the analysis in light of target industries, which will result in employee-per-acre assumptions that are more specific to the types of industries the County wants to target.
- **Track site inquiries.** This study raises potential issues around development constraints and transportation access—proximity to Interstate 5 and rail. The degree to which these issues discourage industrial development in Skagit County can be tested by tracking inquiries from firms that are potentially interested in locating or expanding in Skagit County. The Economic Development Association of Skagit County (EDASC) already collects this type of data. EDASC can now compare inquires with the inventory to help make these determinations.

Appendix A. Methods and Data Sources

Appendix A provides an overview of buildable lands inventories, methods and assumptions used in the Skagit County industrial buildable land inventory, and the data sources ECO used in the analysis.

BUILDABLE LAND INVENTORIES: THE PROCESS

This report presents a "point-in-time" inventory of lands that allow industrial uses in Skagit County.[9] It is based on parcel data obtained from the Skagit County Geographic Information Systems (GIS) Department and involved an extensive review and verification process to ensure accuracy of the inventory. The results are organized by urban growth area (UGA) and areas outside UGAs.

Methods for identifying buildable land can range from relatively simple, field-based inventories for small areas, to complex and resource-intensive ones for large regions. Figure A-1 shows a conceptual framework for constraint and classification in a typical buildable land inventory. The framework has two dimensions: development status (indicated by the presence or absence of improvements) and constraining conditions. Lands with constraints can be prohibitively constrained by commitment to a specific use (e.g., streets or parks) or protected (e.g., wetlands) or partially constrained. Lands with prohibitive constraints have no development capacity; those that are partially constrained have partial development capacity.

On the dimension of developments status (presence of improvements), developable lands (which can be thought of as vacant lands) have capacity; developed lands generally do not have capacity, but some may have infill or redevelopment capacity. In short, infill and redevelopment can be thought of as a subset of developed land.

[9] The inventory includes some commercial zones that allow industrial uses.

Figure A-1. Framework for land and constraint classification in a buildable land inventory

<table>
<tr><td colspan="3" rowspan="2"></td><td colspan="2">Presence of Improvements</td></tr>
<tr><td>Developable</td><td>Developed</td></tr>
<tr><td rowspan="4">Constraining Conditions</td><td rowspan="2">Prohibitively Constrained</td><td>Committed</td><td colspan="2">No capacity</td></tr>
<tr><td>Protected</td><td colspan="2">No capacity</td></tr>
<tr><td colspan="2">Partially Constrained</td><td>Partial capacity</td><td rowspan="2">Potential infill/ redevelopment capacity</td></tr>
<tr><td colspan="2">Unconstrained</td><td>Full capacity</td></tr>
</table>

The process of developing a buildable lands inventory is not particularly complex. The steps and sub-steps in a supply inventory are:

1. *Calculate the gross vacant acres by land use designation, including fully vacant and partially vacant parcels.* The first step requires parcels to be classified as vacant, partially vacant or developed. The amount of vacant land is then tabulated by the planned land use from the comprehensive plan.
2. *Calculate gross buildable vacant acres by plan designation by subtracting unbuildable acres from total acres.* Not all vacant land is developable. Lands with environmental constraints such as steep slopes, floodplains, or other natural hazards are deducted from the inventory. This deduction yields "buildable" acres, or the amount of land that is available for development.
3. *Calculate net buildable acres by plan designation subtracting land for future public facilities from gross buildable vacant acres.* Not all buildable land will be used for development; streets and other public facilities will require land. This deduction results in *net* acres.[10]

[10] Gross and net buildable acres are typically defined as follows:

Gross Buildable Acre — An acre of vacant land before part of it has been dedicated for public right-of-way, private streets, or public utility easements. For example, a standard assumption is that between 20% and 30% of land in a subdivision is used for streets and

4. *Calculate total net buildable acres by plan designation by adding redevelopable acres to net buildable acres.* Some developed land will redevelop during the planning period, the inventory should identify lands with redevelopment potential and include them in the inventory.

The basic steps and data elements for the supply analysis can be easily displayed in table format. Once the specific definitions are agreed upon, each parcel is assigned a classification in the parcel table of the GIS database. Moreover, each parcel record is supplemented with additional information on constraints and other attributes deemed important.

LAND INVENTORY METHODS: THE DETAILS

The industrial buildable lands inventory (BLI) consisted of the following steps:

1. Create land base (e.g., the scope of parcels included in the inventory).
2. Develop operational definitions/methods.
3. Classify land into mutually exclusive categories by development status.
4. Net out development constraints.
5. Validate results.
6. Develop tabular summaries and maps of lands by classification and plan designation.

This Appendix describes the methods and definitions ECONorthwest used to complete the Skagit County employment buildable lands inventory.

The general structure of the buildable land (supply) analysis is based on the methods used for other buildable lands inventories conducted by ECONorthwest. The steps in the supply inventory were:

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utilities. If so, then a gross vacant acre will yield only about 35,000 sq. ft. (70%-80% of a full acre) for lots.

Net Buildable Acre — An acre of vacant land after part of it has been dedicated for public right-of-way, private streets, or utility easements. A net vacant acre has 43,560 square feet available for construction, because no further street or utility dedications are required: all the land is in lots.

- *Generate employment "land base."* This involved "clipping" or selecting all of the tax lots in Skagit County with the comprehensive plan or zoning layers. The GIS function was followed by a quality assurance step to review the output and validate that the resulting dataset accurately represents all lands designated for industrial use.
- *Classify lands.* Each tax lot was classified into one of the following categories:
    - Vacant land
    - Partially vacant land
    - Developed land
    - Public/semi-public land
- *Identify constraints.* Areas in steep slopes (over 15%), floodways, wetlands, shoreland protection areas, and land identified for future public facilities as constrained or committed lands. These areas are deducted from lands that were identified as vacant or partially vacant. To estimate the constrained area within each tax lot, all constraints listed above will be merged into a single constraint file which was overlaid on tax lots.
- *Tabulation and mapping*. The results are presented in tabular and map format with accompanying narrative. The maps include lands by classification, and maps of vacant and partially vacant lands with constraints.

Step I: Land Base

The first step in the inventory was to create the "land base." In the context of the inventory, the land base is the universe of parcels that are included in the inventory. To create the land base, we started with the consolidated land designation/zoning data that was compiled as part of the Envision Skagit process. That data coverage includes generalized land designations. We started by including the following land designation categories (from the Zone B fields) in the inventory:

- 12 – Industrial
- 13 – Manufacturing

Based on our preliminary review, these covered the majority of city and county lands that are designated for some type of industrial use. Based on discussions with the TAC, however, the consolidated land designation coverage lumps some commercial designations/zones that allow industrial uses into a generalized commercial designation. We reviewed local

comprehensive plans and received input from local planners and included the following zones as part of the land base as shown in Table A-1.

Table A-1. Zone/Land Designations Included in the Industrial Land Base

Jurisdiction	Zone Abbreviation	Zone Name	In All Zoning (y/n)
Skagit County			
	MI	Rural Marine Industrial	Y
	HI	Major Industrial	Y
	LI	Natural Resource Industrial	Y
Anacortes			
	ND	Airport (AZ)	N
	CC	Commercial Marine 1 (CM1)	N
	CC	Commercial Marine 2 (CM2)	N
	HI	Heavy Manufacturing (HM)	Y
	HI	Industrial (I)	Y
	LI	Light Manufacturing (LM)	Y
	LI	Light Manufacturing 1 (LM1)	Y
	LI	Manufacturing / Shipping (MS)	Y
Burlington			
	M-1	Heavy Industrial	Y
	BP	Business Park	Y
Concrete			
	LI	Light Industrial	Y
	CI	Commercial/Industrial	Y
Hamilton			
	MC	Industrial/Commercial	Y
La Conner			
	HI	Industrial	Y
Lyman	**No Industrial Zones**		
Mount Vernon			
	CI	Commercial/Limited Industrial (C-L)	N
	LI	Light Manufacturing and Commercial (M-1)	Y
	HI	Industrial (M-2)	Y
Sedro-Woolley			
	I	Industrial	Y

Step 2: Classifications

The next step in the buildable inventory was to develop working definitions and assumptions. ECO began the buildable lands analysis with a tax lot database provided by the County GIS Department. The tax lot database was current as of February 2013. The supply analysis builds from the tax lot-level database to estimates of buildable land by plan designation.

A key step in the buildable lands analysis was to classify each tax lot into a set of mutually exclusive categories. All tax lots included in the land base County were classified into one of the following categories:

- *Vacant land.* Tax lots that have no structures or have buildings with very little value. For the purpose of this inventory, employment lands with improvement values under $10,000 were considered vacant.

- *Partially vacant land.* Partially vacant tax lots are those occupied by a use but which contain enough land to be further subdivided without need of rezoning. This determination was made through review of aerial photographs and review by local planners.

- *Developed land.* Land that is developed at densities consistent with zoning with improvements that make it unlikely to redevelop during the analysis period. Lands not classified as vacant, partially-vacant, or undevelopable are considered developed.

- *Public land.* Lands in public ownership are mostly considered unavailable for employment uses. This includes lands in Federal, State, County, Port, or City ownership. This category only includes public lands that are located in employment plan designations. We propose to use ownership records or property classifications to identify public lands. Public land could be a subset of any land type.

ECO initially classified land using a rule-based methodology. ECO then generated maps showing the results of the application of those rules, with adjustments made through a validation step based on review of aerial photos. The preliminary classification maps were provided to Port staff, the TAC, local planners, and others for review and comment. ECO went through two rounds of map review and made many changes based on input received during the validation process.

STEP 3: IDENTIFY DEVELOPMENT CONSTRAINTS

Based on discussions with the TAC and the Steering Committed, ECO grouped constraints into two categories: (1) prohibitive; and (2) non-prohibitive. Following is a list of data sets we have grouped by constraint status.

Prohibitive Constraints

- **Slopes**: The TAC agreed that areas in slopes over 15% should be considered a "prohibitive" constraint. ECO used the 6-meter digital elevation model (DEM) provided by County Staff to identify slope constraints.

- **Floodway**. The TAC agreed that floodways identified on the FEMA FIRM maps should be considered a prohibitive constraint. ECO used the FEMA Q3 data layer to identify floodway constraints.

Non-Prohibitive Constraints

- **Critical Natural Resource Areas/Buffers.** The TAC agreed that critical natural resource areas and buffers were considered a prohibitive constraint.

- **Airport Clear Zone.** The TAC agreed that areas within the Port of Skagit Regional Airport approach zones were considered non-prohibitive constraints.

- **FEMA FIRM 100-year floodplain.** The TAC agreed that floodplains present a constraint, but do not generally prohibit development.

- **Wetlands.** The TAC agreed that wetlands present a constraint, but unless they are identified as a critical natural resource area, they should not be considered prohibitive. For most areas, we will use the National Wetlands Inventory, which tends to be very general in nature. Some cities (e.g., Mt. Vernon and Burlington) have local wetland inventories. In instances where local data exists, we will use local data.

Data Layers used for Industrial Lands Constraints

Following is a summary of data layers used for the constraint analysis. ECO conducted the analysis of prohibitive constraints, while Joshua Greenberg of Skagit County GIS conducted the analysis of non-prohibitive constraints.

Prohibitive Constraints

Slopes:

Source: Skagit County GIS

Process: select slopes over 15%

Floodway:

Source: WA DNR Geology

Non-Prohibitive Constraints

Notes data September 18, 2013 from Joshua Greenberg, Skagit County GIS.

Soil Stability:

Liquifaction
Source: WA DNR Geology
Selection: LIQ_HAZ = "High"
Note: Discussion with John Cooper (Skagit County PDS Geologist) states that liquefaction zone is considered depending on the type of structure being created and may require some additional engineering to address instability at the site.
File location:
\\ADMNTMV1\gisdata\agency\dnr\geology\liquifaction\Liquifaction.shp

Wetlands

NOTE: The wetlands data were not used in Mount Vernon and Port of Skagit Areas where better data was used instead.

NWI

Source: WDFW
Selection: region.wetlands
Note: national wetlands inventory with known accuracy issues but the best comprehensive wetland data available
File location:
\\ADMNTMV1\gisdata\agency\wdfw\nwi\sk_nwi
Feature Class: region.wetlands

Air_terp

Source: WDFW
Selection: region.wetlands
Note: Additional aerial interpretation of wetlands meant to compliment NWI. Created by a Parametrix consulting for the county in 1990's with no known metadata.
File Location:
\\ADMNTMV1\gisdata\agency\wdfw\nwi\air_terp
Feature Class: region.wetlands

Hydro_buffer

Source: WA DNR Hydro
Selection: S= 200', F = 150', N= 50'
Where S;F;N from FP_WTRTY_CD
Note: Did not use Skagit County hydro data because it was lacking the typing scheme most commonly used.

FLOODING

FEMAQ3
Source: FEMA
Selection: SFHA = "IN"
Note: Currently being updated by FEMA but with no new information expected for awhile. This data is not meant to be used for spatial determination of flood areas (this is NOT Digital Firm data)

MOUNT_VERNON Data

- **PotentialWetlands.shp**
- **MtVernon_Hydro_buffer3**

Port Of Skagit Data

- **POS_PartialConstrain**

Process:

1)Merge Wetland data together…then "erase" Mount Vernon and Port of Skagit areas
2) Merge Mount Vernon data

3) Merge POS data
4)Merge remaining constraint layers – Flooding & Liquifaction

Final Layer = All_PartialConstraints

Appendix B. Industrial Land Summary Tables by Urban Growth Area

This appendix presents summary tables for various geographies within Skagit County – countywide, UGA totals, unincorporated areas, and UGAs.[11] Each summary includes the following tables:

1. Summary statistics – acres in UGA/city limit
2. Acres by classification – total acres and tax lots by land classification (e.g., development status)
3. Acres by classification development/constraint status – a crosstabulation of land classifications with total acres by development/constraint status
4. Tax lots by classification and lot size (total acres) – a crosstabulation of classifications with total acres in tax lot grouped by size
5. Vacant and partially vacant tax lots by classification and lot size (buildable acres) – lots classified as vacant or partially vacant by the buildable area in the lot (e.g., total acres minus prohibitively constrained acres)

[11] Note that the Lyman and Swinomish UGAs have no designated industrial lands and are not included here.

Table B-1. Countywide Summary Data, 2013

1. Summary Statistics

Acres in UGA:	37,063
Acres in City Limit:	25,502

2. Total Acres by Classification

Variable	Developed	Unbuildable	Partially Vacant	Vacant	Total
Number of Tax Lots	1,970	60	63	462	2,555
Total Acres in Tax Lots	5,298	998	494	1,482	8,272

3. Acres by Classification and Development/Constraint Status

		Acres by Status				
Classification	Tax Lots	Developed Acres	Fully Constrained Acres	Partially Constrained Acres	Buildable Acres	Total Acres
Developed	1,970	5,247	51	2,177	0	5,298
Unbuildable	60	0	998	63	0	998
Partially Vacant	63	122	65	176	307	494
Vacant	462	0	21	546	1,461	1,482
Total	**2,555**	**5,369**	**1,135**	**2,962**	**1,767**	**8,272**

Note: Total acres = developed acres + fully constrained acres + buildable acres
Partially constrained acres can exist in developed or buildable areas

4. Tax Lots by Classification and Total Lot Size (in Acres)

	Total Acres in Tax Lots									
Classification	<0.25	>=0.25 and <0.50	>=0.50 and <1.00	>=1.00 and <2.00	>=2.00 and <5.00	>=5.00 and <10.00	>=10.00 and <20.00	>=20.00 and <50.00	50 and Over	Total
Total Acres in Tax Lots										
Developed	74	131	282	459	740	468	315	491	2,339	5,298
Unbuildable	0	3	5	6	34	57	92	224	0	422
Partially Vacant	0	0	5	4	69	128	134	153	577	1,070
Vacant	6	16	65	176	290	303	249	262	117	1,482
Total Acres	**80**	**150**	**357**	**644**	**1,133**	**956**	**790**	**1,130**	**3,033**	**8,272**
Number of Tax Lots										
Developed	529	365	390	327	24	237	15	72	11	1,970
Unbuildable	2	8	8	5	7	10	8	7	5	60
Partially Vacant	0	0	6	2	10	21	5	19	0	63
Vacant	48	43	84	122	17	93	8	45	2	462
Total Tax Lots	**579**	**416**	**488**	**456**	**58**	**361**	**36**	**143**	**18**	**2,555**

5. Vacant and Partially Vacant Tax Lots by Classification and Buildable Lot Size (in Acres)

	Buildable Acres in Tax Lots									
Classification	<0.25	>=0.25 and <0.50	>=0.50 and <1.00	>=1.00 and <2.00	>=2.00 and <5.00	>=5.00 and <10.00	>=10.00 and <20.00	>=20.00 and <50.00	50 and Over	Total
Buildable Acres in Tax Lots										
Partially Vacant	0	1	3	10	80	95	85	33	0	307
Vacant	6	17	64	170	283	301	242	262	117	1,461
Total Acres	**6**	**18**	**67**	**180**	**363**	**395**	**326**	**295**	**117**	**1,767**
Number of Tax Lots										
Partially Vacant	3	3	4	7	24	15	6	1	0	63
Vacant	51	46	83	119	91	45	17	8	2	462
Total Tax Lots	**54**	**49**	**87**	**126**	**115**	**60**	**23**	**9**	**2**	**525**

Table B-2. UGA Combined (all UGAs) Summary Data, 2013

Skagit County Industrial Lands Inventory

UGA Summary Data

Skagit County Industrial Lands Inventory
2/19/14

1. Summary Statistics

Acres in UGA:	37,063
Acres in City Limit:	25,502

2. Total Acres by Classification

Variable	Developed	Unbuildable	Partially Vacant	Vacant	Total
Number of Tax Lots	1,858	60	54	451	2,423
Total Acres in Tax Lots	5,069	998	403	1,424	7,895

3. Acres by Classification and Development/Constraint Status

		Acres by Status				
Classification	Tax Lots	Developed Acres	Fully Constrained Acres	Partially Constrained Acres	Buildable Acres	Total Acres
Developed	1,858	5,038	31	2,013	0	5,069
Unbuildable	60	0	998	63	0	998
Partially Vacant	54	95	64	104	244	403
Vacant	451	0	17	503	1,407	1,424
Total	**2,423**	**5,133**	**1,111**	**2,682**	**1,652**	**7,895**

Note: Total acres = developed acres + fully constrained acres + buildable acres
Partially constrained acres can exist in developed or buildable areas

4. Tax Lots by Classification and Total Lot Size (in Acres)

	Total Acres in Tax Lots									
Classification	<0.25	>=0.25 and <0.50	>=0.50 and <1.00	>=1.00 and <2.00	>=2.00 and <5.00	>=5.00 and <10.00	>=10.00 and <20.00	>=20.00 and <50.00	50 and Over	Total
Total Acres in Tax Lots										
Developed	71	124	267	436	658	407	276	491	2,339	5,069
Unbuildable	0	3	5	6	34	57	92	224	0	422
Partially Vacant	0	0	4	4	56	122	86	132	577	980
Vacant	6	15	63	172	290	289	211	262	117	1,424
Total Acres	**77**	**142**	**340**	**618**	**1,038**	**874**	**665**	**1,109**	**3,033**	**7,895**
Number of Tax Lots										
Developed	510	347	370	311	-2	227	12	72	11	1,858
Unbuildable	2	8	8	5	7	10	8	7	5	60
Partially Vacant	0	0	5	2	7	20	2	18	0	54
Vacant	47	41	82	120	17	91	6	45	2	451
Total Tax Lots	**559**	**396**	**465**	**438**	**29**	**348**	**28**	**142**	**18**	**2,423**

5. Vacant and Partially Vacant Tax Lots by Classification and Buildable Lot Size (in Acres)

	Buildable Acres in Tax Lots									
Classification	<0.25	>=0.25 and <0.50	>=0.50 and <1.00	>=1.00 and <2.00	>=2.00 and <5.00	>=5.00 and <10.00	>=10.00 and <20.00	>=20.00 and <50.00	50 and Over	Total
Buildable Acres in Tax Lots										
Partially Vacant	0	1	3	10	80	95	85	33	0	307
Vacant	6	17	64	170	283	301	242	262	117	1,461
Total Acres	**6**	**18**	**67**	**180**	**363**	**395**	**326**	**295**	**117**	**1,767**
Number of Tax Lots										
Partially Vacant	3	3	4	7	24	15	6	1	0	63
Vacant	51	46	83	119	91	45	17	8	2	462
Total Tax Lots	**54**	**49**	**87**	**126**	**115**	**60**	**23**	**9**	**2**	**525**

Table B-3. County Unincorporated Areas Summary Data, 2013

Unincorporated Areas in Skagit County

UGA Summary Data

Skagit County Industrial Lands Inventory

2/19/14

1 .Summary Statistics

Acres in UGA:	na
Acres in City Limit:	na

2. Total Acres by Classification

Variable	Developed	Unbuildable	Partially Vacant	Vacant	Total
Number of Tax Lots	112	0	9	11	132
Total Acres in Tax Lots	229	0	90	58	377

3. Acres by Classification and Development/Constraint Status

		Acres by Status				
Classification	Tax Lots	Developed Acres	Fully Constrained Acres	Partially Constrained Acres	Buildable Acres	Total Acres
Developed	112	209	19	164	0	229
Unbuildable	0	0	0	0	0	0
Partially Vacant	9	28	1	73	62	90
Vacant	11	0	4	43	53	58
Total	**132**	**237**	**24**	**280**	**116**	**377**

Note: Total acres = developed acres + fully constrained acres + buildable acres

Partially constrained acres can exist in developed or buildable areas

4. Tax Lots by Classification and Total Lot Size (in Acres)

	Total Acres in Tax Lots									
Classification	<0.25	>=0.25 and <0.50	>=0.50 and <1.00	>=1.00 and <2.00	>=2.00 and <5.00	>=5.00 and <10.00	>=10.00 and <20.00	>=20.00 and <50.00	50 and Over	Total
Total Acres in Tax Lots										
Developed	2	7	14	23	82	61	39	0	0	229
Unbuildable	0	0	0	0	0	0	0	0	0	0
Partially Vacant	0	0	1	0	14	7	48	21	0	90
Vacant	0	1	2	3	0	14	37	0	0	58
Total Acres	**2**	**8**	**17**	**26**	**96**	**82**	**125**	**21**	**0**	**377**
Number of Tax Lots										
Developed	19	18	20	16	26	10	3	0	0	112
Unbuildable	0	0	0	0	0	0	0	0	0	0
Partially Vacant	0	0	1	0	3	1	3	1	0	9
Vacant	1	2	2	2	0	2	2	0	0	11
Total Tax Lots	**20**	**20**	**23**	**18**	**29**	**13**	**8**	**1**	**0**	**132**

5. Vacant and Partially Vacant Tax Lots by Classification and Buildable Lot Size (in Acres)

	Buildable Acres in Tax Lots									
Classification	<0.25	>=0.25 and <0.50	>=0.50 and <1.00	>=1.00 and <2.00	>=2.00 and <5.00	>=5.00 and <10.00	>=10.00 and <20.00	>=20.00 and <50.00	50 and Over	Total
Buildable Acres in Tax Lots										
Partially Vacant	0	0	0	0	9	10	42	0	0	62
Vacant	0	1	2	3	0	14	33	0	0	53
Total Acres	**0**	**1**	**2**	**3**	**9**	**25**	**76**	**0**	**0**	**116**
Number of Tax Lots										
Partially Vacant	0	1	0	0	3	2	3	0	0	9
Vacant	1	2	2	2	0	2	2	0	0	11
Total Tax Lots	**1**	**3**	**2**	**2**	**3**	**4**	**5**	**0**	**0**	**20**

Table B-4. Anacortes Summary Data, 2013

Anacortes

UGA Summary Data

Skagit County Industrial Lands Inventory

2/19/14

1. Summary Statistics

Acres in UGA:	13,537
Acres in City Limit:	10,058

2. Total Acres by Classification

Variable	Developed	Unbuildable	Partially Vacant	Vacant	Total
Number of Tax Lots	453	17	25	114	609
Total Acres in Tax Lots	2,315	67	138	319	2,839

3. Acres by Classification and Development/Constraint Status

		Acres by Status				
Classification	Tax Lots	Developed Acres	Fully Constrained Acres	Partially Constrained Acres	Buildable Acres	Total Acres
Developed	453	2,310	4	648	0	2,315
Unbuildable	17	0	67	60	0	67
Partially Vacant	25	40	1	19	97	138
Vacant	114	0	10	46	309	319
Total	**609**	**2,350**	**82**	**773**	**407**	**2,839**

Note: Total acres = developed acres + fully constrained acres + buildable acres
Partially constrained acres can exist in developed or buildable areas

4. Tax Lots by Classification and Total Lot Size (in Acres)

	Total Acres in Tax Lots									
Classification	<0.25	>=0.25 and <0.50	>=0.50 and <1.00	>=1.00 and <2.00	>=2.00 and <5.00	>=5.00 and <10.00	>=10.00 and <20.00	>=20.00 and <50.00	50 and Over	Total
Total Acres in Tax Lots										
Developed	19	26	53	100	163	112	93	74	1,674	2,315
Unbuildable	0	0	4	2	14	0	25	21	0	67
Partially Vacant	0	0	1	0	31	72	35	0	0	138
Vacant	1	4	20	34	81	69	111	0	0	319
Total Acres	**20**	**30**	**78**	**136**	**288**	**252**	**264**	**95**	**1,674**	**2,839**
Number of Tax Lots										
Developed	147	74	75	73	51	17	7	2	7	453
Unbuildable	1	1	6	2	4	0	2	1	0	17
Partially Vacant	0	0	1	0	10	11	3	0	0	25
Vacant	11	11	24	25	25	10	8	0	0	114
Total Tax Lots	**159**	**86**	**106**	**100**	**90**	**38**	**20**	**3**	**7**	**609**

5. Vacant and Partially Vacant Tax Lots by Classification and Buildable Lot Size (in Acres)

	Buildable Acres in Tax Lots									
Classification	<0.25	>=0.25 and <0.50	>=0.50 and <1.00	>=1.00 and <2.00	>=2.00 and <5.00	>=5.00 and <10.00	>=10.00 and <20.00	>=20.00 and <50.00	50 and Over	Total
Buildable Acres in Tax Lots										
Partially Vacant	0	0	1	7	45	44	0	0	0	97
Vacant	1	4	20	34	76	66	109	0	0	309
Total Acres	**1**	**4**	**20**	**41**	**121**	**111**	**109**	**0**	**0**	**407**
Number of Tax Lots										
Partially Vacant	0	0	1	5	13	6	0	0	0	25
Vacant	12	11	24	25	24	10	8	0	0	114
Total Tax Lots	**12**	**11**	**25**	**30**	**37**	**16**	**8**	**0**	**0**	**139**

Table B-5. Bayview Ridge Summary Data, 2013

Bayview Ridge

UGA Summary Data

Skagit County Industrial Lands Inventory

2/19/14

1. Summary Statistics

Acres in UGA:	2,725
Acres in City Limit:	0

2. Total Acres by Classification

Variable	Developed	Unbuildable	Partially Vacant	Vacant	Total
Number of Tax Lots	159	39	7	98	303
Total Acres in Tax Lots	1,306	928	163	635	3,033

3. Acres by Classification and Development/Constraint Status

		Acres by Status				
Classification	Tax Lots	Developed Acres	Fully Constrained Acres	Partially Constrained Acres	Buildable Acres	Total Acres
Developed	159	1,298	8	126	0	1,306
Unbuildable	39	0	928	0	0	928
Partially Vacant	7	11	63	0	89	163
Vacant	98	0	0	36	635	635
Total	**303**	**1,309**	**1,000**	**163**	**724**	**3,033**

Note: Total acres = developed acres + fully constrained acres + buildable acres
Partially constrained acres can exist in developed or buildable areas

4. Tax Lots by Classification and Total Lot Size (in Acres)

	Total Acres in Tax Lots									
Classification	<0.25	>=0.25 and <0.50	>=0.50 and <1.00	>=1.00 and <2.00	>=2.00 and <5.00	>=5.00 and <10.00	>=10.00 and <20.00	>=20.00 and <50.00	50 and Over	Total
Total Acres in Tax Lots										
Developed	4	4	21	53	86	76	72	324	665	1,306
Unbuildable	0	2	1	2	21	57	67	203	577	928
Partially Vacant	0	0	0	0	0	16	15	132	0	163
Vacant	0	0	6	37	81	158	57	240	55	635
Total Acres	**5**	**6**	**28**	**91**	**188**	**307**	**212**	**899**	**1,297**	**3,033**
Number of Tax Lots										
Developed	28	9	29	36	25	12	6	10	4	159
Unbuildable	1	6	1	1	6	7	5	7	5	39
Partially Vacant	0	0	0	0	0	2	1	4	0	7
Vacant	3	1	8	26	25	23	4	7	1	98
Total Tax Lots	**32**	**16**	**38**	**63**	**56**	**44**	**16**	**28**	**10**	**303**

5. Vacant and Partially Vacant Tax Lots by Classification and Buildable Lot Size (in Acres)

	Buildable Acres in Tax Lots									
Classification	<0.25	>=0.25 and <0.50	>=0.50 and <1.00	>=1.00 and <2.00	>=2.00 and <5.00	>=5.00 and <10.00	>=10.00 and <20.00	>=20.00 and <50.00	50 and Over	Total
Buildable Acres in Tax Lots										
Partially Vacant	0	0	0	0	3	11	42	33	0	89
Vacant	0	0	6	37	81	158	57	240	55	635
Total Acres	**0**	**0**	**6**	**37**	**84**	**169**	**99**	**273**	**55**	**724**
Number of Tax Lots										
Partially Vacant	0	0	0	0	1	2	3	1	0	7
Vacant	3	1	8	26	25	23	4	7	1	98
Total Tax Lots	**3**	**1**	**8**	**26**	**26**	**25**	**7**	**8**	**1**	**105**

Table B-6. Burlington Summary Data, 2013

Burlington

UGA Summary Data

Skagit County Industrial Lands Inventory

2/19/14

1 .Summary Statistics

Acres in UGA:	3,149
Acres in City Limit:	2,824

2. Total Acres by Classification

Variable	Developed	Unbuildable	Partially Vacant	Vacant	Total
Number of Tax Lots	226	4	2	48	280
Total Acres in Tax Lots	368	3	14	122	507

3. Acres by Classification and Development/Constraint Status

		Acres by Status				
Classification	Tax Lots	Developed Acres	Fully Constrained Acres	Partially Constrained Acres	Buildable Acres	Total Acres
Developed	226	356	12	341	0	368
Unbuildable	4	0	3	3	0	3
Partially Vacant	2	13	0	13	1	14
Vacant	48	0	0	117	122	122
Total	**280**	**368**	**15**	**474**	**123**	**507**

Note: Total acres = developed acres + fully constrained acres + buildable acres
Partially constrained acres can exist in developed or buildable areas

4. Tax Lots by Classification and Total Lot Size (in Acres)

	Total Acres in Tax Lots									
Classification	<0.25	>=0.25 and <0.50	>=0.50 and <1.00	>=1.00 and <2.00	>=2.00 and <5.00	>=5.00 and <10.00	>=10.00 and <20.00	>=20.00 and <50.00	50 and Over	Total
Total Acres in Tax Lots										
Developed	5	11	21	93	142	72	24	0	0	368
Unbuildable	0	0	1	2	0	0	0	0	0	3
Partially Vacant	0	0	0	0	2	0	11	0	0	14
Vacant	0	1	5	40	14	0	0	0	62	122
Total Acres	**6**	**12**	**27**	**135**	**159**	**72**	**36**	**0**	**62**	**507**
Number of Tax Lots										
Developed	42	31	29	66	45	11	2	0	0	226
Unbuildable	0	1	1	2	0	0	0	0	0	4
Partially Vacant	0	0	0	0	1	0	1	0	0	2
Vacant	6	2	7	27	5	0	0	0	1	48
Total Tax Lots	**48**	**34**	**37**	**95**	**51**	**11**	**3**	**0**	**1**	**280**

5. Vacant and Partially Vacant Tax Lots by Classification and Buildable Lot Size (in Acres)

	Buildable Acres in Tax Lots									
Classification	<0.25	>=0.25 and <0.50	>=0.50 and <1.00	>=1.00 and <2.00	>=2.00 and <5.00	>=5.00 and <10.00	>=10.00 and <20.00	>=20.00 and <50.00	50 and Over	Total
Buildable Acres in Tax Lots										
Partially Vacant	0	0	0	1	0	0	0	0	0	1
Vacant	0	1	5	40	14	0	0	0	62	122
Total Acres	**0**	**1**	**5**	**41**	**14**	**0**	**0**	**0**	**62**	**123**
Number of Tax Lots										
Partially Vacant	1	0	0	1	0	0	0	0	0	2
Vacant	6	2	7	27	5	0	0	0	1	48
Total Tax Lots	**7**	**2**	**7**	**28**	**5**	**0**	**0**	**0**	**1**	**50**

Table B-7. Concrete Summary Data, 2013

Concrete

UGA Summary Data

Skagit County Industrial Lands Inventory

2/19/14

1 .Summary Statistics

Acres in UGA:	954
Acres in City Limit:	758

2. Total Acres by Classification

Variable	Developed	Unbuildable	Partially Vacant	Vacant	Total
Number of Tax Lots	15	0	0	7	22
Total Acres in Tax Lots	45	0	0	25	69

3. Acres by Classification and Development/Constraint Status

		Acres by Status				
Classification	Tax Lots	Developed Acres	Fully Constrained Acres	Partially Constrained Acres	Buildable Acres	Total Acres
Developed	15	41	4	43	0	45
Unbuildable	0	0	0	0	0	0
Partially Vacant	0	0	0	0	0	0
Vacant	7	0	0	25	25	25
Total	**22**	**41**	**4**	**67**	**25**	**69**

Note: Total acres = developed acres + fully constrained acres + buildable acres
Partially constrained acres can exist in developed or buildable areas

4. Tax Lots by Classification and Total Lot Size (in Acres)

	Total Acres in Tax Lots									
Classification	<0.25	>=0.25 and <0.50	>=0.50 and <1.00	>=1.00 and <2.00	>=2.00 and <5.00	>=5.00 and <10.00	>=10.00 and <20.00	>=20.00 and <50.00	50 and Over	Total
Total Acres in Tax Lots										
Developed	0	0	2	3	14	25	0	0	0	45
Unbuildable	0	0	0	0	0	0	0	0	0	0
Partially Vacant	0	0	0	0	0	0	0	0	0	0
Vacant	0	0	1	0	10	13	0	0	0	25
Total Acres	**0**	**0**	**3**	**3**	**25**	**38**	**0**	**0**	**0**	**69**
Number of Tax Lots										
Developed	0	1	3	2	5	4	0	0	0	15
Unbuildable	0	0	0	0	0	0	0	0	0	0
Partially Vacant	0	0	0	0	0	0	0	0	0	0
Vacant	0	0	1	0	4	2	0	0	0	7
Total Tax Lots	**0**	**1**	**4**	**2**	**9**	**6**	**0**	**0**	**0**	**22**

5. Vacant and Partially Vacant Tax Lots by Classification and Buildable Lot Size (in Acres)

	Buildable Acres in Tax Lots									
Classification	<0.25	>=0.25 and <0.50	>=0.50 and <1.00	>=1.00 and <2.00	>=2.00 and <5.00	>=5.00 and <10.00	>=10.00 and <20.00	>=20.00 and <50.00	50 and Over	Total
Buildable Acres in Tax Lots										
Partially Vacant	0	0	0	0	0	0	0	0	0	0
Vacant	0	0	1	0	10	13	0	0	0	25
Total Acres	**0**	**0**	**1**	**0**	**10**	**13**	**0**	**0**	**0**	**25**
Number of Tax Lots										
Partially Vacant	0	0	0	0	0	0	0	0	0	0
Vacant	0	0	1	0	4	2	0	0	0	7
Total Tax Lots	**0**	**0**	**1**	**0**	**4**	**2**	**0**	**0**	**0**	**7**

Table B-8. Hamilton Summary Data, 2013

Hamilton

UGA Summary Data

Skagit County Industrial Lands Inventory

2/19/14

1 .Summary Statistics

Acres in UGA:	918
Acres in City Limit:	662

2. Total Acres by Classification

Variable	Developed	Unbuildable	Partially Vacant	Vacant	Total
Number of Tax Lots	27	0	0	9	36
Total Acres in Tax Lots	92	0	0	34	125

3. Acres by Classification and Development/Constraint Status

		Acres by Status				
Classification	Tax Lots	Developed Acres	Fully Constrained Acres	Partially Constrained Acres	Buildable Acres	Total Acres
Developed	27	90	2	70	0	92
Unbuildable	0	0	0	0	0	0
Partially Vacant	0	0	0	0	0	0
Vacant	9	0	6	28	28	34
Total	**36**	**90**	**8**	**97**	**28**	**125**

Note: Total acres = developed acres + fully constrained acres + buildable acres
Partially constrained acres can exist in developed or buildable areas

4. Tax Lots by Classification and Total Lot Size (in Acres)

	Total Acres in Tax Lots									
Classification	<0.25	>=0.25 and <0.50	>=0.50 and <1.00	>=1.00 and <2.00	>=2.00 and <5.00	>=5.00 and <10.00	>=10.00 and <20.00	>=20.00 and <50.00	50 and Over	Total
Total Acres in Tax Lots										
Developed	1	1	7	4	9	9	29	32	0	92
Unbuildable	0	0	0	0	0	0	0	0	0	0
Partially Vacant	0	0	0	0	0	0	0	0	0	0
Vacant	0	0	0	7	9	18	0	0	0	34
Total Acres	**1**	**1**	**7**	**11**	**18**	**27**	**29**	**32**	**0**	**125**
Number of Tax Lots										
Developed	4	4	9	3	3	1	2	1	0	27
Unbuildable	0	0	0	0	0	0	0	0	0	0
Partially Vacant	0	0	0	0	0	0	0	0	0	0
Vacant	0	0	0	4	2	3	0	0	0	9
Total Tax Lots	**4**	**4**	**9**	**7**	**5**	**4**	**2**	**1**	**0**	**36**

5. Vacant and Partially Vacant Tax Lots by Classification and Buildable Lot Size (in Acres)

	Buildable Acres in Tax Lots									
Classification	<0.25	>=0.25 and <0.50	>=0.50 and <1.00	>=1.00 and <2.00	>=2.00 and <5.00	>=5.00 and <10.00	>=10.00 and <20.00	>=20.00 and <50.00	50 and Over	Total
Buildable Acres in Tax Lots										
Partially Vacant	0	0	0	0	0	0	0	0	0	0
Vacant	0	1	0	0	9	18	0	0	0	28
Total Acres	**0**	**1**	**0**	**0**	**9**	**18**	**0**	**0**	**0**	**28**
Number of Tax Lots										
Partially Vacant	0	0	0	0	0	0	0	0	0	0
Vacant	2	2	0	0	2	3	0	0	0	9
Total Tax Lots	**2**	**2**	**0**	**0**	**2**	**3**	**0**	**0**	**0**	**9**

Table B-9. La Conner Summary Data, 2013

La Conner

UGA Summary Data

Skagit County Industrial Lands Inventory

2/19/14

1 .Summary Statistics

Acres in UGA:	272
Acres in City Limit:	324

2. Total Acres by Classification

Variable	Developed	Unbuildable	Partially Vacant	Vacant	Total
Number of Tax Lots	26	0	0	1	27
Total Acres in Tax Lots	30	0	0	2	32

3. Acres by Classification and Development/Constraint Status

		Acres by Status				
Classification	Tax Lots	Developed Acres	Fully Constrained Acres	Partially Constrained Acres	Buildable Acres	Total Acres
Developed	26	30	0	28	0	30
Unbuildable	0	0	0	0	0	0
Partially Vacant	0	0	0	0	0	0
Vacant	1	0	1	0	2	2
Total	**27**	**30**	**1**	**28**	**2**	**60**

Note: Total acres = developed acres + fully constrained acres + buildable acres
Partially constrained acres can exist in developed or buildable areas

4. Tax Lots by Classification and Total Lot Size (in Acres)

	Total Acres in Tax Lots									
Classification	<0.25	>=0.25 and <0.50	>=0.50 and <1.00	>=1.00 and <2.00	>=2.00 and <5.00	>=5.00 and <10.00	>=10.00 and <20.00	>=20.00 and <50.00	50 and Over	Total
Total Acres in Tax Lots										
Developed	2	2	2	3	2	0	18	0	0	30
Unbuildable	0	0	0	0	0	0	0	0	0	0
Partially Vacant	0	0	0	0	0	0	0	0	0	0
Vacant	0	0	0	0	2	0	0	0	0	2
Total Acres	**2**	**2**	**2**	**3**	**4**	**0**	**18**	**0**	**0**	**32**
Number of Tax Lots										
Developed	12	6	4	2	1	0	1	0	0	26
Unbuildable	0	0	0	0	0	0	0	0	0	0
Partially Vacant	0	0	0	0	0	0	0	0	0	0
Vacant	0	0	0	0	1	0	0	0	0	1
Total Tax Lots	**12**	**6**	**4**	**2**	**2**	**0**	**1**	**0**	**0**	**27**

5. Vacant and Partially Vacant Tax Lots by Classification and Buildable Lot Size (in Acres)

	Buildable Acres in Tax Lots									
Classification	<0.25	>=0.25 and <0.50	>=0.50 and <1.00	>=1.00 and <2.00	>=2.00 and <5.00	>=5.00 and <10.00	>=10.00 and <20.00	>=20.00 and <50.00	50 and Over	Total
Buildable Acres in Tax Lots										
Partially Vacant	0	0	0	0	0	0	0	0	0	0
Vacant	0	0	0	2	0	0	0	0	0	2
Total Acres	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**2**
Number of Tax Lots										
Partially Vacant	0	0	0	0	0	0	0	0	0	0
Vacant	0	0	0	1	0	0	0	0	0	1
Total Tax Lots	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**1**

Table B-10. Mount Vernon Summary Data, 2013

Mount Vernon

UGA Summary Data

Skagit County Industrial Lands Inventory

2/19/14

1 .Summary Statistics

Acres in UGA:	10,400
Acres in City Limit:	7,955

2. Total Acres by Classification

Variable	Developed	Unbuildable	Partially Vacant	Vacant	Total
Number of Tax Lots	867	0	13	154	1,034
Total Acres in Tax Lots	804	0	61	228	1,093

3. Acres by Classification and Development/Constraint Status

		Acres by Status				
Classification	Tax Lots	Developed Acres	Fully Constrained Acres	Partially Constrained Acres	Buildable Acres	Total Acres
Developed	867	803	1	756	0	804
Unbuildable	0	0	0	0	0	0
Partially Vacant	13	21	0	60	39	61
Vacant	154	0	1	223	227	228
Total	**1,034**	**824**	**2**	**1,040**	**267**	**1,093**

Note: Total acres = developed acres + fully constrained acres + buildable acres
Partially constrained acres can exist in developed or buildable areas

4. Tax Lots by Classification and Total Lot Size (in Acres)

	Total Acres in Tax Lots									
Classification	<0.25	>=0.25 and <0.50	>=0.50 and <1.00	>=1.00 and <2.00	>=2.00 and <5.00	>=5.00 and <10.00	>=10.00 and <20.00	>=20.00 and <50.00	50 and Over	Total
Total Acres in Tax Lots										
Developed	39	73	139	164	220	114	28	28	0	804
Unbuildable	0	0	0	0	0	0	0	0	0	0
Partially Vacant	0	0	1	4	16	27	13	0	0	61
Vacant	4	9	30	47	76	31	31	0	0	228
Total Acres	**42**	**82**	**169**	**215**	**312**	**172**	**72**	**28**	**0**	**1,093**
Number of Tax Lots										
Developed	267	203	188	116	73	17	2	1	0	867
Unbuildable	0	0	0	0	0	0	0	0	0	0
Partially Vacant	0	0	1	2	5	4	1	0	0	13
Vacant	25	25	39	33	25	5	2	0	0	154
Total Tax Lots	**292**	**228**	**228**	**151**	**103**	**26**	**5**	**1**	**0**	**1,034**

5. Vacant and Partially Vacant Tax Lots by Classification and Buildable Lot Size (in Acres)

	Buildable Acres in Tax Lots									
Classification	<0.25	>=0.25 and <0.50	>=0.50 and <1.00	>=1.00 and <2.00	>=2.00 and <5.00	>=5.00 and <10.00	>=10.00 and <20.00	>=20.00 and <50.00	50 and Over	Total
Buildable Acres in Tax Lots										
Partially Vacant	0	0	2	2	19	17	0	0	0	39
Vacant	4	9	29	47	76	31	31	0	0	227
Total Acres	**4**	**9**	**31**	**49**	**95**	**48**	**31**	**0**	**0**	**267**
Number of Tax Lots										
Partially Vacant	2	0	2	1	5	3	0	0	0	13
Vacant	25	26	38	33	25	5	2	0	0	154
Total Tax Lots	**27**	**26**	**40**	**34**	**30**	**8**	**2**	**0**	**0**	**167**

Table B-11. Sedro-Woolley Summary Data, 2013

Sedro-Woolley

UGA Summary Data

Skagit County Industrial Lands Inventory

2/19/14

1 .Summary Statistics

Acres in UGA:	3,653
Acres in City Limit:	2,432

2. Total Acres by Classification

Variable	Developed	Unbuildable	Partially Vacant	Vacant	Total
Number of Tax Lots	85	0	7	20	112
Total Acres in Tax Lots	110	0	28	60	198

3. Acres by Classification and Development/Constraint Status

		Acres by Status				
Classification	Tax Lots	Developed Acres	Fully Constrained Acres	Partially Constrained Acres	Buildable Acres	Total Acres
Developed	85	110	0	1	0	110
Unbuildable	0	0	0	0	0	0
Partially Vacant	7	10	0	12	18	28
Vacant	20	0	0	27	60	60
Total	**112**	**121**	**0**	**40**	**77**	**198**

Note: Total acres = developed acres + fully constrained acres + buildable acres
Partially constrained acres can exist in developed or buildable areas

4. Tax Lots by Classification and Total Lot Size (in Acres)

	Total Acres in Tax Lots									
Classification	<0.25	>=0.25 and <0.50	>=0.50 and <1.00	>=1.00 and <2.00	>=2.00 and <5.00	>=5.00 and <10.00	>=10.00 and <20.00	>=20.00 and <50.00	50 and Over	Total
Total Acres in Tax Lots										
Developed	2	6	21	16	22	0	11	33	0	110
Unbuildable	0	0	0	0	0	0	0	0	0	0
Partially Vacant	0	0	2	0	6	7	12	0	0	28
Vacant	0	1	2	7	17	0	11	21	0	60
Total Acres	**2**	**7**	**25**	**23**	**45**	**7**	**34**	**54**	**0**	**198**
Number of Tax Lots										
Developed	10	19	33	13	8	0	1	1	0	85
Unbuildable	0	0	0	0	0	0	0	0	0	0
Partially Vacant	0	0	3	0	2	1	1	0	0	7
Vacant	2	2	3	5	6	0	1	1	0	20
Total Tax Lots	**12**	**21**	**39**	**18**	**16**	**1**	**3**	**2**	**0**	**112**

5. Vacant and Partially Vacant Tax Lots by Classification and Buildable Lot Size (in Acres)

	Buildable Acres in Tax Lots									
Classification	<0.25	>=0.25 and <0.50	>=0.50 and <1.00	>=1.00 and <2.00	>=2.00 and <5.00	>=5.00 and <10.00	>=10.00 and <20.00	>=20.00 and <50.00	50 and Over	Total
Buildable Acres in Tax Lots										
Partially Vacant	0	1	1	0	4	12	0	0	0	18
Vacant	0	1	2	7	17	0	11	21	0	60
Total Acres	**0**	**2**	**2**	**7**	**21**	**12**	**11**	**21**	**0**	**77**
Number of Tax Lots										
Partially Vacant	0	2	1	0	2	2	0	0	0	7
Vacant	2	2	3	5	6	0	1	1	0	20
Total Tax Lots	**2**	**4**	**4**	**5**	**8**	**2**	**1**	**1**	**0**	**27**

Appendix C. Buildable Lands Maps

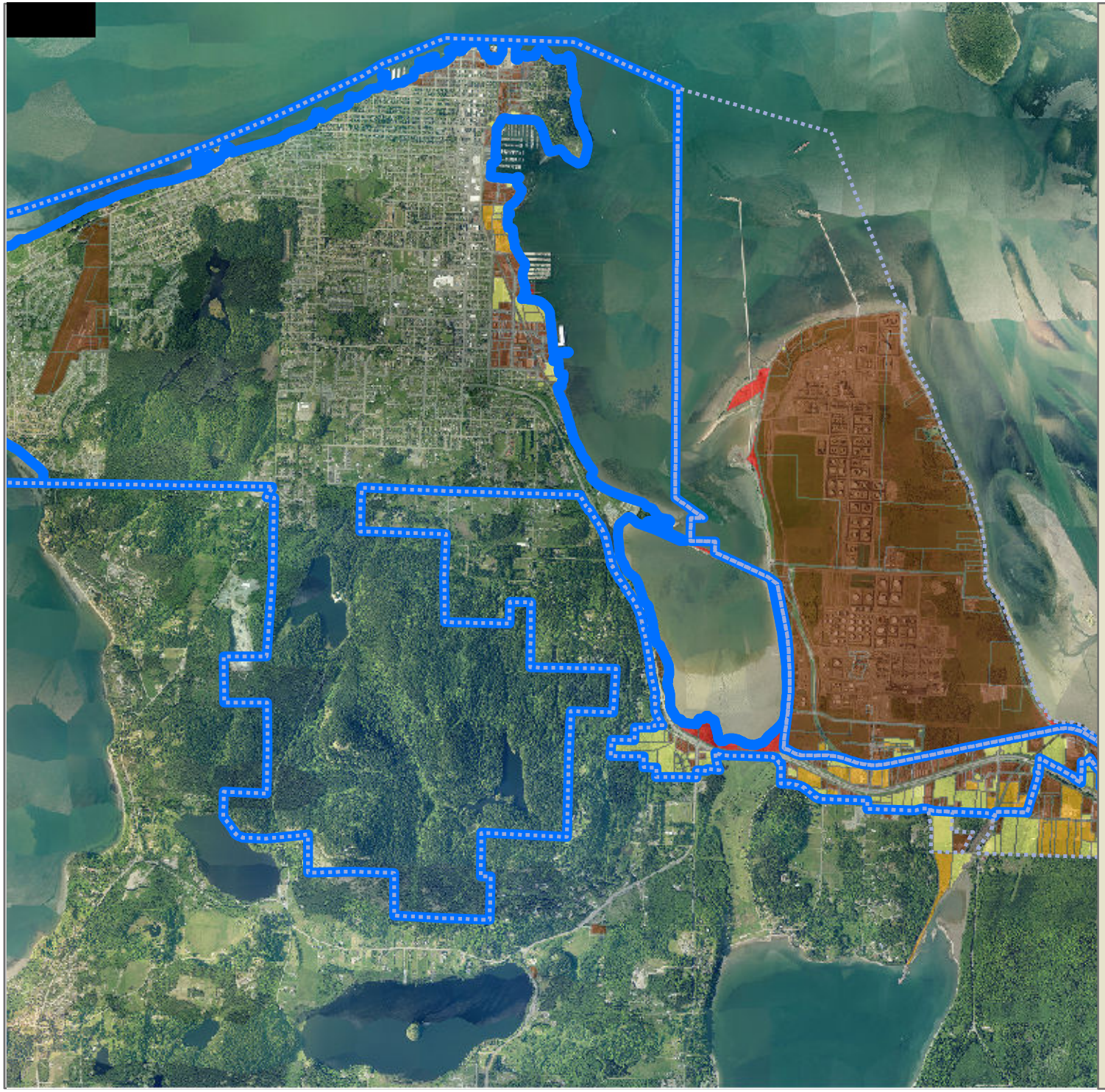
Appendix C presents maps for each UGA with industrial lands (note that the Lyman and Swinomish UGAs have no land included in the inventory). Each UGA has three maps:[12]

- Land Classification – shows lands included in the inventory by land classification (e.g., development status)
- Prohibitive Constraints and Land Classification – shows land by classification and prohibitive constraints (slopes over 15% and floodways)
- Vacant and Partially Vacant Land by Constraint – shows individual constraints and parcels designated as vacant or partially vacant.

This Appendix includes maps for the following UGAs:

- Anacortes
- Bayview Ridge
- Burlington
- Concrete
- Hamilton
- La Conner
- Mount Vernon
- Sedro-Woolley

[12] Due to size, nine maps are included for Mount Vernon , maps of the entire UGA, and maps of the northern portion and southern portion of the UGA.



Land Classifications Industrial Buildable Lands Inventory

Anacortes

Washington

Legend

- CityUGA
- CityLimits

Development Status

- Developed
- Partially Vacant
- Unbuildable
- Vacant

Anacortes Summary Statistics

Classification	Tax Lots	Acres by Status: Developed Acres	Fully Constrained Acres	Partially Constrained Acres	Buildable Acres	Total Acres
Developed	453	2,310	4	648	0	2,315
Unbuildable	17	0	67	60	0	67
Partially Vacant	25	40	1	19	97	138
Vacant	114	0	10	46	309	319
Total	**609**	**2,350**	**82**	**773**	**407**	**2,839**

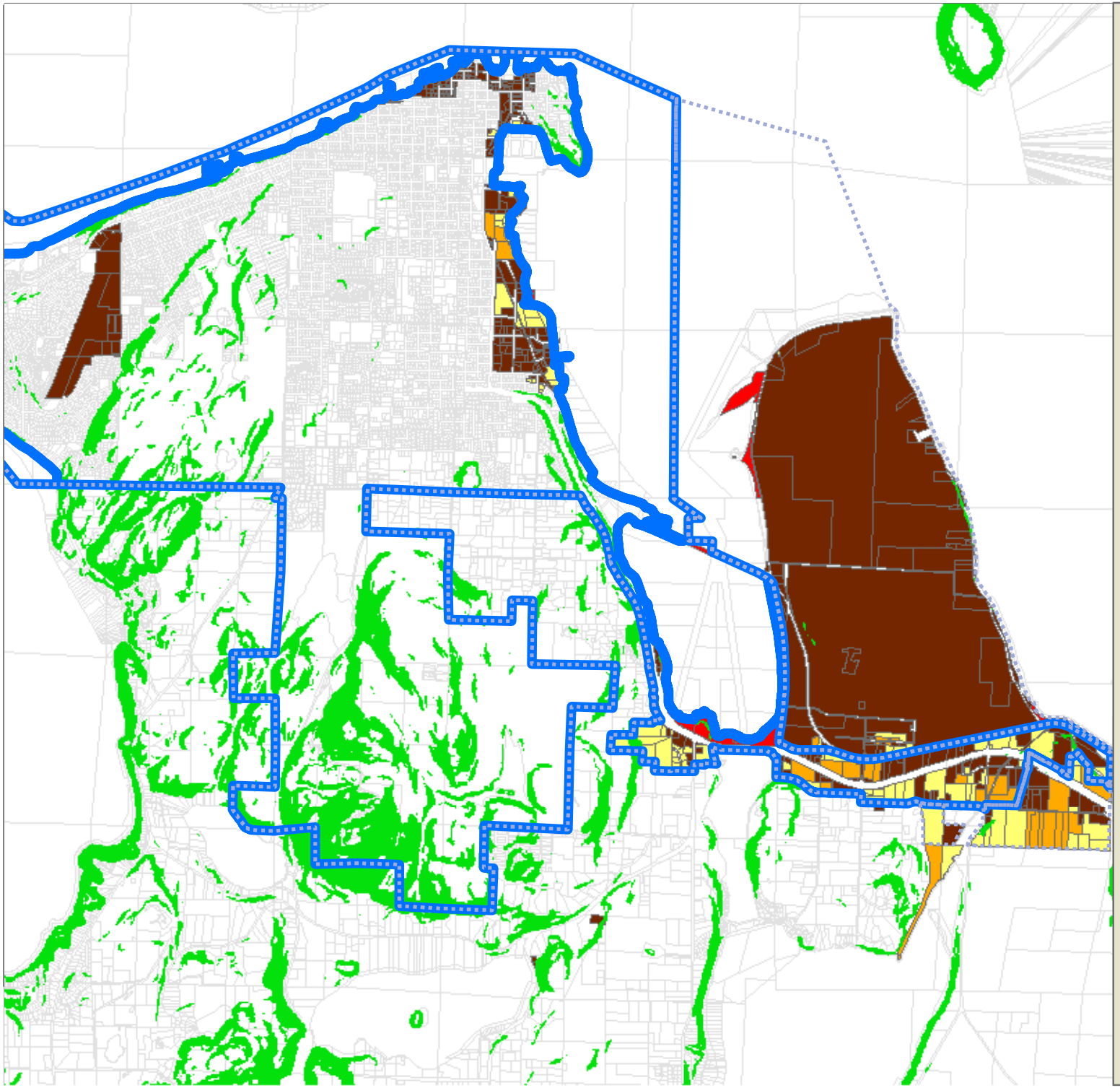
Note: Total acres = developed acres + fully constrained acres + buildable acres
Partially constrained acres can exist in developed or buildable areas

N

0 2,500 5,000

Feet

Cartography/GIS: ECONorthwest, February 2014



Land Classifications and Prohibitive Constraints

Anacortes

Washington

Legend

- CityUGA
- CityLimits
- Slopes over 15%
- SkagitFloodway

Development Status

- Developed
- Partially Vacant
- Unbuildable
- Vacant
- Parcels

Anacortes Summary Statistics

		Acres by Status				
Classification	Tax Lots	Developed Acres	Fully Constrained Acres	Partially Constrained Acres	Buildable Acres	Total Acres
Developed	453	2,310	4	648	0	2,315
Unbuildable	17	0	67	60	0	67
Partially Vacant	25	40	1	19	97	138
Vacant	114	0	10	46	309	319
Total	**609**	**2,350**	**82**	**773**	**407**	**2,839**

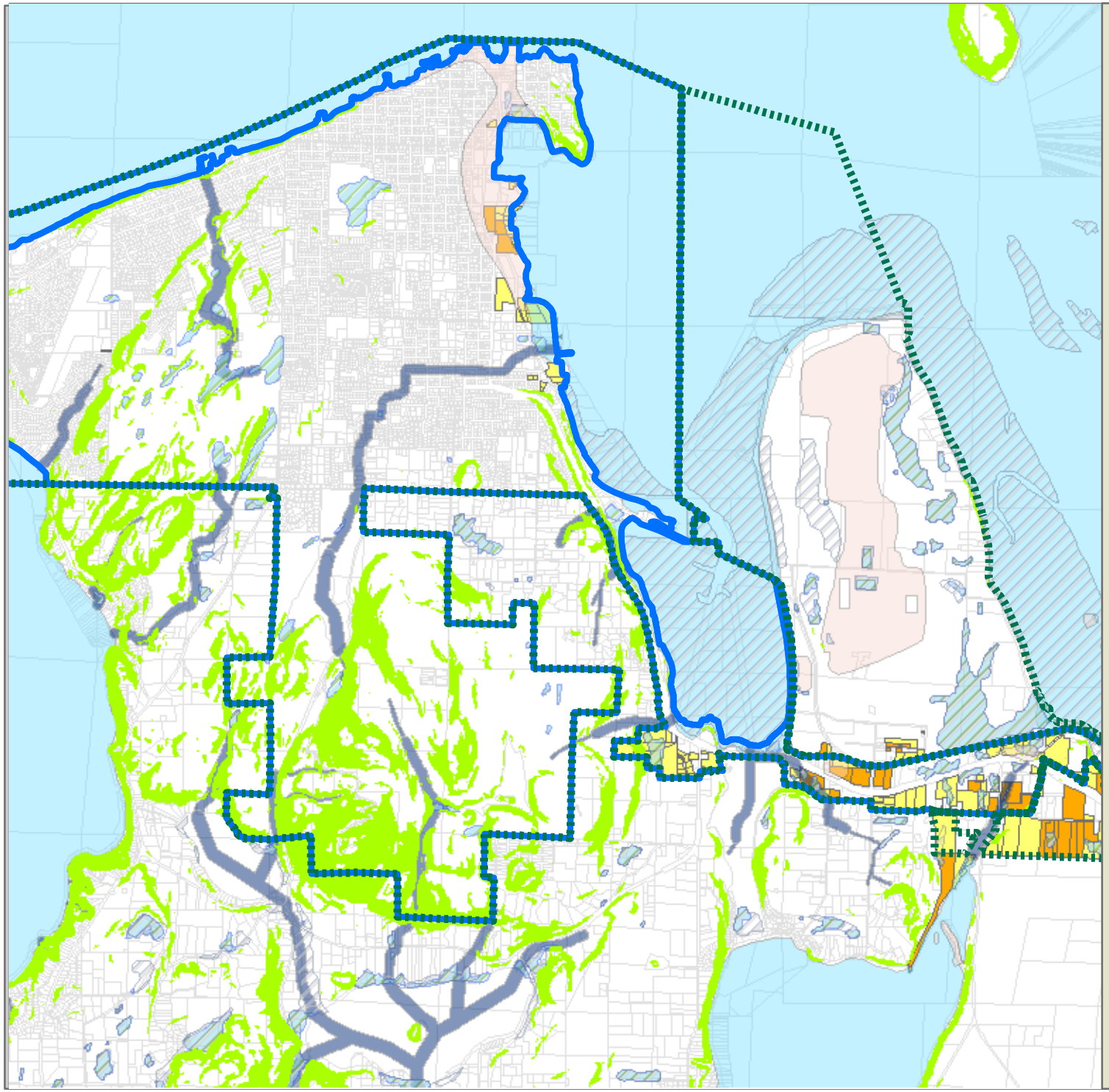
Note: Total acres = developed acres + fully constrained acres + buildable acres
Partially constrained acres can exist in developed or buildable areas

N

0 2,500 5,000

Feet

Cartography/GIS: ECONorthwest, February 2014



Vacant and Partially Vacant Industrial Land and Development Constraints

Anacortes

Washington

Legend

- CityUGA
- CityLimits
- Slope >15%
- Floodway (prohibitive)
- Liquifaction Zone
- Aerial Wetland Interpretation
- Wetlands (NWI)
- Waterway buffer
- 100-yr Floodplain

Development Status

- Developed
- Partially Vacant
- Unbuildable
- Vacant
- Parcels

Anacortes Buildable Acres by Lot Size

	Buildable Acres in Tax Lots									
Classification	<0.25	>=0.25 and <0.50	>=0.50 and <1.00	>=1.00 and <2.00	>=2.00 and <5.00	>=5.00 and <10.00	>=10.00 and <20.00	>=20.00 and <50.00	50 and Over	Total
Buildable Acres in Tax Lots										
Partially Vacant	0	0	1	7	45	44	0	0	0	97
Vacant	1	4	20	34	76	66	109	0	0	309
Total Acres	**1**	**4**	**20**	**41**	**121**	**111**	**109**	**0**	**0**	**407**
Number of Tax Lots										
Partially Vacant	0	0	1	5	13	6	0	0	0	25
Vacant	12	11	24	25	24	10	8	0	0	114
Total Tax Lots	**12**	**11**	**25**	**30**	**37**	**16**	**8**	**0**	**0**	**139**

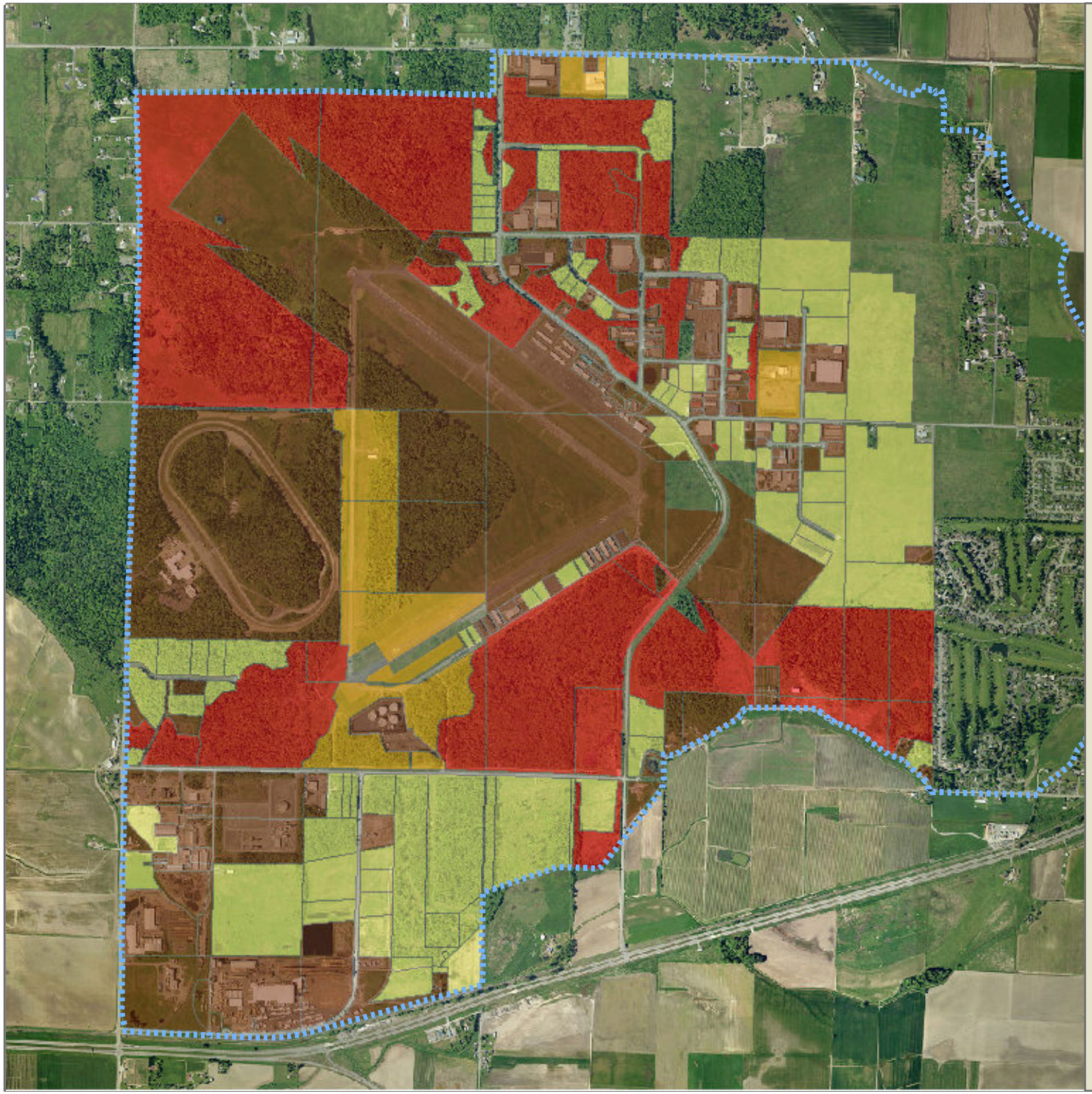
Note: Slopes over 15% and Floodways are considered "prohibitive constraints" that preclude development. Other constraints can be mitigated and are not considered unbuildable.

N

0 2,500 5,000

Feet

Cartography/GIS: ECONorthwest, February 2014



Land Classifications Industrial Buildable Lands Inventory

Bayview Ridge

Washington

Legend

- CityUGA
- CityLimits

Development Status

- Developed
- Partially Vacant
- Unbuildable
- Vacant

Bayview Ridge Summary Statistics

Classification	Tax Lots	Acres by Status: Developed Acres	Fully Constrained Acres	Partially Constrained Acres	Buildable Acres	Total Acres
Developed	159	1,298	8	126	0	1,306
Unbuildable	39	0	928	0	0	928
Partially Vacant	7	11	63	0	89	163
Vacant	98	0	0	36	635	635
Total	**303**	**1,309**	**1,000**	**163**	**724**	**3,033**

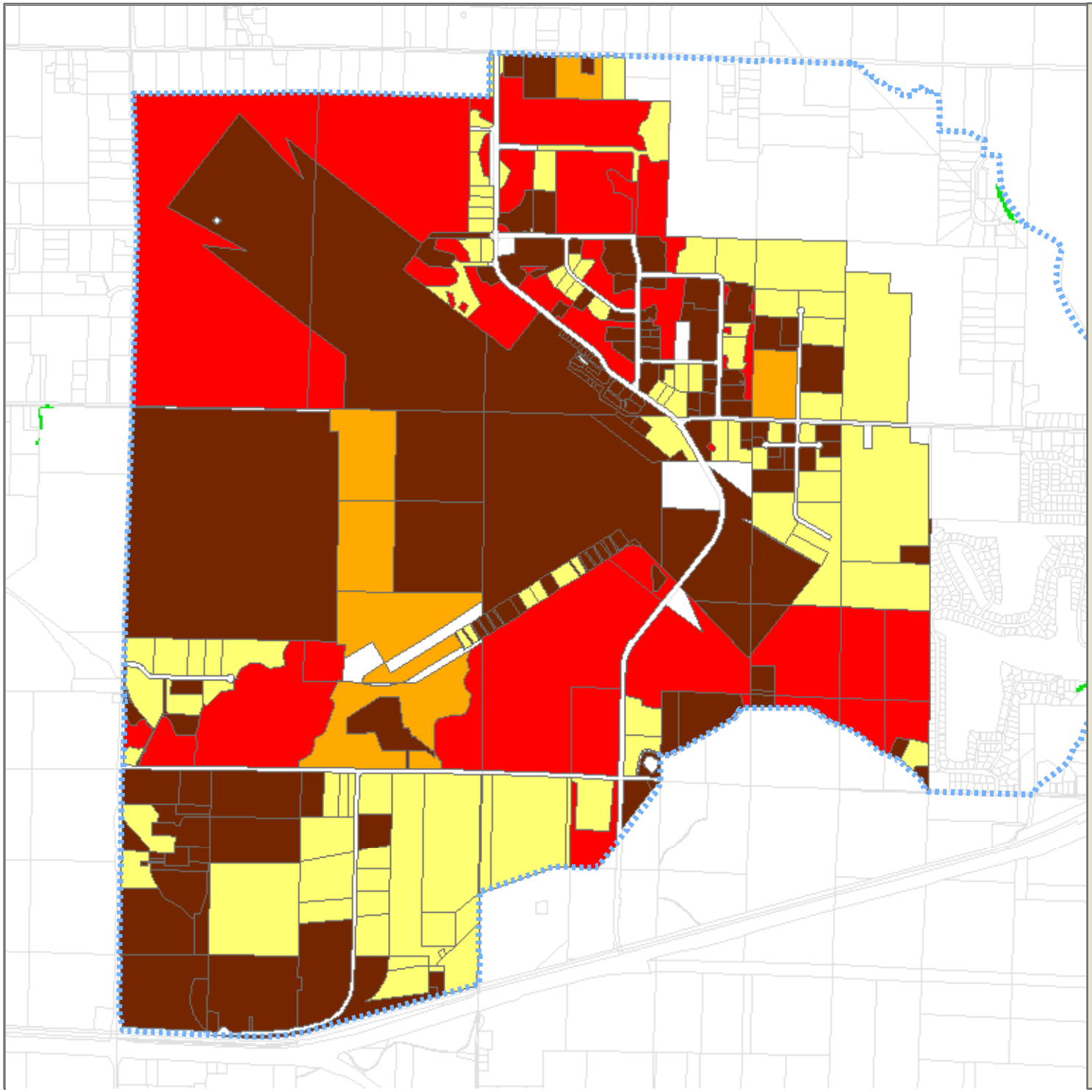
Note: Total acres = developed acres + fully constrained acres + buildable acres
Partially constrained acres can exist in developed or buildable areas

N

0 2,500 5,000

Feet

Cartography/GIS: ECONorthwest, February 2014



Land Classifications and Prohibitive Constraints

Bayview Ridge

Washington

Legend

- CityUGA
- CityLimits
- Slope >15%
- SkagitFloodway

Development Status

- Developed
- Partially Vacant
- Unbuildable
- Vacant
- Parcels

Bayview Ridge Summary Statistics

Classification	Tax Lots	Acres by Status: Developed Acres	Fully Constrained Acres	Partially Constrained Acres	Buildable Acres	Total Acres
Developed	159	1,298	8	126	0	1,306
Unbuildable	39	0	928	0	0	928
Partially Vacant	7	11	63	0	89	163
Vacant	98	0	0	36	635	635
Total	**303**	**1,309**	**1,000**	**163**	**724**	**3,033**

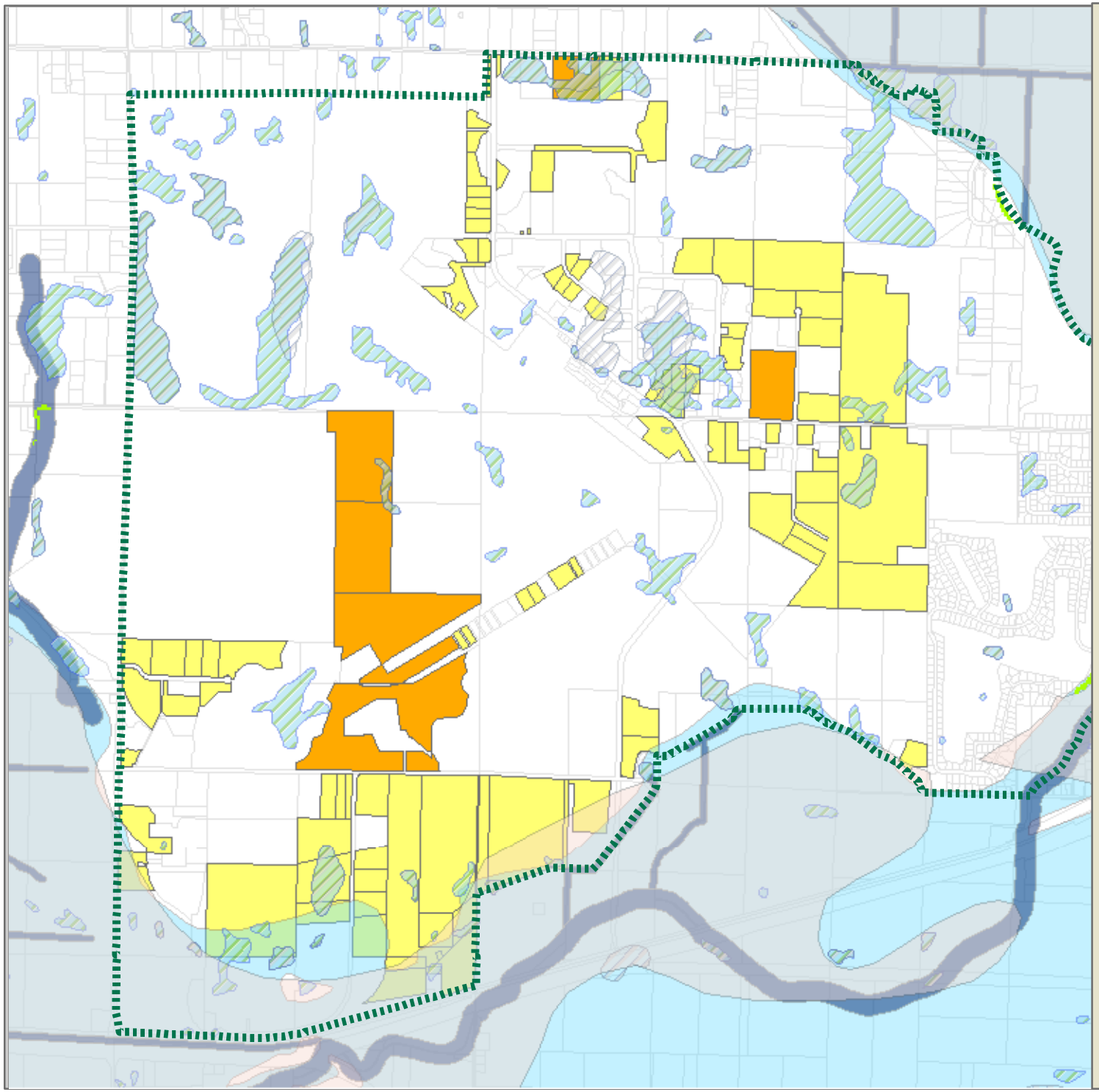
Note: Total acres = developed acres + fully constrained acres + buildable acres
Partially constrained acres can exist in developed or buildable areas

N

0 2,500 5,000

Feet

Cartography/GIS: ECONorthwest, February 2014



Vacant and Partially Vacant Industrial Land and Development Constraints

Bayview Ridge

Washington

Legend

- CityUGA
- CityLimits
- Slope >15%
- Floodway (prohibitive)
- Liquifaction Zone
- Aerial Wetland Interpretation
- Wetlands (NWI)
- Waterway buffer
- 100-yr Floodplain

Development Status

- Developed
- Partially Vacant
- Unbuildable
- Vacant
- Parcels

Bayview Ridge Buildable Acres by Lot Size

	Buildable Acres in Tax Lots									
Classification	<0.25	>=0.25 and <0.50	>=0.50 and <1.00	>=1.00 and <2.00	>=2.00 and <5.00	>=5.00 and <10.00	>=10.00 and <20.00	>=20.00 and <50.00	50 and Over	Total
Buildable Acres in Tax Lots										
Partially Vacant	0	0	0	0	3	11	42	33	0	89
Vacant	0	0	6	37	81	158	57	240	55	635
Total Acres	**0**	**0**	**6**	**37**	**84**	**169**	**99**	**273**	**55**	**724**
Number of Tax Lots										
Partially Vacant	0	0	0	0	1	2	3	1	0	7
Vacant	3	1	8	26	25	23	4	7	1	98
Total Tax Lots	**3**	**1**	**8**	**26**	**26**	**25**	**7**	**8**	**1**	**105**

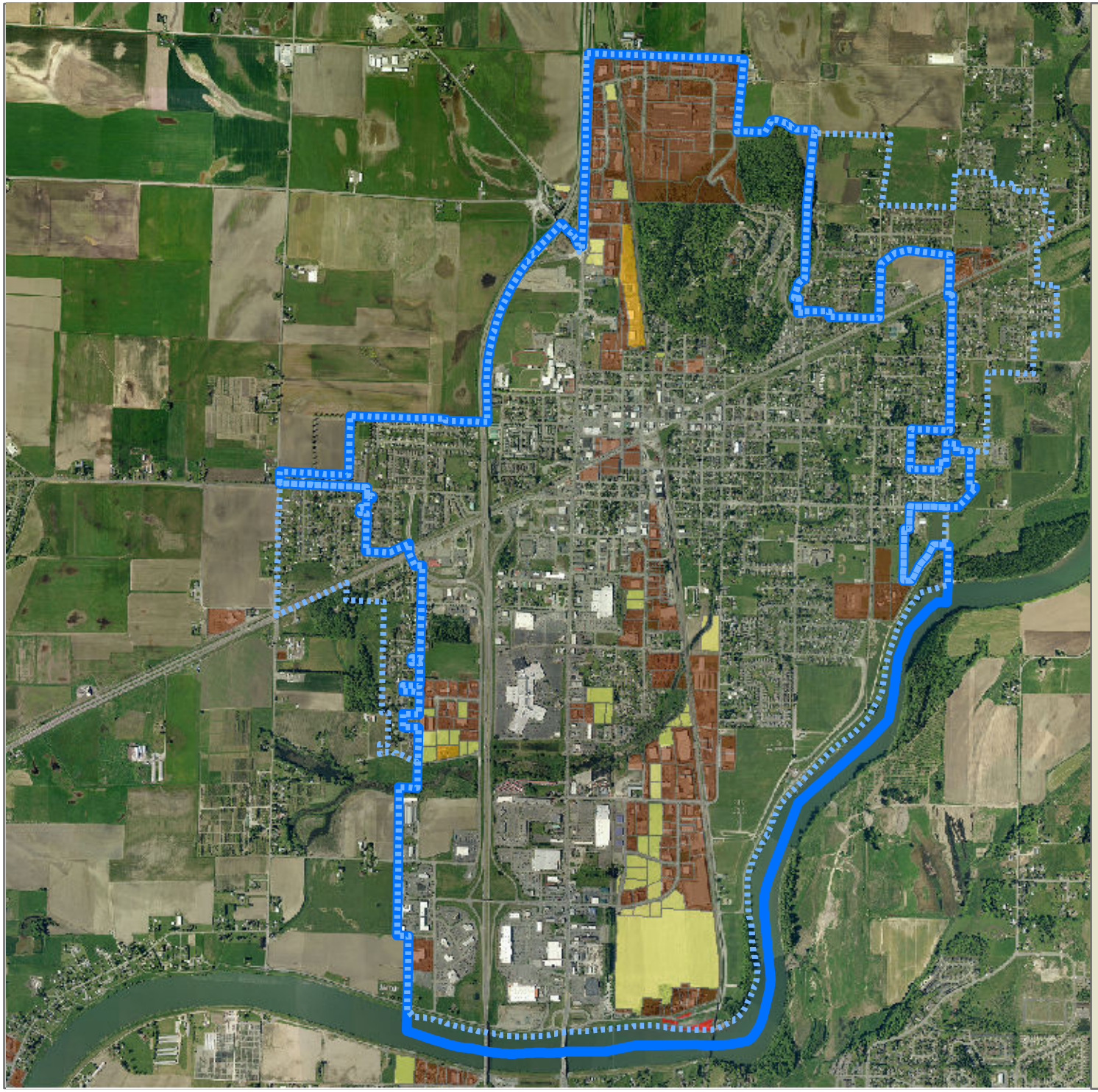
Note: Slopes over 15% and Floodways are considered "prohibitive constraints" that preclude development. Other constraints can be mitigated and are not considered unbuildable.

N

0 2,500 5,000

Feet

Cartography/GIS: ECONorthwest, February 2014



Land Classifications Industrial Buildable Lands Inventory

Burlington

Washington

Legend

CityUGA

CityLimits

Development Status

Developed

Partially Vacant

Unbuildable

Vacant

Burlington Summary Statistics

		Acres by Status				
		Developed	Fully Constrained	Partially Constrained	Buildable	Total
Classification	Tax Lots	Acres	Acres	Acres	Acres	Acres
Developed	226	356	12	341	0	368
Unbuildable	4	0	3	3	0	3
Partially Vacant	2	13	0	13	1	14
Vacant	48	0	0	117	122	122
Total	**280**	**368**	**15**	**474**	**123**	**507**

Note: Total acres = developed acres + fully constrained acres + buildable acres

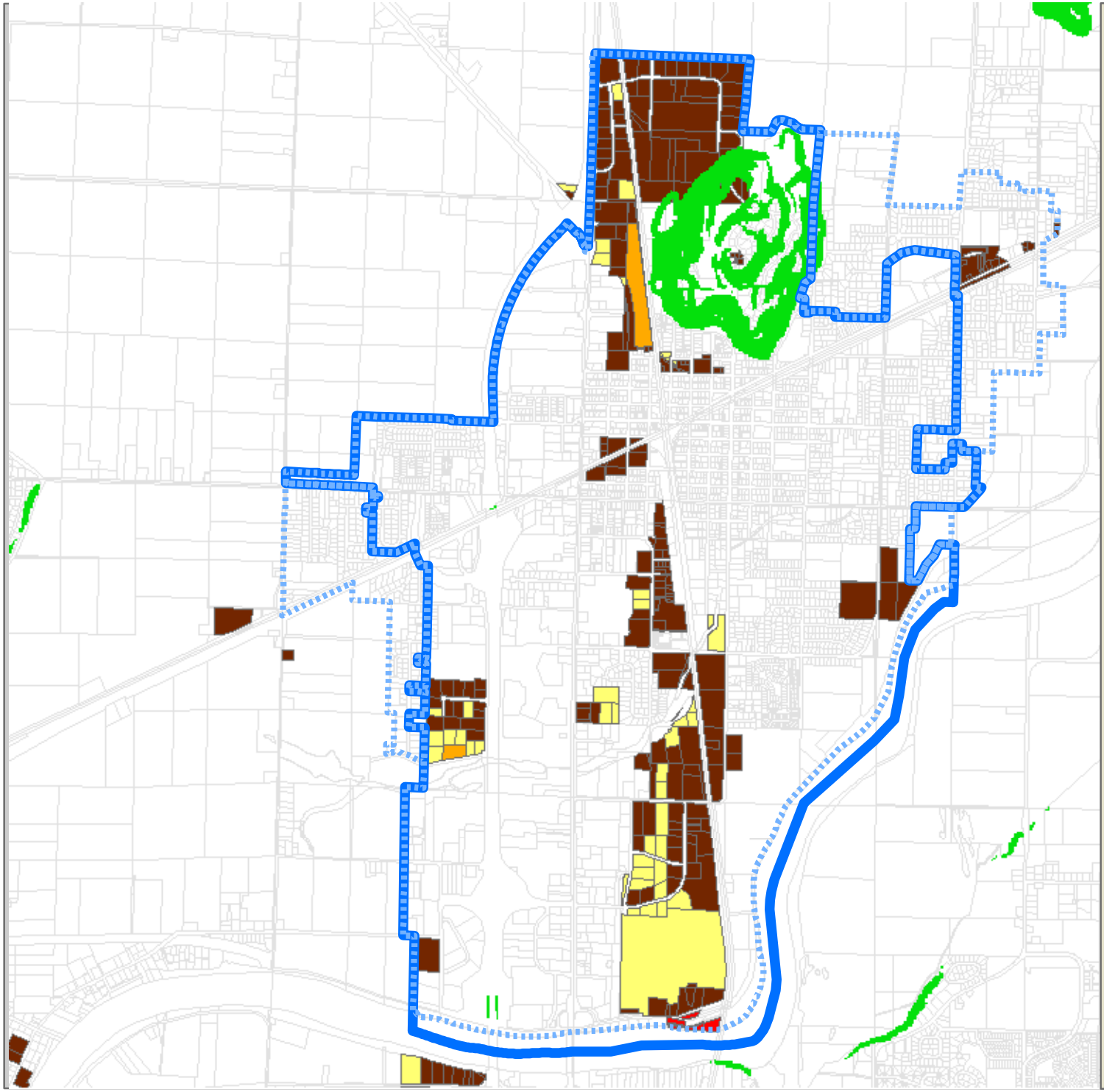
Partially constrained acres can exist in developed or buildable areas

N

0 2,500 5,000

Feet

Cartography/GIS: ECONorthwest, February 2014



Land Classifications and Prohibitive Constraints

Burlington

Washington

Legend

- CityUGA
- CityLimits
- Slope >15%
- SkagitFloodway

Development Status

- Developed
- Partially Vacant
- Unbuildable
- Vacant
- Parcels

Burlington Summary Statistics

		Acres by Status				
		Developed	Fully Constrained	Partially Constrained	Buildable	Total
Classification	Tax Lots	Acres	Acres	Acres	Acres	Acres
Developed	226	356	12	341	0	368
Unbuildable	4	0	3	3	0	3
Partially Vacant	2	13	0	13	1	14
Vacant	48	0	0	117	122	122
Total	**280**	**368**	**15**	**474**	**123**	**507**

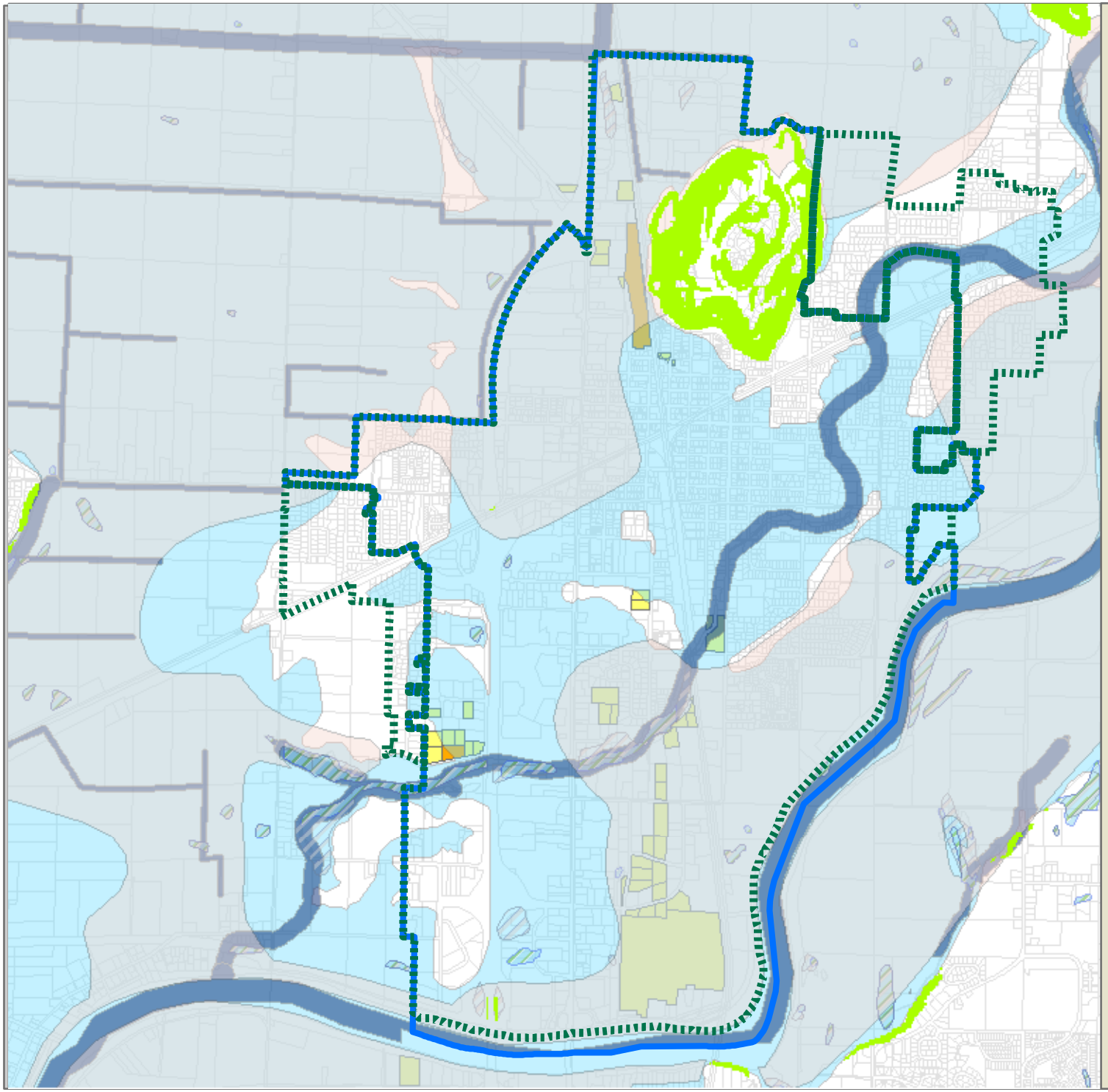
Note: Total acres = developed acres + fully constrained acres + buildable acres
Partially constrained acres can exist in developed or buildable areas

N

0 2,500 5,000

Feet

Cartography/GIS: ECONorthwest, February 2014



Vacant and Partially Vacant Industrial Land and Development Constraints

Burlington

Washington

Legend

- CityUGA
- CityLimits
- Slope >15%
- Floodway (prohibitive)
- Liquifaction Zone
- Aerial Wetland Interpretation
- Wetlands (NWI)
- Waterway buffer
- 100-yr Floodplain

Development Status

- Developed
- Partially Vacant
- Unbuildable
- Vacant
- Parcels

Burlington Buildable Acres by Lot Size

	Buildable Acres in Tax Lots									
Classification	<0.25	>=0.25 and <0.50	>=0.50 and <1.00	>=1.00 and <2.00	>=2.00 and <5.00	>=5.00 and <10.00	>=10.00 and <20.00	>=20.00 and <50.00	50 and Over	Total
Buildable Acres in Tax Lots										
Partially Vacant	0	0	0	1	0	0	0	0	0	1
Vacant	0	1	5	40	14	0	0	0	62	122
Total Acres	**0**	**1**	**5**	**41**	**14**	**0**	**0**	**0**	**62**	**123**
Number of Tax Lots										
Partially Vacant	1	0	0	1	0	0	0	0	0	2
Vacant	6	2	7	27	5	0	0	0	1	48
Total Tax Lots	**7**	**2**	**7**	**28**	**5**	**0**	**0**	**0**	**1**	**50**

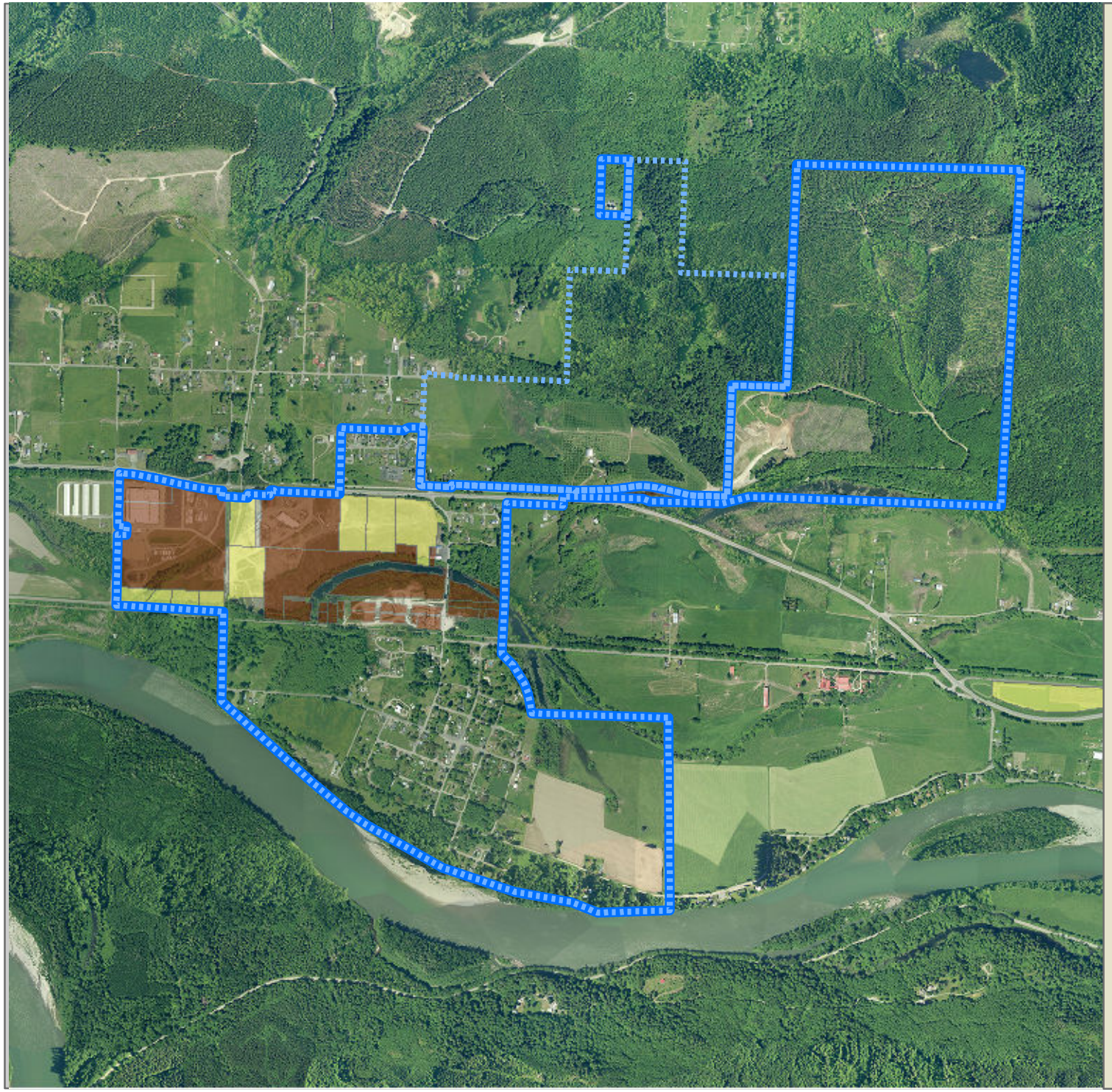
Note: Slopes over 15% and Floodways are considered "prohibitive constraints" that preclude development. Other constraints can be mitigated and are not considered unbuildable.

N

0 2,500 5,000

Feet

Cartography/GIS: ECONorthwest, February 2014



Land Classifications Industrial Buildable Lands Inventory

Hamilton

Washington

Legend

CityUGA

CityLimits

Development Status

Developed

Partially Vacant

Unbuildable

Vacant

Hamilton Summary Statistics

		Acres by Status				
Classification	Tax Lots	Developed Acres	Fully Constrained Acres	Partially Constrained Acres	Buildable Acres	Total Acres
Developed	27	90	2	70	0	92
Unbuildable	0	0	0	0	0	0
Partially Vacant	0	0	0	0	0	0
Vacant	9	0	6	28	28	34
Total	**36**	**90**	**8**	**97**	**28**	**125**

Note: Total acres = developed acres + fully constrained acres + buildable acres

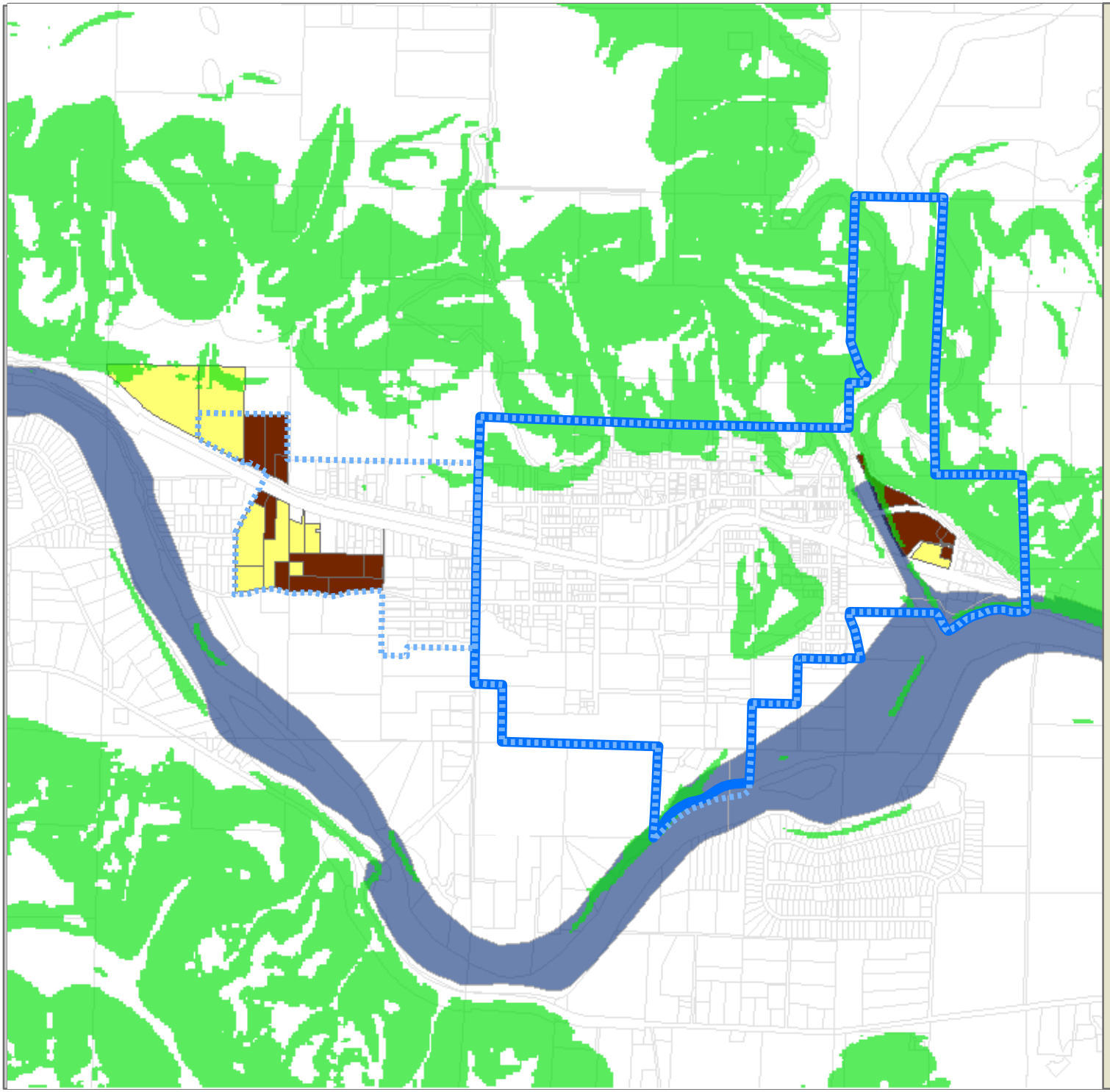
Partially constrained acres can exist in developed or buildable areas

N

0 2,500 5,000

Feet

Cartography/GIS: ECONorthwest, February 2014



Land Classifications and Prohibitive Constraints

Concrete

Washington

Legend

- CityUGA
- CityLimits
- Slope >15%
- SkagitFloodway

Development Status

- Developed
- Partially Vacant
- Unbuildable
- Vacant
- Parcels

Concrete Summary Statistics

Classification	Tax Lots	Acres by Status: Developed Acres	Fully Constrained Acres	Partially Constrained Acres	Buildable Acres	Total Acres
Developed	15	41	4	43	0	45
Unbuildable	0	0	0	0	0	0
Partially Vacant	0	0	0	0	0	0
Vacant	7	0	0	25	25	25
Total	**22**	**41**	**4**	**67**	**25**	**69**

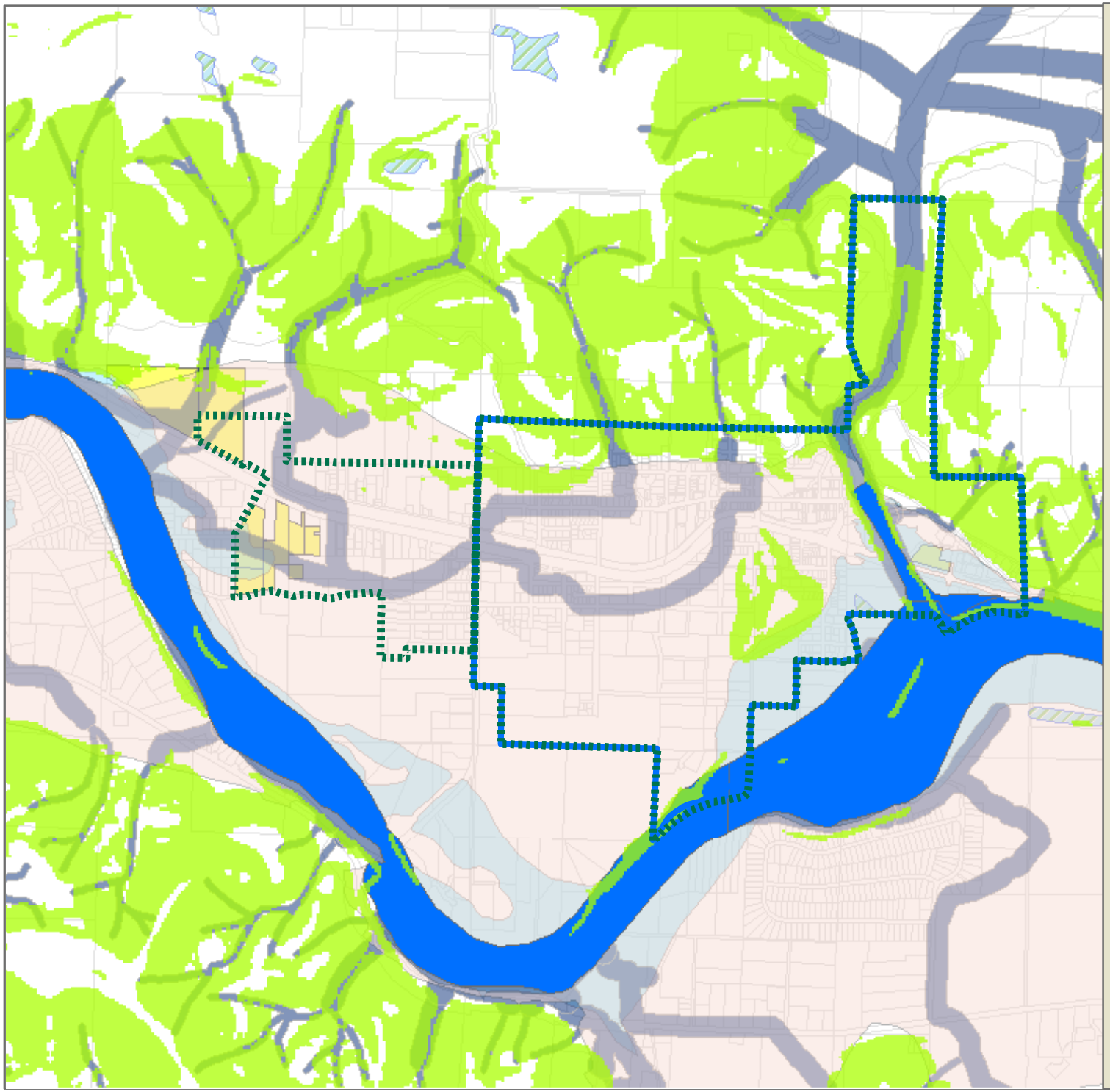
Note: Total acres = developed acres + fully constrained acres + buildable acres
Partially constrained acres can exist in developed or buildable areas

N

0 2,500 5,000

Feet

Cartography/GIS: ECONorthwest, February 2014



Vacant and Partially Vacant Industrial Land and Development Constraints

Concrete

Washington

Legend

- CityUGA
- CityLimits
- Slope >15%
- Floodway (prohibitive)
- Liquifaction Zone
- Aerial Wetland Interpretation
- Wetlands (NWI)
- Waterway buffer
- 100-yr Floodplain

Development Status

- Developed
- Partially Vacant
- Unbuildable
- Vacant
- Parcels

Concrete Buildable Acres by Lot Size

	Buildable Acres in Tax Lots									
Classification	<0.25	>=0.25 and <0.50	>=0.50 and <1.00	>=1.00 and <2.00	>=2.00 and <5.00	>=5.00 and <10.00	>=10.00 and <20.00	>=20.00 and <50.00	50 and Over	Total
Buildable Acres in Tax Lots										
Partially Vacant	0	0	0	0	0	0	0	0	0	0
Vacant	0	0	1	0	10	13	0	0	0	25
Total Acres	**0**	**0**	**1**	**0**	**10**	**13**	**0**	**0**	**0**	**25**
Number of Tax Lots										
Partially Vacant	0	0	0	0	0	0	0	0	0	0
Vacant	0	0	1	0	4	2	0	0	0	7
Total Tax Lots	**0**	**0**	**1**	**0**	**4**	**2**	**0**	**0**	**0**	**7**

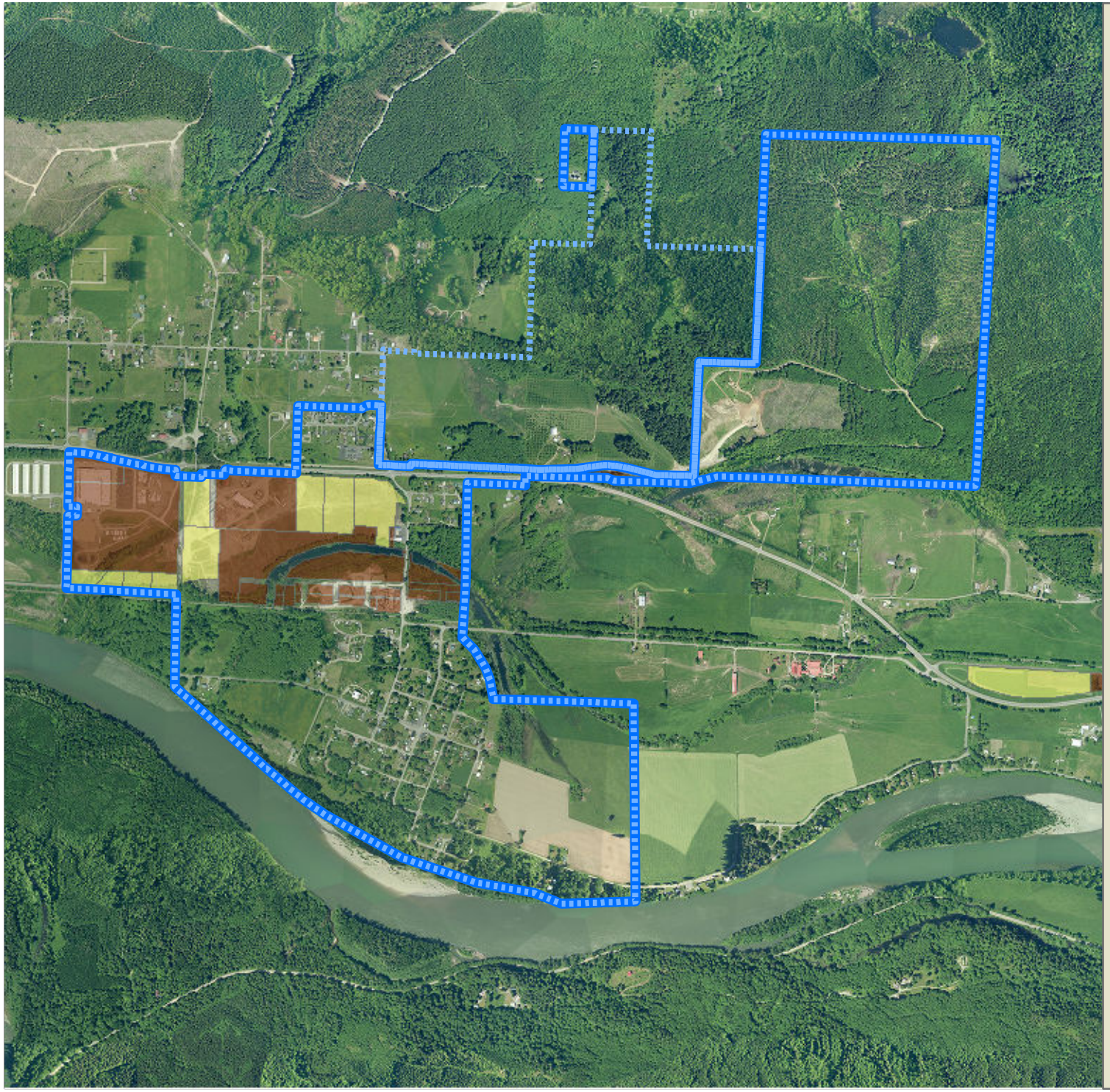
Note: Slopes over 15% and Floodways are considered "prohibitive constraints" that preclude development. Other constraints can be mitigated and are not considered unbuildable.

N

0 2,500 5,000

Feet

Cartography/GIS: ECONorthwest, February 2014



Land Classifications Industrial Buildable Lands Inventory

Hamilton

Washington

Legend

- CityUGA
- CityLimits

Development Status

- Developed
- Partially Vacant
- Unbuildable
- Vacant

Hamilton Summary Statistics

Classification	Tax Lots	Acres by Status: Developed Acres	Fully Constrained Acres	Partially Constrained Acres	Buildable Acres	Total Acres
Developed	27	90	2	70	0	92
Unbuildable	0	0	0	0	0	0
Partially Vacant	0	0	0	0	0	0
Vacant	9	0	6	28	28	34
Total	**36**	**90**	**8**	**97**	**28**	**125**

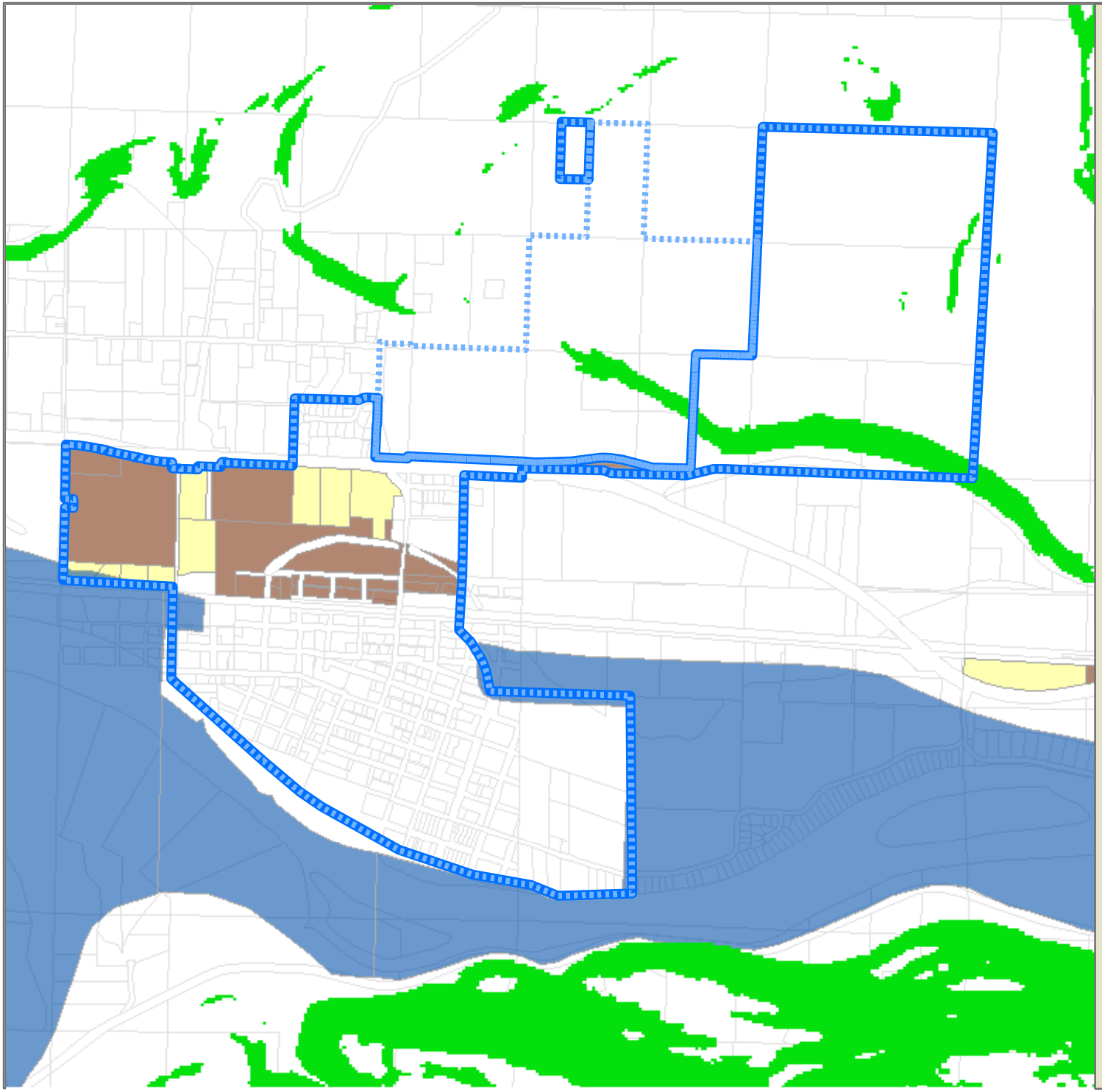
Note: Total acres = developed acres + fully constrained acres + buildable acres
Partially constrained acres can exist in developed or buildable areas

N

0 2,500 5,000

Feet

Cartography/GIS: ECONorthwest, February 2014



Land Classifications and Prohibitive Constraints

Hamilton

Washington

Legend

- CityUGA
- CityLimits
- Slope >15%
- SkagitFloodway

Development Status

- Developed
- Partially Vacant
- Unbuildable
- Vacant
- Parcels

Hamilton Summary Statistics

		Acres by Status				
Classification	Tax Lots	Developed Acres	Fully Constrained Acres	Partially Constrained Acres	Buildable Acres	Total Acres
Developed	27	90	2	70	0	92
Unbuildable	0	0	0	0	0	0
Partially Vacant	0	0	0	0	0	0
Vacant	9	0	6	28	28	34
Total	**36**	**90**	**8**	**97**	**28**	**125**

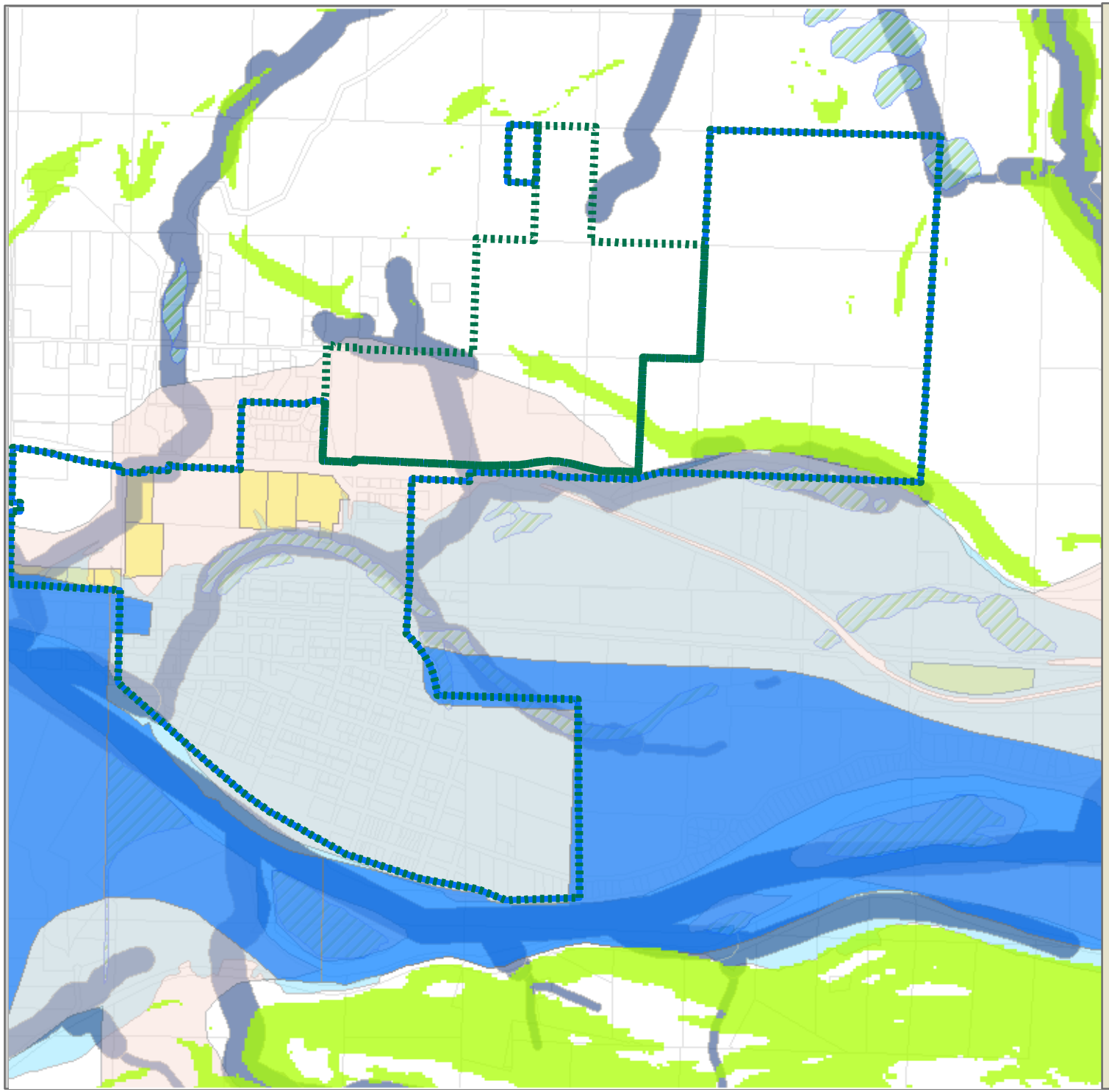
Note: Total acres = developed acres + fully constrained acres + buildable acres
Partially constrained acres can exist in developed or buildable areas

N

0 2,500 5,000

Feet

Cartography/GIS: ECONorthwest, February 2014



Vacant and Partially Vacant Industrial Land and Development Constraints

Hamilton

Washington

Legend

- CityUGA
- CityLimits
- Slope >15%
- Floodway (prohibitive)
- Liquifaction Zone
- Aerial Wetland Interpretation
- Wetlands (NWI)
- Waterway buffer
- 100-yr Floodplain

Development Status

- Developed
- Partially Vacant
- Unbuildable
- Vacant
- Parcels

Hamilton Buildable Acres by Lot Size

	Buildable Acres in Tax Lots									
Classification	<0.25	>=0.25 and <0.50	>=0.50 and <1.00	>=1.00 and <2.00	>=2.00 and <5.00	>=5.00 and <10.00	>=10.00 and <20.00	>=20.00 and <50.00	50 and Over	Total
Buildable Acres in Tax Lots										
Partially Vacant	0	0	0	0	0	0	0	0	0	0
Vacant	0	1	0	0	9	18	0	0	0	28
Total Acres	**0**	**1**	**0**	**0**	**9**	**18**	**0**	**0**	**0**	**28**
Number of Tax Lots										
Partially Vacant	0	0	0	0	0	0	0	0	0	0
Vacant	2	2	0	0	2	3	0	0	0	9
Total Tax Lots	**2**	**2**	**0**	**0**	**2**	**3**	**0**	**0**	**0**	**9**

Note: Slopes over 15% and Floodways are considered "prohibitive constraints" that preclude development. Other constraints can be mitigated and are not considered unbuildable.

N

0 2,500 5,000

Feet

Cartography/GIS: ECONorthwest, February 2014

Land Classifications Industrial Buildable Lands Inventory

La Conner

Washington

Legend

- CityUGA
- CityLimits

Development Status

- Developed
- Partially Vacant
- Unbuildable
- Vacant

La Conner Summary Statistics

Classification	Tax Lots	Acres by Status: Developed Acres	Fully Constrained Acres	Partially Constrained Acres	Buildable Acres	Total Acres
Developed	26	30	0	28	0	30
Unbuildable	0	0	0	0	0	0
Partially Vacant	0	0	0	0	0	0
Vacant	1	0	1	0	2	2
Total	**27**	**30**	**1**	**28**	**2**	**60**

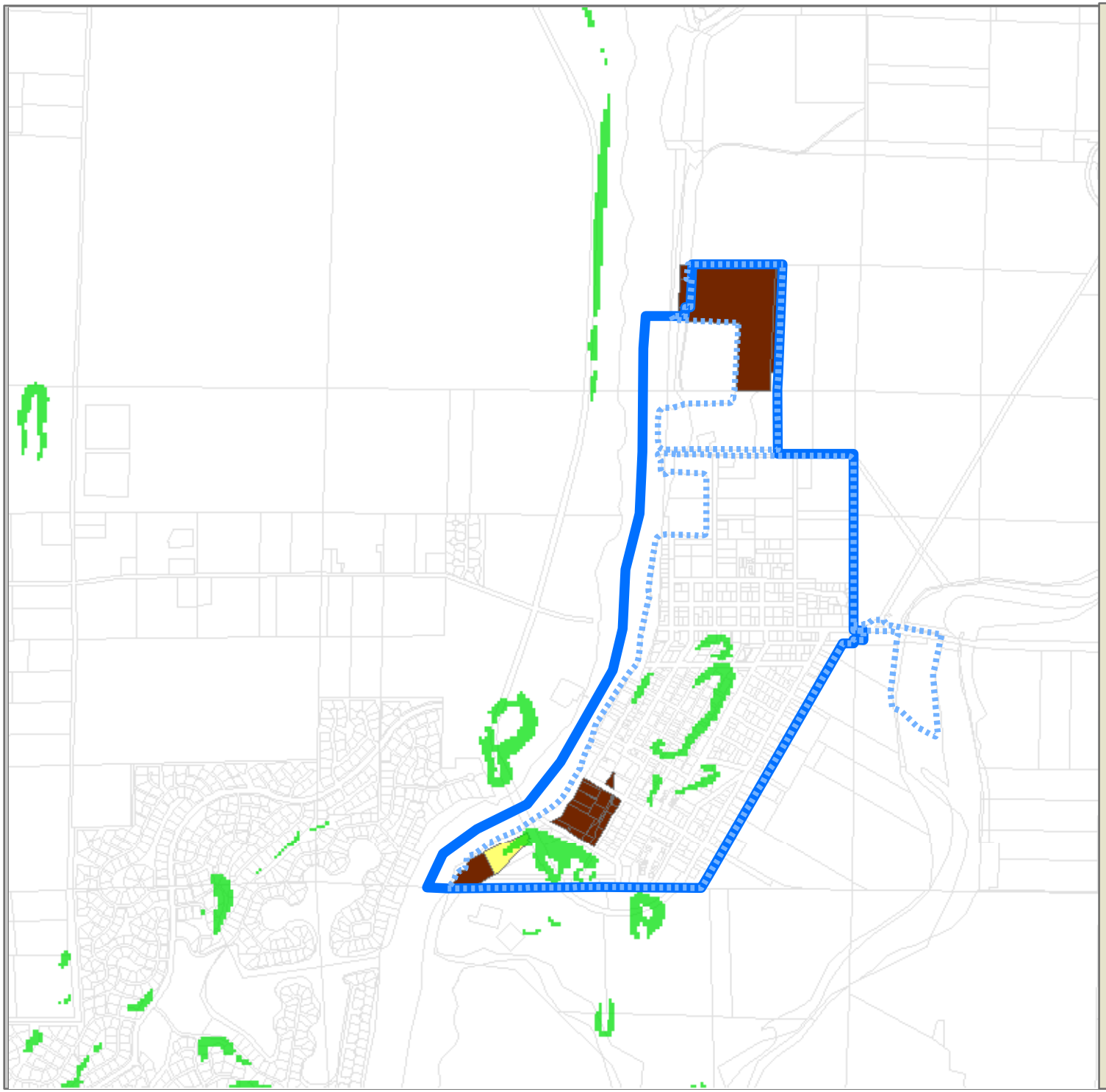
Note: Total acres = developed acres + fully constrained acres + buildable acres
Partially constrained acres can exist in developed or buildable areas

N

0 2,500 5,000

Feet

Cartography/GIS: ECONorthwest, February 2014



Land Classifications and Prohibitive Constraints

La Conner

Washington

Legend

- CityUGA
- CityLimits
- Slopes >15%
- SkagitFloodway

Development Status

- Developed
- Partially Vacant
- Unbuildable
- Vacant
- Parcels

La Conner Summary Statistics

Classification	Tax Lots	Acres by Status: Developed Acres	Fully Constrained Acres	Partially Constrained Acres	Buildable Acres	Total Acres
Developed	26	30	0	28	0	30
Unbuildable	0	0	0	0	0	0
Partially Vacant	0	0	0	0	0	0
Vacant	1	0	1	0	2	2
Total	**27**	**30**	**1**	**28**	**2**	**60**

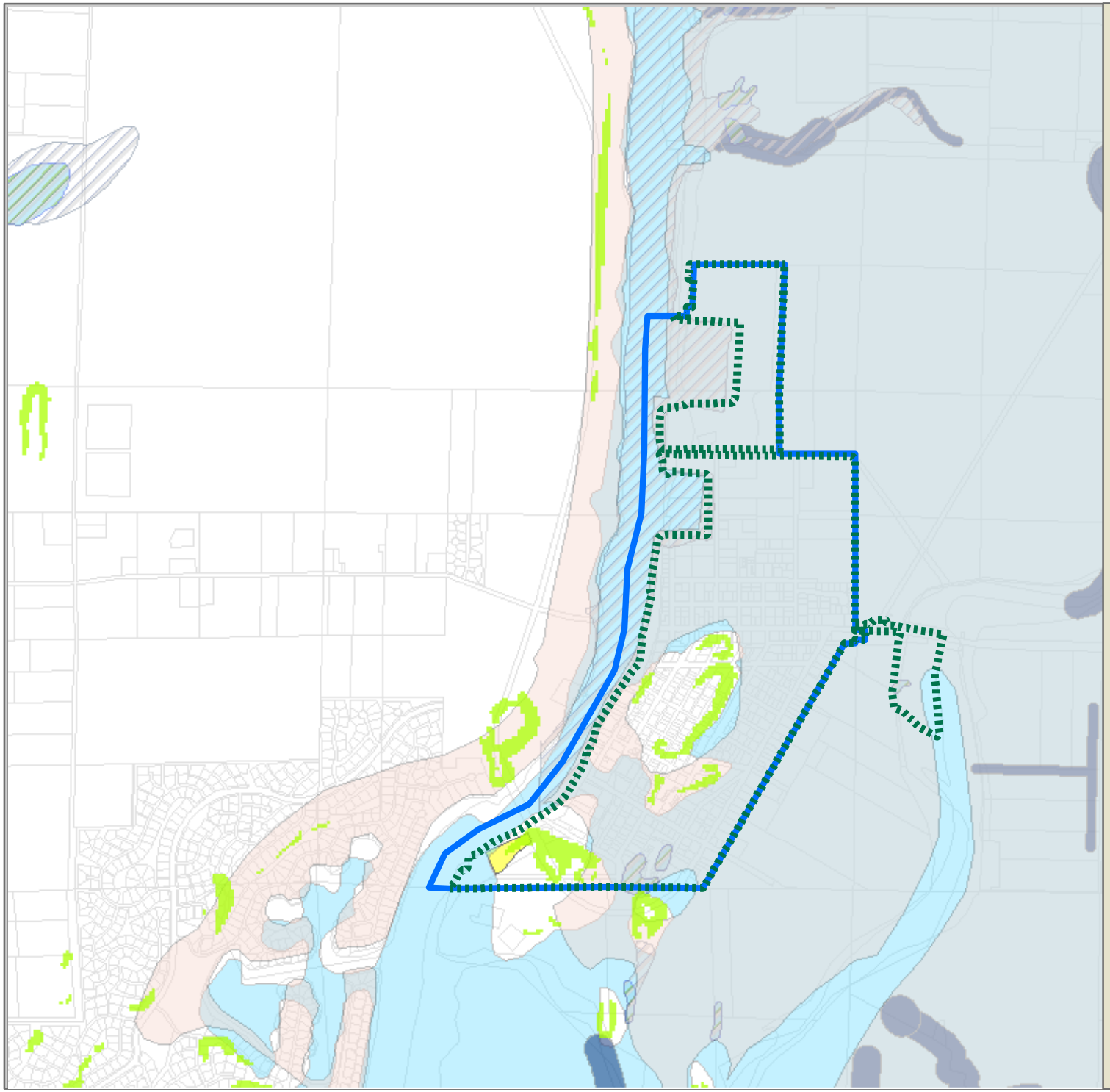
Note: Total acres = developed acres + fully constrained acres + buildable acres
Partially constrained acres can exist in developed or buildable areas

N

0 2,500 5,000

Feet

Cartography/GIS: ECONorthwest, February 2014



Vacant and Partially Vacant Industrial Land and Development Constraints

La Conner

Washington

Legend

- CityUGA
- CityLimits
- Slope >15%
- Floodway (prohibitive)
- Liquifaction Zone
- Aerial Wetland Interpretation
- Wetlands (NWI)
- Waterway buffer
- 100-yr Floodplain

Development Status

- Developed
- Partially Vacant
- Unbuildable
- Vacant
- Parcels

La Conner Buildable Acres by Lot Size

	Buildable Acres in Tax Lots									
Classification	<0.25	>=0.25 and <0.50	>=0.50 and <1.00	>=1.00 and <2.00	>=2.00 and <5.00	>=5.00 and <10.00	>=10.00 and <20.00	>=20.00 and <50.00	50 and Over	Total
Buildable Acres in Tax Lots										
Partially Vacant	0	0	0	0	0	0	0	0	0	0
Vacant	0	0	0	2	0	0	0	0	0	2
Total Acres	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**2**
Number of Tax Lots										
Partially Vacant	0	0	0	0	0	0	0	0	0	0
Vacant	0	0	0	1	0	0	0	0	0	1
Total Tax Lots	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**1**

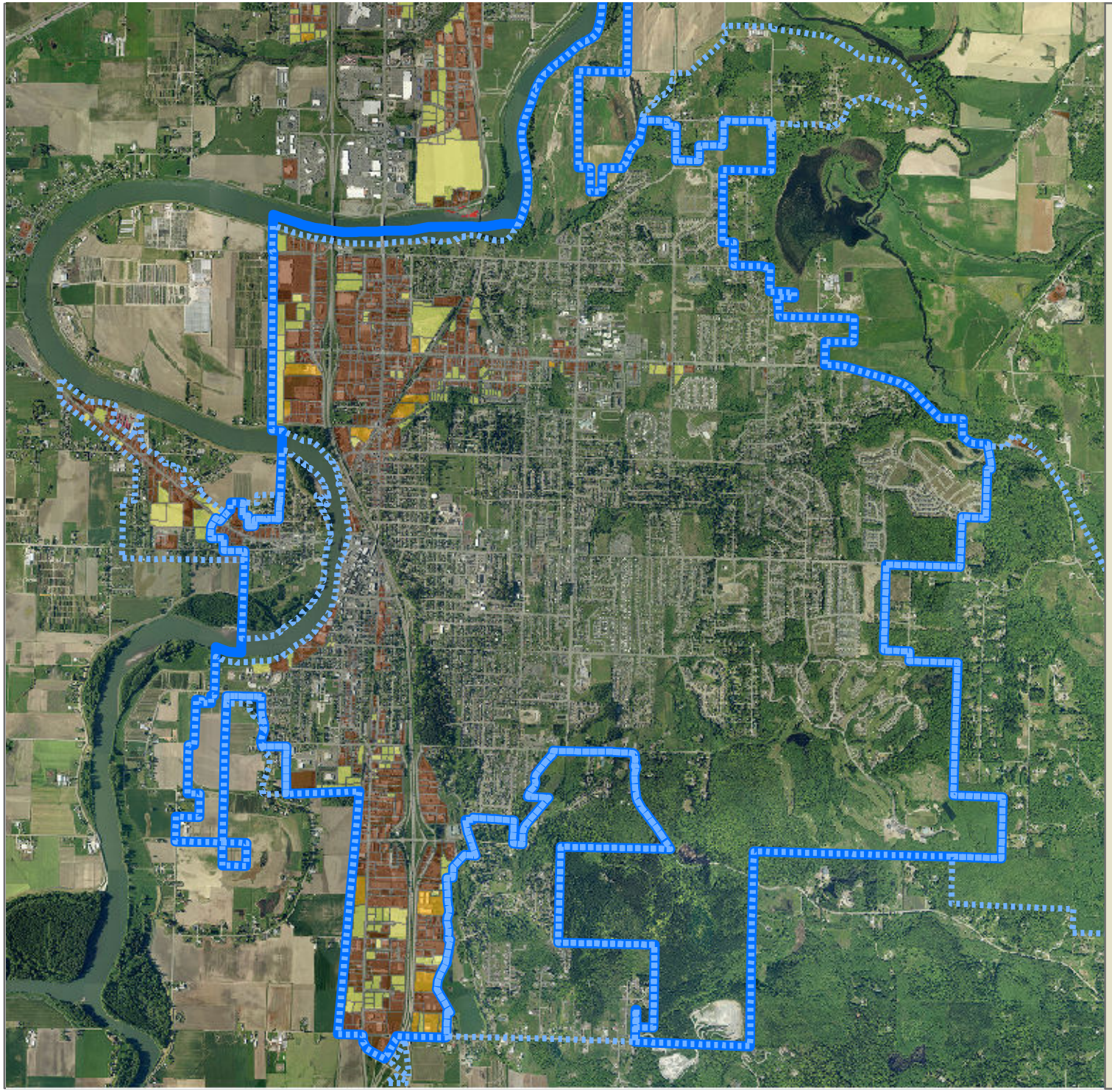
Note: Slopes over 15% and Floodways are considered "prohibitive constraints" that preclude development. Other constraints can be mitigated and are not considered unbuildable.

N

0 2,500 5,000

Feet

Cartography/GIS: ECONorthwest, February 2014



Land Classifications Industrial Buildable Lands Inventory

Mount Vernon

Washington

Legend

CityUGA

CityLimits

Development Status

Developed

Partially Vacant

Unbuildable

Vacant

Mount Vernon Summary Statistics

		Acres by Status				
Classification	Tax Lots	Developed Acres	Fully Constrained Acres	Partially Constrained Acres	Buildable Acres	Total Acres
Developed	867	803	1	756	0	804
Unbuildable	0	0	0	0	0	0
Partially Vacant	13	21	0	60	39	61
Vacant	154	0	1	223	227	228
Total	**1,034**	**824**	**2**	**1,040**	**267**	**1,093**

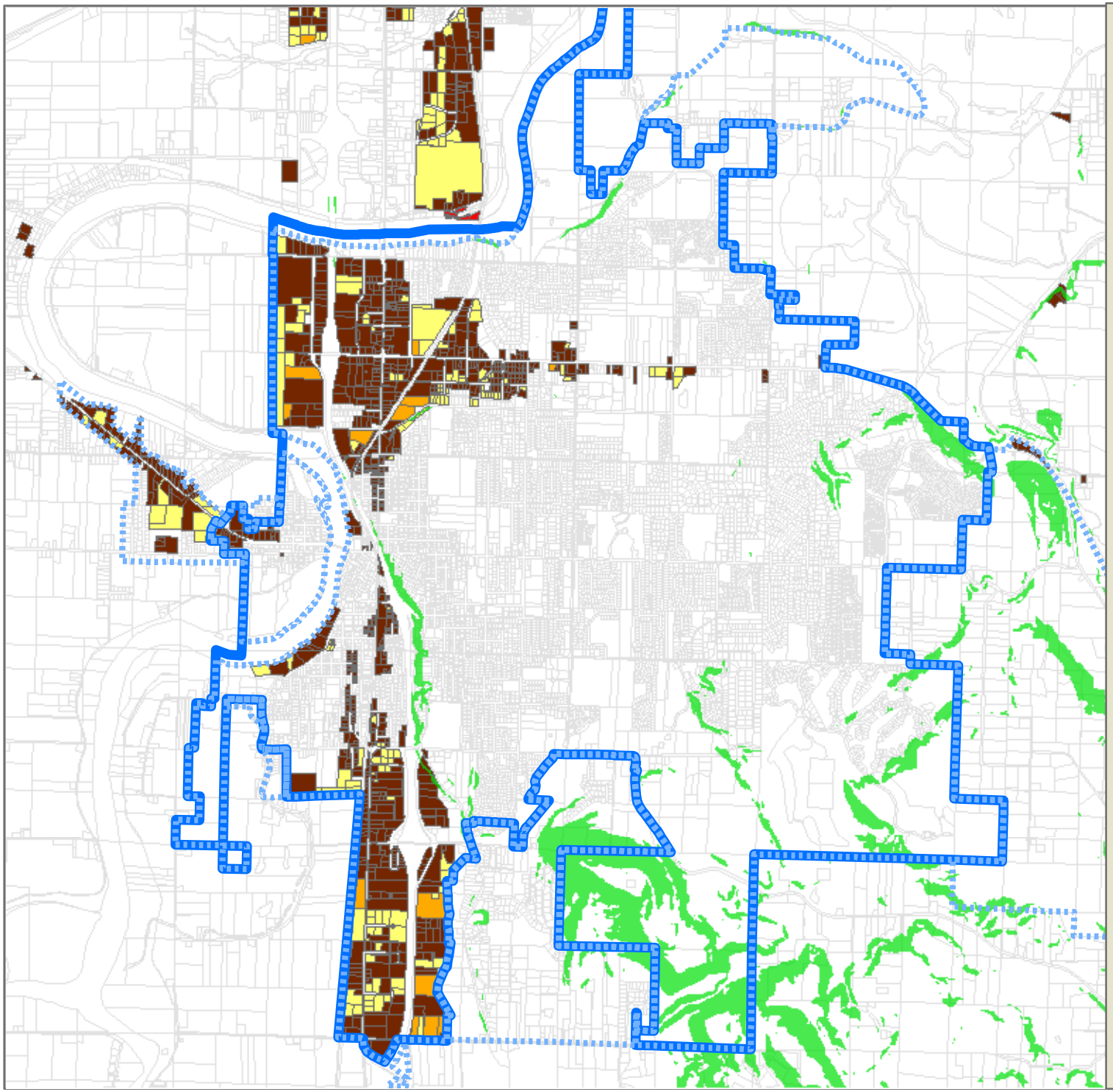
Note: Total acres = developed acres + fully constrained acres + buildable acres
Partially constrained acres can exist in developed or buildable areas

N

0 2,500 5,000

Feet

Cartography/GIS: ECONorthwest, February 2014



Land Classifications and Prohibitive Constraints

Mount Vernon

Washington

Legend

- CityUGA
- CityLimits
- Slopes >15%
- SkagitFloodway

Development Status

- Developed
- Partially Vacant
- Unbuildable
- Vacant
- Parcels

Mount Vernon Summary Statistics

Classification	Tax Lots	Acres by Status: Developed Acres	Fully Constrained Acres	Partially Constrained Acres	Buildable Acres	Total Acres
Developed	867	803	1	756	0	804
Unbuildable	0	0	0	0	0	0
Partially Vacant	13	21	0	60	39	61
Vacant	154	0	1	223	227	228
Total	**1,034**	**824**	**2**	**1,040**	**267**	**1,093**

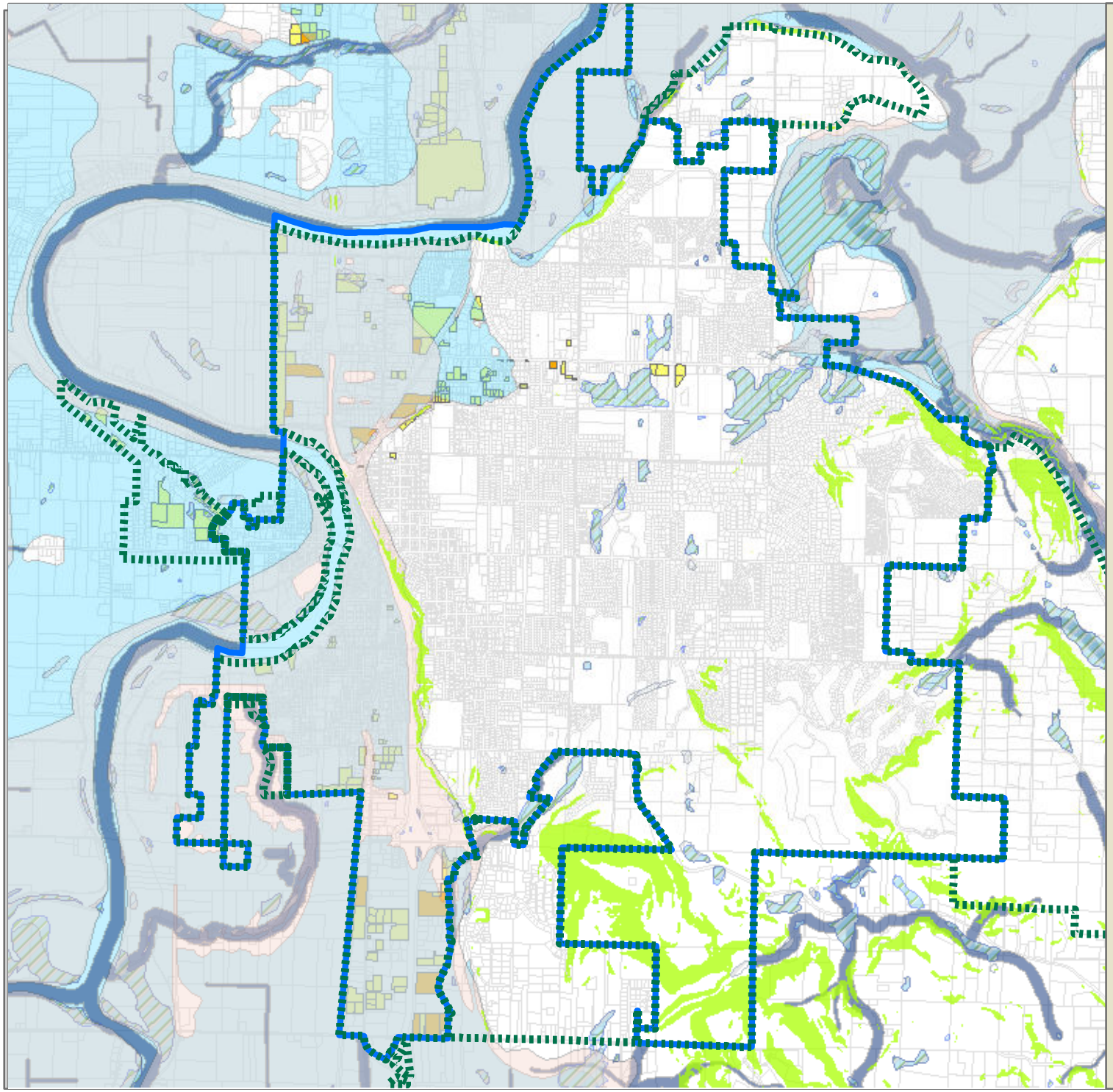
Note: Total acres = developed acres + fully constrained acres + buildable acres
Partially constrained acres can exist in developed or buildable areas

N

0 2,500 5,000

Feet

Cartography/GIS: ECONorthwest, February 2014



Vacant and Partially Vacant Industrial Land and Development Constraints

Mount Vernon

Washington

Legend

- CityUGA
- CityLimits
- Slope >15%
- Floodway (prohibitive)
- Liquifaction Zone
- Aerial Wetland Interpretation
- Wetlands (NWI)
- Waterway buffer
- 100-yr Floodplain

Development Status

- Developed
- Partially Vacant
- Unbuildable
- Vacant
- Parcels

Mount Vernon Buildable Acres by Lot Size

	Buildable Acres in Tax Lots									
Classification	<0.25	>=0.25 and <0.50	>=0.50 and <1.00	>=1.00 and <2.00	>=2.00 and <5.00	>=5.00 and <10.00	>=10.00 and <20.00	>=20.00 and <50.00	50 and Over	Total
Buildable Acres in Tax Lots										
Partially Vacant	0	0	2	2	19	17	0	0	0	39
Vacant	4	9	29	47	76	31	31	0	0	227
Total Acres	**4**	**9**	**31**	**49**	**95**	**48**	**31**	**0**	**0**	**267**
Number of Tax Lots										
Partially Vacant	2	0	2	1	5	3	0	0	0	13
Vacant	25	26	38	33	25	5	2	0	0	154
Total Tax Lots	**27**	**26**	**40**	**34**	**30**	**8**	**2**	**0**	**0**	**167**

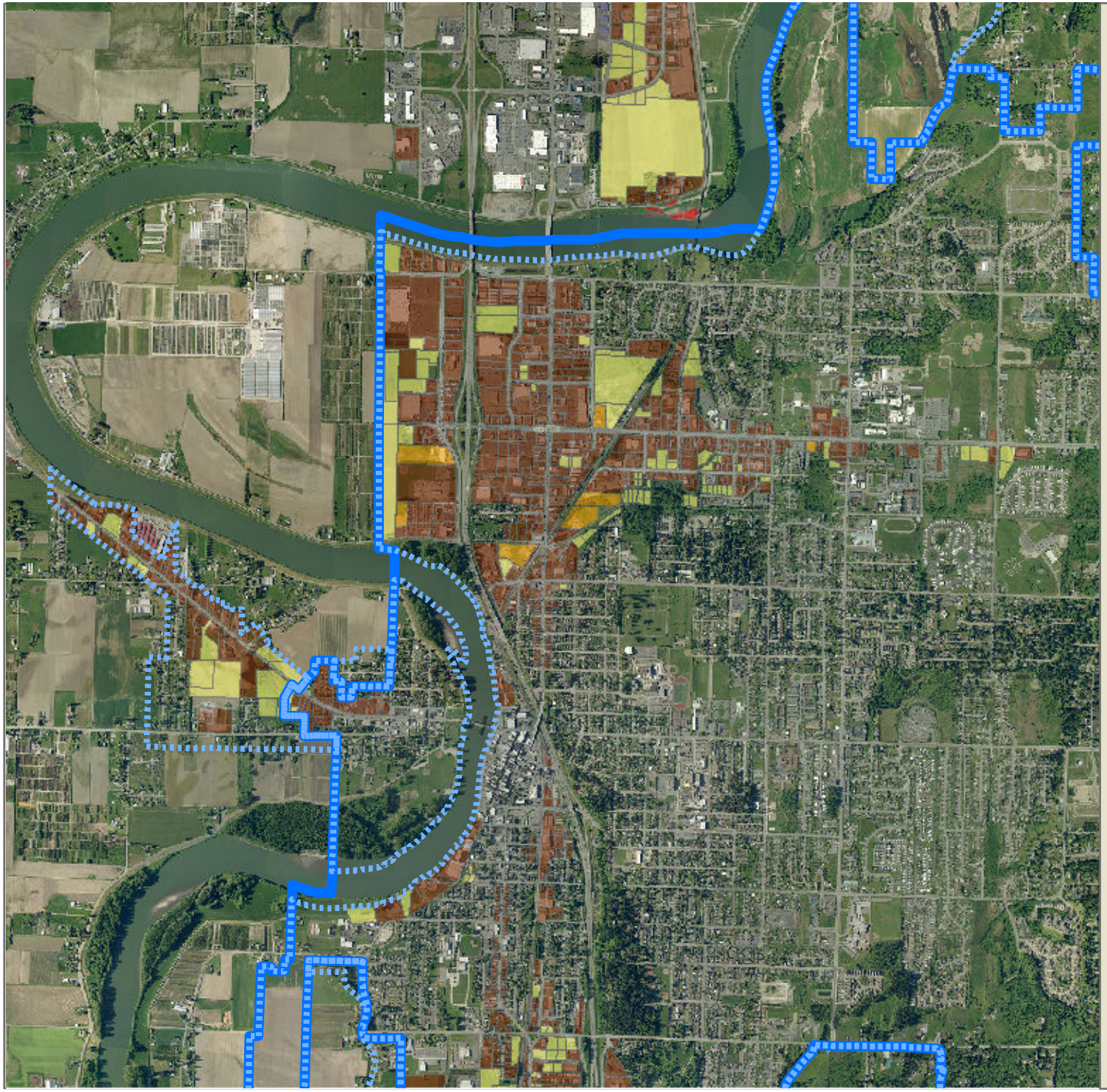
Note: Slopes over 15% and Floodways are considered "prohibitive constraints" that preclude development. Other constraints can be mitigated and are not considered unbuildable.

N

0 2,500 5,000

Feet

Cartography/GIS: ECONorthwest, February 2014



Land Classifications Industrial Buildable Lands Inventory

Mount Vernon - North

Washington

Legend

CityUGA

CityLimits

Development Status

Developed

Partially Vacant

Unbuildable

Vacant

Mount Vernon Summary Statistics

		Acres by Status				
Classification	Tax Lots	Developed Acres	Fully Constrained Acres	Partially Constrained Acres	Buildable Acres	Total Acres
Developed	867	803	1	756	0	804
Unbuildable	0	0	0	0	0	0
Partially Vacant	13	21	0	60	39	61
Vacant	154	0	1	223	227	228
Total	**1,034**	**824**	**2**	**1,040**	**267**	**1,093**

Note: Total acres = developed acres + fully constrained acres + buildable acres

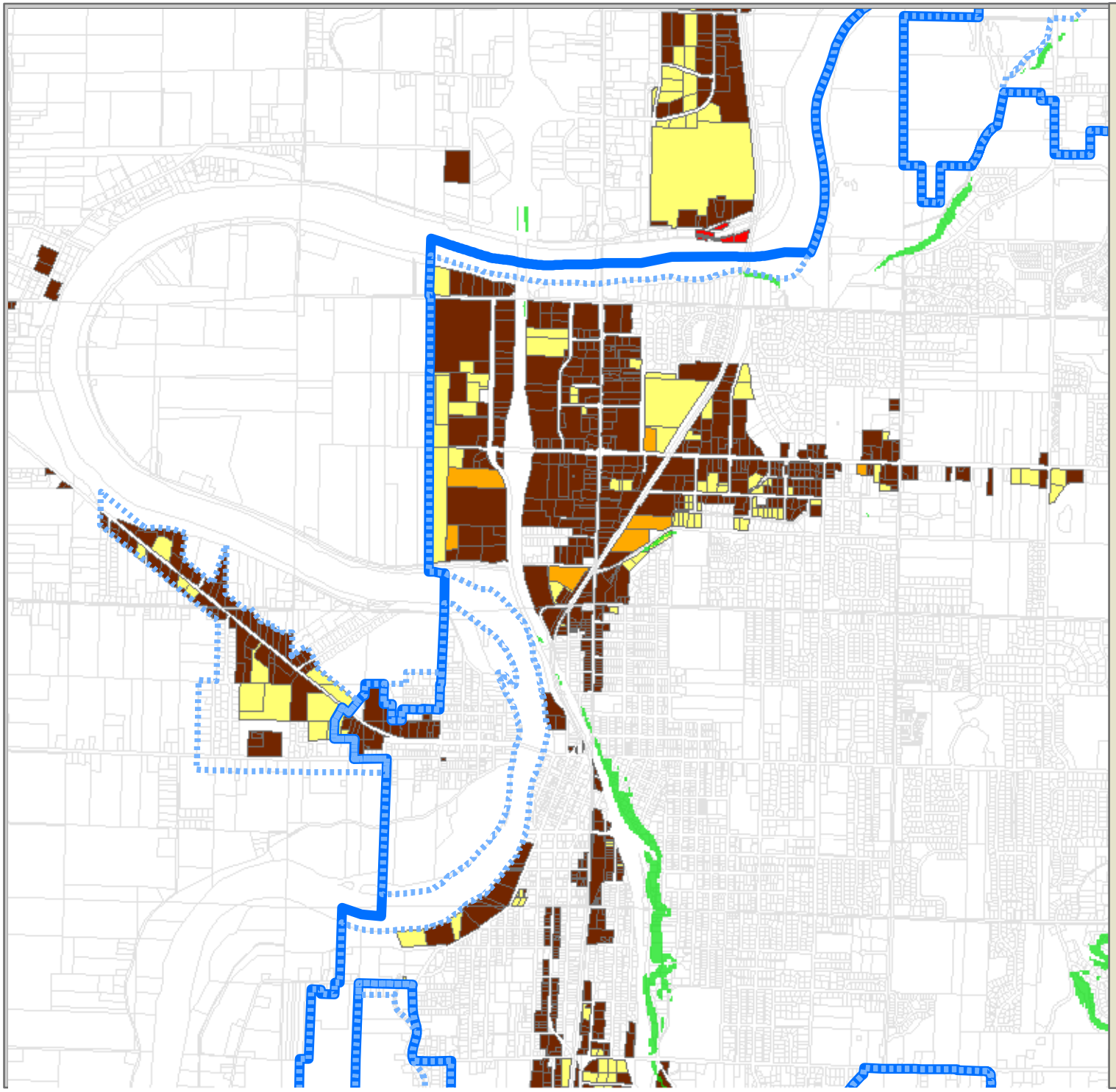
Partially constrained acres can exist in developed or buildable areas

N

0 2,500 5,000

Feet

Cartography/GIS: ECONorthwest, February 2014



Land Classifications and Prohibitive Constraints

Mount Vernon North

Washington

Legend

- CityUGA
- CityLimits
- Slopes >15%
- SkagitFloodway

Development Status

- Developed
- Partially Vacant
- Unbuildable
- Vacant
- Parcels

Mount Vernon Summary Statistics

		Acres by Status				
Classification	Tax Lots	Developed Acres	Fully Constrained Acres	Partially Constrained Acres	Buildable Acres	Total Acres
Developed	867	803	1	756	0	804
Unbuildable	0	0	0	0	0	0
Partially Vacant	13	21	0	60	39	61
Vacant	154	0	1	223	227	228
Total	**1,034**	**824**	**2**	**1,040**	**267**	**1,093**

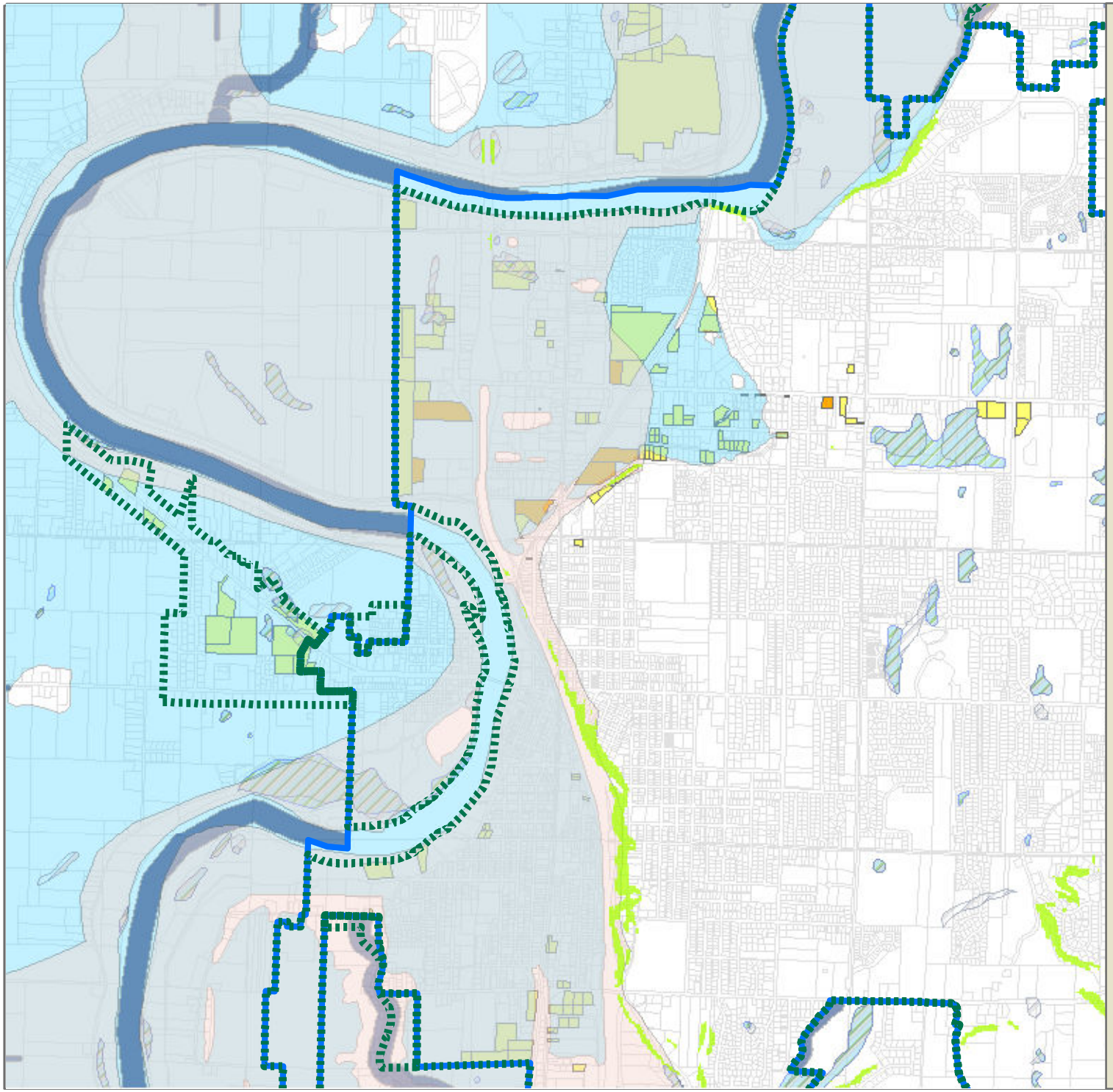
Note: Total acres = developed acres + fully constrained acres + buildable acres
Partially constrained acres can exist in developed or buildable areas

N

0 2,500 5,000

Feet

Cartography/GIS: ECONorthwest, February 2014



Vacant and Partially Vacant Industrial Land and Development Constraints

Mount Vernon North

Washington

Legend

- CityUGA
- CityLimits
- Slope >15%
- Floodway (prohibitive)
- Liquifaction Zone
- Aerial Wetland Interpretation
- Wetlands (NWI)
- Waterway buffer
- 100-yr Floodplain

Development Status

- Developed
- Partially Vacant
- Unbuildable
- Vacant
- Parcels

Mount Vernon Buildable Acres by Lot Size

	Buildable Acres in Tax Lots									
Classification	<0.25	>=0.25 and <0.50	>=0.50 and <1.00	>=1.00 and <2.00	>=2.00 and <5.00	>=5.00 and <10.00	>=10.00 and <20.00	>=20.00 and <50.00	50 and Over	Total
Buildable Acres in Tax Lots										
Partially Vacant	0	0	2	2	19	17	0	0	0	39
Vacant	4	9	29	47	76	31	31	0	0	227
Total Acres	**4**	**9**	**31**	**49**	**95**	**48**	**31**	**0**	**0**	**267**
Number of Tax Lots										
Partially Vacant	2	0	2	1	5	3	0	0	0	13
Vacant	25	26	38	33	25	5	2	0	0	154
Total Tax Lots	**27**	**26**	**40**	**34**	**30**	**8**	**2**	**0**	**0**	**167**

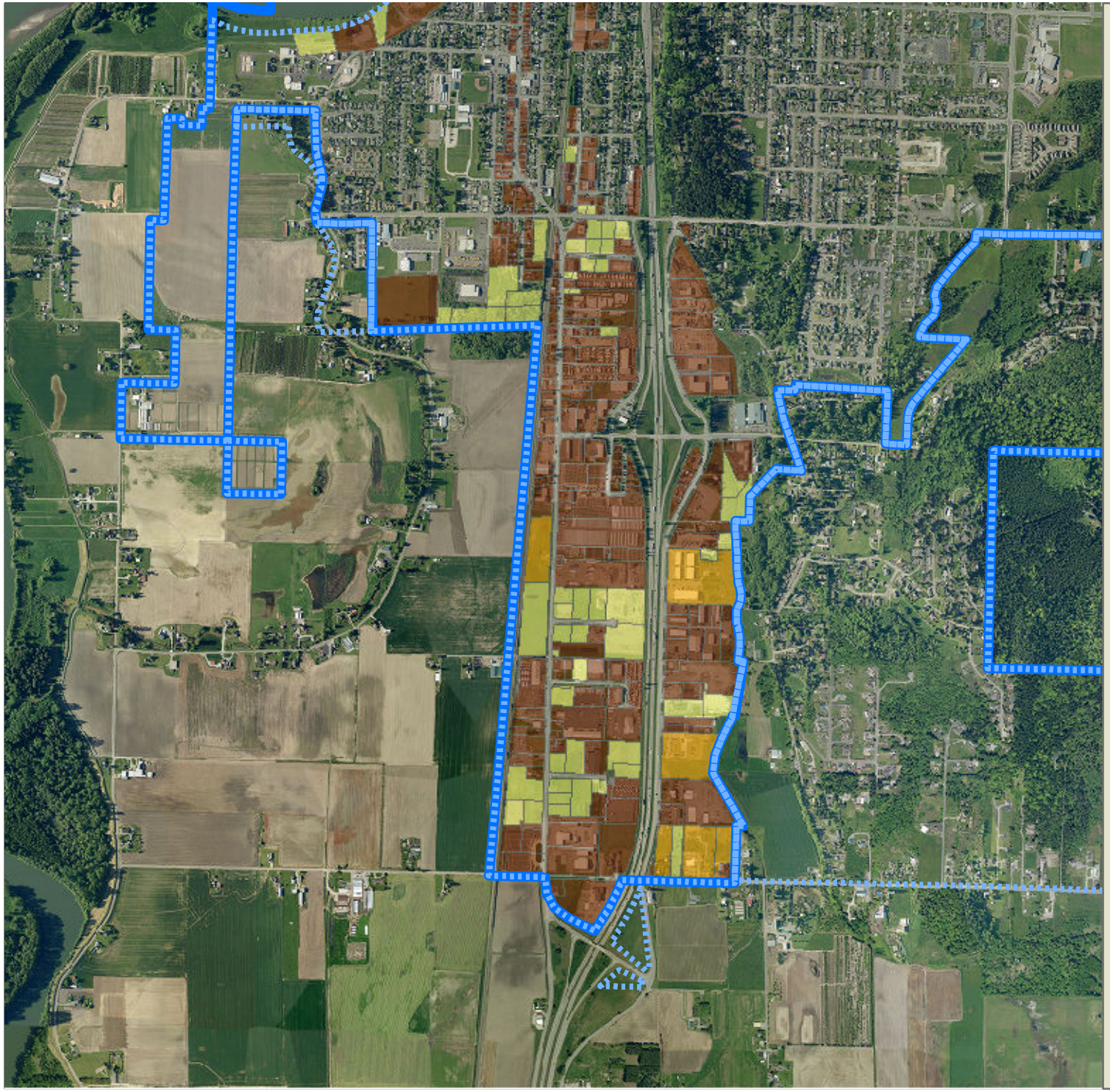
Note: Slopes over 15% and Floodways are considered "prohibitive constraints" that preclude development. Other constraints can be mitigated and are not considered unbuildable.

N

0 2,500 5,000

Feet

Cartography/GIS: ECONorthwest, February 2014



Land Classifications Industrial Buildable Lands Inventory

Mount Vernon - South

Washington

Legend

CityUGA

CityLimits

Development Status

Developed

Partially Vacant

Unbuildable

Vacant

Mount Vernon Summary Statistics

		Acres by Status				
Classification	Tax Lots	Developed Acres	Fully Constrained Acres	Partially Constrained Acres	Buildable Acres	Total Acres
Developed	867	803	1	756	0	804
Unbuildable	0	0	0	0	0	0
Partially Vacant	13	21	0	60	39	61
Vacant	154	0	1	223	227	228
Total	**1,034**	**824**	**2**	**1,040**	**267**	**1,093**

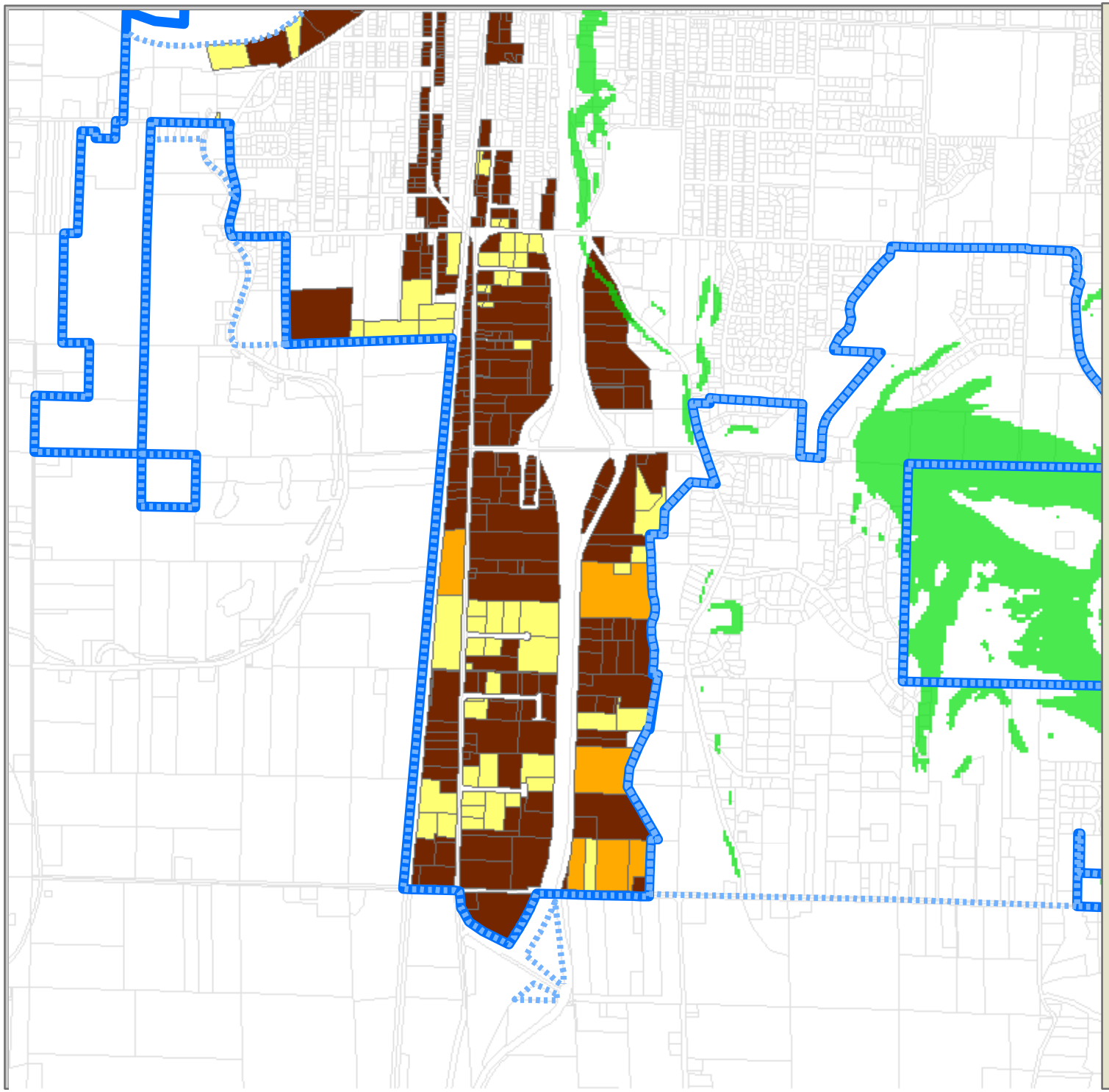
Note: Total acres = developed acres + fully constrained acres + buildable acres
Partially constrained acres can exist in developed or buildable areas

N

0 2,500 5,000

Feet

Cartography/GIS: ECONorthwest, February 2014



Land Classifications and Prohibitive Constraints

Mount Vernon South

Washington

Legend

- CityUGA
- CityLimits
- Slopes >15%
- SkagitFloodway

Development Status

- Developed
- Partially Vacant
- Unbuildable
- Vacant
- Parcels

Mount Vernon Summary Statistics

Classification	Tax Lots	Acres by Status: Developed Acres	Fully Constrained Acres	Partially Constrained Acres	Buildable Acres	Total Acres
Developed	867	803	1	756	0	804
Unbuildable	0	0	0	0	0	0
Partially Vacant	13	21	0	60	39	61
Vacant	154	0	1	223	227	228
Total	**1,034**	**824**	**2**	**1,040**	**267**	**1,093**

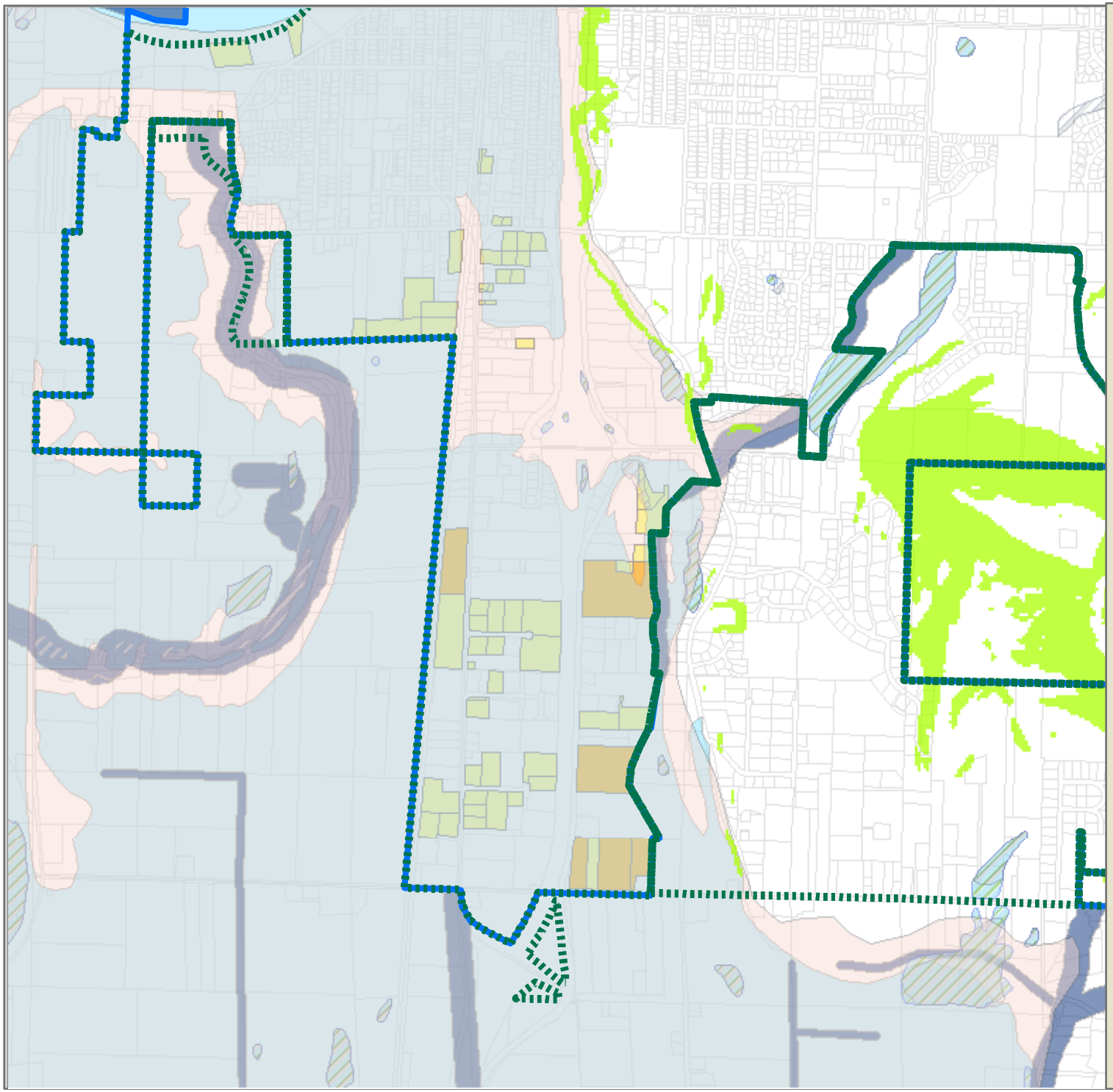
Note: Total acres = developed acres + fully constrained acres + buildable acres
Partially constrained acres can exist in developed or buildable areas

N

0 2,500 5,000

Feet

Cartography/GIS: ECONorthwest, February 2014



Vacant and Partially Vacant Industrial Land and Development Constraints

Mount Vernon South

Washington

Legend

- CityUGA
- CityLimits
- Slope >15%
- Floodway (prohibitive)
- Liquifaction Zone
- Aerial Wetland Interpretation
- Wetlands (NWI)
- Waterway buffer
- 100-yr Floodplain

Development Status

- Developed
- Partially Vacant
- Unbuildable
- Vacant
- Parcels

Mount Vernon Buildable Acres by Lot Size

	Buildable Acres in Tax Lots									
Classification	<0.25	>=0.25 and <0.50	>=0.50 and <1.00	>=1.00 and <2.00	>=2.00 and <5.00	>=5.00 and <10.00	>=10.00 and <20.00	>=20.00 and <50.00	50 and Over	Total
Buildable Acres in Tax Lots										
Partially Vacant	0	0	2	2	19	17	0	0	0	39
Vacant	4	9	29	47	76	31	31	0	0	227
Total Acres	**4**	**9**	**31**	**49**	**95**	**48**	**31**	**0**	**0**	**267**
Number of Tax Lots										
Partially Vacant	2	0	2	1	5	3	0	0	0	13
Vacant	25	26	38	33	25	5	2	0	0	154
Total Tax Lots	**27**	**26**	**40**	**34**	**30**	**8**	**2**	**0**	**0**	**167**

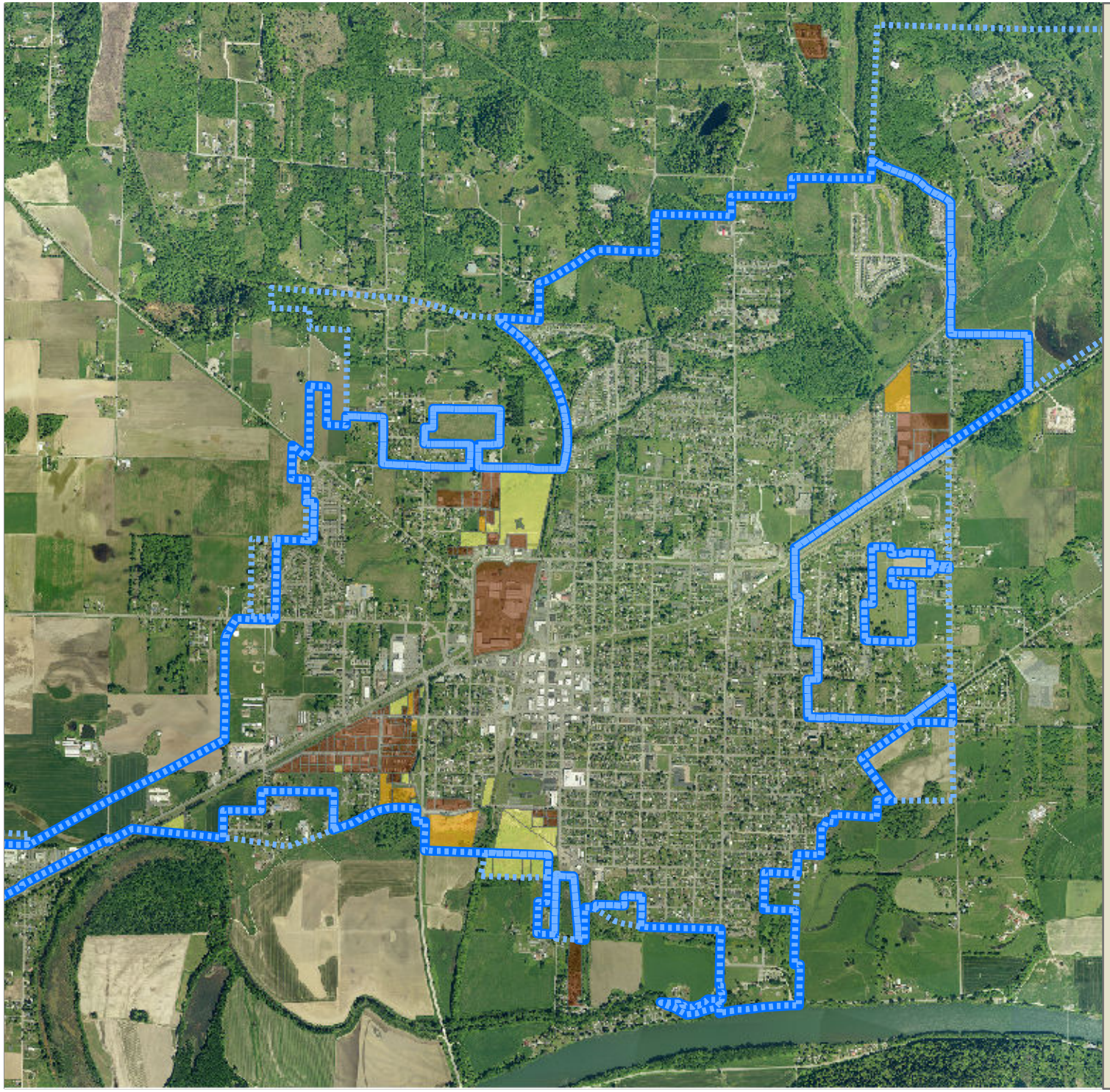
Note: Slopes over 15% and Floodways are considered "prohibitive constraints" that preclude development. Other constraints can be mitigated and are not considered unbuildable.

N

0 2,500 5,000

Feet

Cartography/GIS: ECONorthwest, February 2014



Land Classifications Industrial Buildable Lands Inventory

Sedro-Woolley

Washington

Legend

- CityUGA
- CityLimits

Development Status

- Developed
- Partially Vacant
- Unbuildable
- Vacant

Sedro-Woolley Summary Statistics

		Acres by Status				
Classification	Tax Lots	Developed Acres	Fully Constrained Acres	Partially Constrained Acres	Buildable Acres	Total Acres
Developed	85	110	0	1	0	110
Unbuildable	0	0	0	0	0	0
Partially Vacant	7	10	0	12	18	28
Vacant	20	0	0	27	60	60
Total	**112**	**121**	**0**	**40**	**77**	**198**

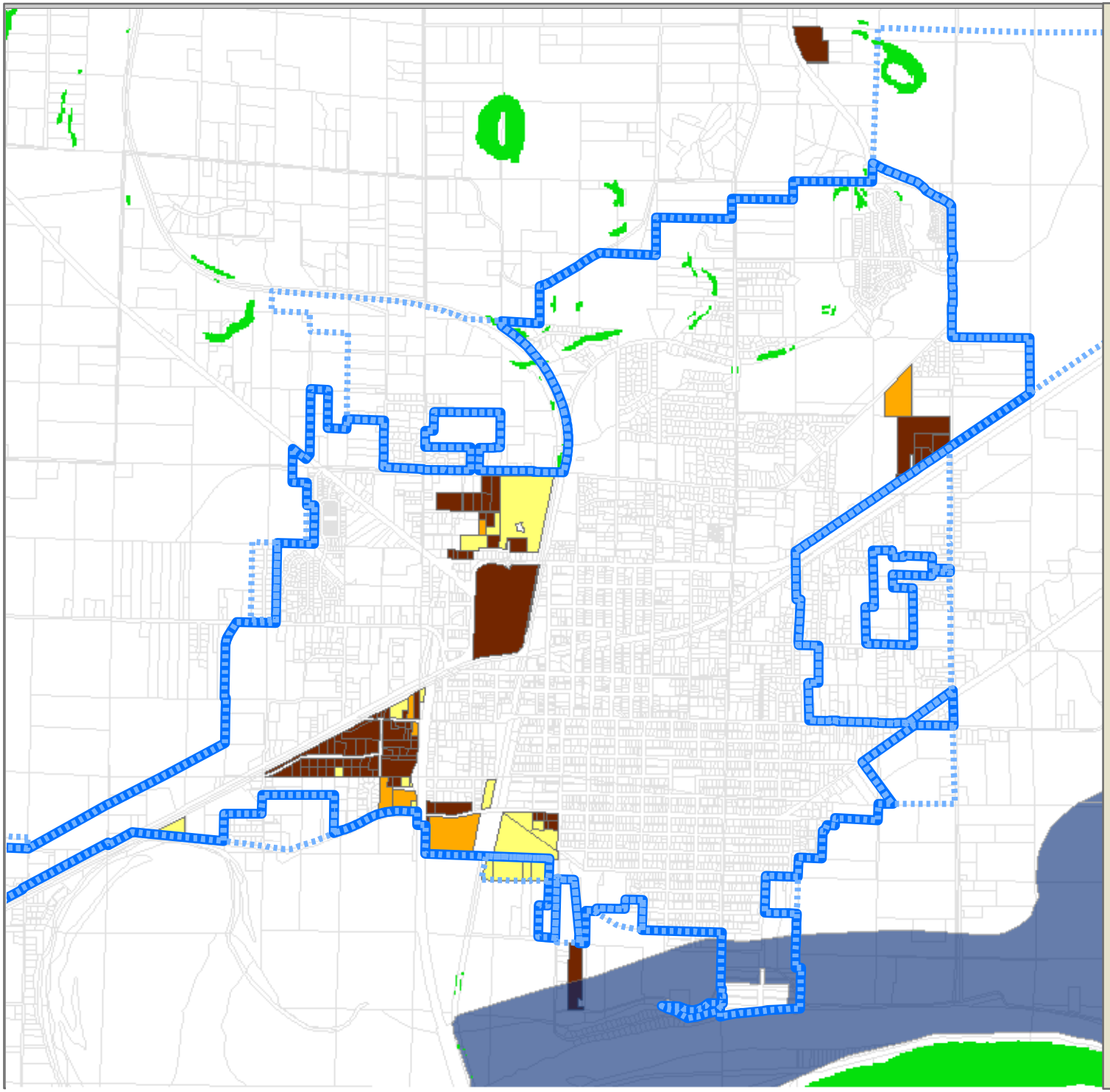
Note: Total acres = developed acres + fully constrained acres + buildable acres
Partially constrained acres can exist in developed or buildable areas

N

0 2,500 5,000

Feet

Cartography/GIS: ECONorthwest, February 2014



Land Classifications and Prohibitive Constraints

Sedro-Woolley

Washington

Legend

- CityUGA
- CityLimits
- Slopes >15%
- Floodway

Development Status

- Developed
- Partially Vacant
- Unbuildable
- Vacant
- Parcels

Sedro-Woolley Summary Statistics

Classification	Tax Lots	Acres by Status: Developed Acres	Fully Constrained Acres	Partially Constrained Acres	Buildable Acres	Total Acres
Developed	85	110	0	1	0	110
Unbuildable	0	0	0	0	0	0
Partially Vacant	7	10	0	12	18	28
Vacant	20	0	0	27	60	60
Total	**112**	**121**	**0**	**40**	**77**	**198**

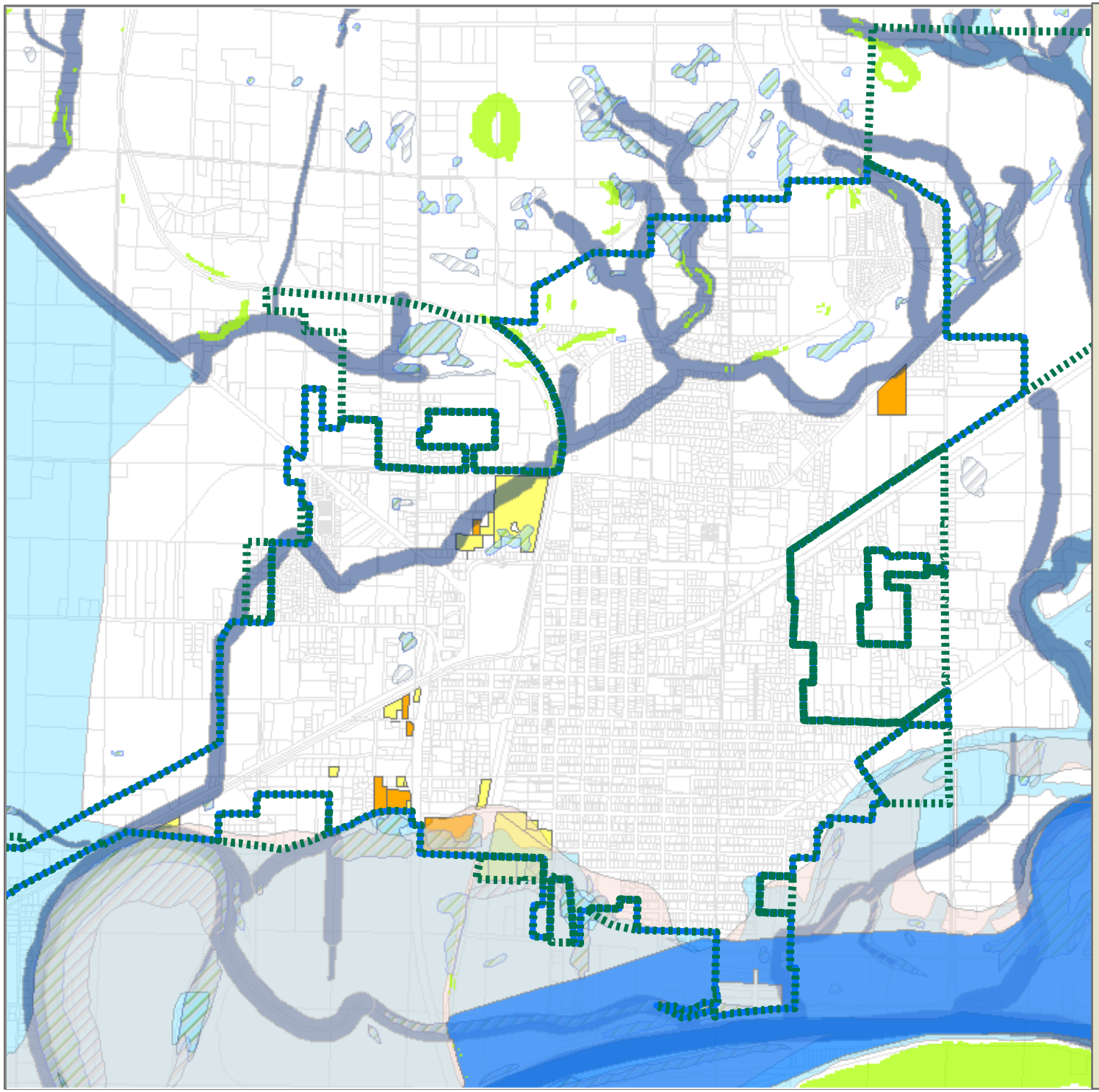
Note: Total acres = developed acres + fully constrained acres + buildable acres
Partially constrained acres can exist in developed or buildable areas

N

0 2,500 5,000

Feet

Cartography/GIS: ECONorthwest, February 2014



Vacant and Partially Vacant Industrial Land and Development Constraints

Sedro-Woolley

Washington

Legend

- CityUGA
- CityLimits
- Slope >15%
- Floodway (prohibitive)
- Liquifaction Zone
- Aerial Wetland Interpretation
- Wetlands (NWI)
- Waterway buffer
- 100-yr Floodplain

Development Status

- Developed
- Partially Vacant
- Unbuildable
- Vacant
- Parcels

Sedro-Woolley Buildable Acres by Lot Size

	Buildable Acres in Tax Lots									
Classification	<0.25	>=0.25 and <0.50	>=0.50 and <1.00	>=1.00 and <2.00	>=2.00 and <5.00	>=5.00 and <10.00	>=10.00 and <20.00	>=20.00 and <50.00	50 and Over	Total
Buildable Acres in Tax Lots										
Partially Vacant	0	1	1	0	4	12	0	0	0	18
Vacant	0	1	2	7	17	0	11	21	0	60
Total Acres	**0**	**2**	**2**	**7**	**21**	**12**	**11**	**21**	**0**	**77**
Number of Tax Lots										
Partially Vacant	0	2	1	0	2	2	0	0	0	7
Vacant	2	2	3	5	6	0	1	1	0	20
Total Tax Lots	**2**	**4**	**4**	**5**	**8**	**2**	**1**	**1**	**0**	**27**

Note: Slopes over 15% and Floodways are considered "prohibitive constraints" that preclude development. Other constraints can be mitigated and are not considered unbuildable.

N

0 2,500 5,000

Feet

Cartography/GIS: ECONorthwest, February 2014