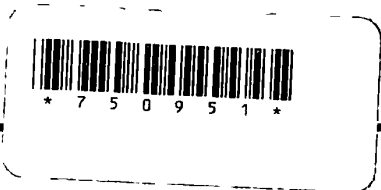


Schroader, Kathy



From: Tim Trohimovich <Tim@futurewise.org>
Sent: Monday, November 23, 2015 3:31 PM
To: Cnty Board of County Councilors General Delivery, Cnty 2016 Comp Plan
Subject: Comments for Board of County Councilors' public hearing on Nov 24, 2015
Attachments: Futurewise Comments to BOCC on Comp Plan Preferred Alt Nov 23 2015.pdf

Dear Sirs and Madams:

Enclosed please find Futurewise's comments on the Planning Commission's November 20, 2015, recommendation of the preferred alternative for the county's next growth management plan. One of the enclosed documents is enclosed with the letter. We will be sending a second supporting document in a separate email.

Please contact me if you require anything else.

Tim Trohimovich, AICP
Futurewise | Director of Planning & Law
816 Second Avenue, Suite 200 | Seattle, Washington 98104
p 206 343 0681 Ext 118
Email tim@futurewise.org

25 YEARS **futurewise**

Building Communities & Protecting the Land



November 23, 2015

The Honorable Tom Mielke
The Honorable David Madore
The Honorable Jeanne E. Stewart
Clark County Board of County Councilors
PO Box 5000
Vancouver, Washington 98666-5000

Dear Councilors Mielke, Madore, and Stewart:

Subject: Comments on the Planning Commission's November 20, 2015, recommendation of the preferred alternative for the county's next growth management plan.

Sent via email to: boardcom@clark.wa.gov; comp.plan@clark.wa.gov

Thank you for the opportunity to comment on the preferred alternative for the *Final Supplemental Environmental Impact Statement (SEIS) for the Clark County 2016 Comprehensive Growth Management Plan Update* for the Board of County Councilors' public hearing on November 24, 2015. In short, Futurewise supports the Planning Commission's November 20, 2015, recommendation for the preferred alternative for Clark County's next growth management plan with two changes. This alternative meets community needs at the lowest cost. We urge the Board of County Councilors to select this recommendation as the preferred alternative for the *Final SEIS for the Clark County 2016 Comprehensive Growth Management Plan Update*.

Futurewise is working throughout Washington State to create livable communities, protect our working farmlands, forests, and waterways, and ensure a better quality of life for present and future generations. We work with communities to implement effective land use planning and policies that prevent waste and stop sprawl, provide efficient transportation choices, create affordable housing and strong local businesses, and ensure healthy natural systems. We are creating a better quality of life in Washington State together. We have members across Washington State including Clark County.

Why the Planning Commission recommendation should be selected as the Preferred Alternative

The Planning Commission recommendation will save taxpayers and ratepayers money

Compact urban growth areas (UGAs) saves taxpayers and ratepayers money. In a study published in a peer-reviewed journal, John Carruthers and Gudmaundur Ulfarsson analyzed urban areas throughout the United States including Clark County.¹ They found that the per capita costs of most public services declined with density and increased where urban areas were large.² Compact urban growth areas save taxpayers and ratepayers money.

Conserving farm and forest land also saves taxpayers money. Farm and forest land pays more in taxes than it requires in public services. For every dollar farm or forest land pays in taxes it only requires 35 cents in public services. For every dollar residential development pays in taxes, it requires \$1.16 in public services.³

The Planning Commission recommendation will protect water quality

Marylynn Yates, in a peer-reviewed scientific journal, analyzed ground water pollution from septic tanks. She concluded that septic tanks are major contributors of waste water, septic tanks are the most frequently reported cause of ground water contamination, and the most important factor influencing ground water contamination from septic tanks is the density of the systems.⁴ Lot sizes associated with ground water contamination cases ranged from less than a quarter acre to three acres.⁵ More recent studies support these conclusions. For example, an "observational study identified septic system density as a risk factor for sporadic cases of viral and bacterial diarrhea in central Wisconsin children."⁶ The greater the density of septic

¹ John Carruthers and Gudmaundur Ulfarsson, *Urban Sprawl and the Cost of Public Services* 30 ENVIRONMENT AND PLANNING B PLANNING AND DESIGN 503, 511 (2003) Enclosed with the paper original of Futurewise's Sept. 10, 2015 letter commenting on the DSEIS

² *Id.* at 518.

³ American Farmland Trust Farmland Information Center, *Cost of Community Services Studies* p. 6 (August 2010) accessed on Nov. 17, 2015 at http://www.farmlandinfo.org/sites/default/files/COCS_08-2010_1.pdf and enclosed with the paper original of Futurewise's Sept. 10, 2015 letter commenting on the DSEIS. These numbers are median values and include Cost of Community Services Studies in Skagit and Okanogan Counties. *Id.* at p. 5.

⁴ Marylynn V. Yates, *Septic Tank Density and Ground-Water Contamination* 23 GROUND WATER 586, p. 590 (1985) accessed on Nov. 17, 2015 at <http://info.igwa.org/gwol/pdf/852537546.PDF> and enclosed with the paper original of Futurewise's Sept. 10, 2015 letter commenting on the DSEIS. Ground Water is a peer-reviewed scientific journal. See the Ground Water Peer Review enclosed with the paper original of Futurewise's Sept. 10, 2015 letter commenting on the DSEIS.

⁵ Marylynn V. Yates, *Septic Tank Density and Ground-Water Contamination* 23 GROUND WATER 586, p. 590 (1985).

⁶ Mark A. Borchardt, Po-Huang Chyou, Edna O. DeVries, and Edward A. Belongia, *Septic System Density and Infectious Diarrhea in a Defined Population of Children* 111 ENVIRONMENTAL HEALTH PERSPECTIVES 742, p. 745 (2003) accessed most recently on Nov. 17, 2015 at: <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1241485/pdf/clip0111-000742.pdf> and enclosed with the paper original of Futurewise's Sept. 10, 2015 letter commenting on the DSEIS. Environmental Health

tanks the greater the likelihood of diarrheal disease.⁷ And the highest septic tank densities studied were one septic tank per 11 acres.⁸ By limiting the small lots susceptible to ground water contamination, the Planning Commission recommendation will protect water quality.

The Planning Commission recommendation will protect property owners' wells

The Washington State Department of Ecology (Ecology) has determined that "[t]here is limited water available for new uses in [Water Resource Inventory Area] WRIA 27" the Lewis River Watershed and "much of the water in the Lewis River Watershed has already been spoken for."⁹ The situation is the same in the Salmon-Washougal Watershed, WRIA 28. "There is limited water available for new uses .." and "much of the water in this watershed has already been spoken for."¹⁰ In fact, water is in such short supply that there is already evidence that the overdevelopment of rural lands has caused wells to run dry.¹¹

When Ecology adopted the instream flow rules for WRIs 27 and 28, Ecology established reserves for future domestic uses.¹² The reserved in Clark County can serve another 4,859 new households or occupied housing units.¹³ However, Clark County currently has 5,042 existing vacant lots in the rural areas and on resource lands as of 2014.¹⁴ So the County already has more lots than can be supported by the surface and ground water resources available in the rural areas and on resource lands. Since the

Perspectives is a peer reviewed scientific journal. See the Environmental Health Perspectives Journal Information accessed on Nov 17, 2015 at: <http://ehp.niehs.nih.gov/journal-information/> and enclosed with the paper original of Futurewise's Sept 10, 2015 letter commenting on the DSEIS.

⁷ Mark A. Borhardt, Po-Huang Chyou, Edna O. DeVries, and Edward A. Belongia, *Septic System Density and Infectious Diarrhea in a Defined Population of Children* 111 ENVIRONMENTAL HEALTH PERSPECTIVES 742, pp 745 - 47 (2003).

⁸ *Id.* at 747

⁹ Washington State Department of Ecology Water Resources Program, *Focus on Water Availability Lewis River Watershed, WRIA 27* p 1 (Publication Number 11-11-031 August 2012) accessed on Nov 17, 2015 at: <https://fortress.wa.gov/ecy/publications/summarypages/1111031.html> and enclosed with the paper original of Futurewise's Sept 10, 2015 letter commenting on the DSEIS

¹⁰ Washington State Department of Ecology Water Resources Program, *Focus on Water Availability Salmon-Washougal Watershed, WRIA 28* p. 1 (Publication Number 11-11-032 August 2012) accessed on Nov 17, 2015 at <https://fortress.wa.gov/ecy/publications/summarypages/1111032.html> and enclosed with the paper original of Futurewise's Sept. 10, 2015 letter commenting on the DSEIS

¹¹ Personal Communication from Coyote Ridge Ranch to Tim Trohimovich (April 02, 2015) enclosed with the paper original of Futurewise's Sept 10, 2015 letter commenting on the DSEIS

¹² Washington State Department of Ecology Water Resources Program, *Focus on Water Availability Lewis River Watershed, WRIA 27* p 1 (Publication Number 11-11-031 August 2012), Washington State Department of Ecology Water Resources Program, *Focus on Water Availability Salmon-Washougal Watershed, WRIA 28* p 2 (Publication Number 11-11-032 August 2012).

¹³ Spreadsheet "WRIA 27-28 Reservations ESTIMATES w Totals for Clark County by Category" enclosed with this letter.

¹⁴ *Clark County Buildable Lands Report* p 13 (June 2015) accessed on Nov 17, 2015 at: http://www.clark.wa.gov/thecloud/documents/061015WS_2015BUILDABLE_LANDS_REPORT.pdf and enclosed in a separate email

Planning Commission recommendation allows a more moderate level of new lot creation than Alternative 4, it will better protect existing water rights holders who may otherwise see their wells or their diversions run dry.

The county's water providers are not planning on serving most of the rural area with piped water. The *Clark County Coordinated Water System Plan Update: Regional Supplement* calls for serving rural development outside of "rural centers" with private wells.¹⁵ The *Clark County Coordinated Water System Plan Update* states that the rural areas "are not expected to accommodate large amounts of population growth."¹⁶ So the Planning Commission recommendation is more consistent with the plans of the county's water providers.

The Planning Commission recommendation will help keep healthy local food available for Clark County residents

The Planning Commission recommendation will help to continue to protect the county's working farms. This will help make healthy, local food available to county residents.

Changes we recommend to the Planning Commission Recommendation

Please do not combine the three rural-comprehensive plan designations into one "Rural" designation

The Growth Management Act (GMA) requires and the Washington State Supreme Court has held that the rural element of the comprehensive plan must include a variety of rural densities.¹⁷ In *Kittitas County v. Eastern Washington Growth Management Hearings Board*, the Kittitas County Comprehensive Plan had a single rural comprehensive plan designation. Kittitas County's Limited Areas of More Intense Rural Development (LAMIRDs) also had separate comprehensive plan designations. The county argued that the reference in the comprehensive plan to "zoning regulations that have included six possible designations (with three possible densities) and innovative zoning techniques" complied with the Growth Management Act requirement for a variety of rural densities.¹⁸ Based on the plain language of the GMA, the Washington State Supreme

¹⁵ Clark County Water Utility Coordinating Committee, *Clark County Coordinated Water System Plan Update: Regional Supplement* p 25 & p 36 (Nov. 2011) accessed on Nov 17, 2015 at: http://www.clark.wa.gov/planning/comp_plan/documents/Final_2011CWSP-optimized.pdf and enclosed with the paper original of Futurewise's Sept. 10, 2015 letter commenting on the DSEIS

¹⁶ *Id* at p 15

¹⁷ RCW 36 70A 070(5), *Thurston County v Western Washington Growth Management Hearings Board*, 164 Wn 2d 329, 357, 190 P 3d 38 (2008).

¹⁸ *Kittitas Cnty v E Washington Growth Mgmt. Hearings Bd*, 172 Wn. 2d 144, 167, 256 P 3d 1193, 1204 (2011)

Court held that the comprehensive plan itself must include a variety of rural densities and the Kittitas County Comprehensive Plan violated this requirement¹⁹

The Washington State Supreme Court identified a practical reason for this requirement:

¶ 40 We also note a practical concern raised by RIDGE and CTED. They argue that reading the GMA to not require that the Plan itself provide for a variety of rural densities will result in the evasion of GMA requirements through site-specific rezones. This is not the first time this court has recognized this potential problem. See *Woods v. Kittitas County*, 162 Wn 2d 597, 629–32, 174 P.3d 25 (2007) (Becker, J., concurring). Because interested parties cannot raise GMA compliance issues in Land Use Petition Act (chapter 36.70C RCW) petitions, *id.* at 616, 174 P.3d 25 (majority opinion), site-specific rezones are only evaluated for compliance with the GMA through evaluation of their consistency with the existing Plan. A comprehensive plan that is silent on the provision of a variety of rural densities (and other protective measures for rural areas) effectively allows rezones that circumvent the GMA. This argument may prove too much, as rezones must also comply with development regulations, which can be challenged for compliance with the GMA. *Id.* at 615–16, 174 P.3d 25. However, in *Woods*, the petitioner's land was designated at one dwelling unit per 20 acres, and the County later approved a 3-acre rezone after it was too late for her to challenge the development regulations for compliance with the GMA. *Id.* at 629–30, 174 P.3d 25 (Becker, J., concurring) ("The rezone was the first and only time that the actual change of density on the subject site could have been challenged ... as violating the GMA."); RCW 36.70A.290(2) (stating that petitions challenging a comprehensive plan or development regulation as noncompliant with the GMA "must be filed within sixty days after publication"). While we decide this question on the basis of the plain statutory language, we recognize that reading out the requirement that counties include certain protections in the Plan itself, including to provide for a variety of rural densities, could result in the evasion of GMA requirements through site-specific rezoning.²⁰

The recommended single rural comprehensive plan designation is just like the single rural designation in Kittitas County. Like Kittitas County, the single rural designation violates the GMA. So we recommend you do not include this change in the preferred alternative and retain the existing separate rural designations.

¹⁹ *Kittitas Cnty*, 172 Wn 2d at 169, 256 P 3d at 1205: "A plain reading of the statute indicates that the Plan itself must include something to assure the provision of a variety of rural densities."

²⁰ *Kittitas Cnty*, 172 Wn 2d at 169, 256 P 3d at 1205.

Please do not include the urban growth area expansions in the preferred alternative

Urban growth areas may only be expanded to accommodate the County's need for housing and jobs.²¹ The existing urban growth areas can already accommodate the County's housing and employment projections.²² So we urge the Board of County Councilors to exclude the urban growth area expansions, such as 3.a (Battle Ground), 3.b. and 3.c (La Center), and 3.e (Washougal) in the preferred alternative. Maintaining properly sized urban growth areas will save money for taxpayers and ratepayers.²³

Alternative 4 contains fatal flaws

Alternative 4 as modified by the *Proposed Changes to Planning Assumptions 11/9/2015* contains several fatal flaws that prevent Clark County from legally adopting that alternative. The three most significant flaws have to do with water, population projections, and the conservation of agricultural lands.

The Growth Management Act (GMA), in RCW 36.70A.070(1), requires that the "land use element [of the comprehensive plan] shall provide for protection of the quality and quantity of groundwater used for public water supplies." Further, the GMA, in RCW 36.70A.070(5)(c), provides in relevant part that the "rural element shall include measures that apply to rural development and protect the rural character of the area, as established by the county, by: ... (iv) Protecting critical areas, as provided in RCW 36.70A.060, and surface water and groundwater resources ..." In reviewing these GMA requirements, the Washington State Supreme Court has held that "several relevant statutes indicate that the County must regulate to some extent to assure that land use is not inconsistent with available water resources."²⁴

Unfortunately, in Alternative 4 the planned land use is inconsistent with available water resources. When Ecology adopted the instream flow rules for WRIs 27 and 28, Ecology established reserves for future domestic uses in Clark County.²⁵ Ecology

²¹ *Thurston County v Western Washington Growth Management Hearings Bd*, 164 Wn 2d 329, 351 - 52, 190 P.3d 38, 48 - 49 (2008) See RCW 36.70A.110 and RCW 36.70A.115 which limit the size of UGAs

²² *Clark County Buildable Lands Report* pp 9 - 14 (June 2015) accessed on Nov 17, 2015 at http://www.clark.wa.gov/legnd/documents/061015WS_2015BUILDABLE_LANDS_REPORT.pdf and enclosed with Futurewise's Sept 16, 2015 comment letter on the DSEIS.

²³ John Carruthers and Gudmaundur Ulfarsson, *Urban Sprawl and the Cost of Public Services* 30 ENVIRONMENT AND PLANNING B: PLANNING AND DESIGN 503, 518 (2003)

²⁴ *Kittitas Cty. v. E. Washington Growth Mgmt Hearings Bd*, 172 Wn 2d 144, 178, 256 P 3d 1193, 1209 (2011)

²⁵ Washington State Department of Ecology Water Resources Program, *Focus on Water Availability Lewis River Watershed, WRJA 27* p 1 (Publication Number. 11-11-031 August 2012) accessed on Nov. 17, 2015 at <https://orpress.wa.gov/ecy/publications/summarypages/1111031.html> and enclosed with the paper original of Futurewise's Sept 10, 2015 letter commenting on the DSEIS, Washington State Department of Ecology Water Resources Program, *Focus on Water Availability Salmon-Washougal Watershed, WRJA 28* p. 2 (Publication Number 11-11-032 August 2012) accessed on Nov 17, 2015 at

estimates that the reserves can accommodate another 2,747 domestic wells with each well serving one house and with one household in the house, 1,627 households served by small community water systems, and Clark County Public Utilities can serve another 485 households outside cities.²⁶ This totals 4,859 new households or occupied housing units.²⁷ So Clark County should limit the number of currently vacant and new rural, agricultural, and forest land lots to about 4,859 and only in the parts of the county outside cities that have available reserves. After the reserves are exhausted, new permit-exempt wells can only be used if the person proposing to use the well provides in-kind mitigation, which typically requires acquiring a water right senior to the instream flow rules.²⁸

However, Clark County currently has 5,042 existing vacant lots in the rural areas and on resource lands as of 2014.²⁹ Therefore the County already has more lots than can be supported by the surface and ground water resources available in the rural areas and on resource lands. Alternative 4 will significantly increase the number of lots that can be created on rural and natural resource lands. So Alternative 4 does not regulate to assure that land use is not inconsistent with available water resources. This violates the GMA and is a fatal flaw.

Rural over development is already causing wells to go dry.³⁰ All of the new lots that Alternative 4 allows will make this problem even worse.

The second fatal flaw is that Alternative 4 is based on a mistake of law. The mistake is the incorrect assumption that the comprehensive plan is required to accommodate the adopted population projection in the rural area. In *Clark County Natural Resources Council v. Clark County*, the court of appeals held that the GMA only requires the population projections prepared by the Office of Financial Management and adopted by a county to be used to size urban growth areas.³¹ The court concluded that the

<https://fortress.wa.gov/ecy/publications/summarypages/1111032.html> and enclosed with the paper original of Futurewise's Sept 10, 2015 letter commenting on the DSEIS

²⁶ The enclosed spreadsheet WRIA 27-28 Reservations ESTIMATES w Totals for Clark County by Category totals the Ecology data for Clark County

²⁷ "Spreadsheet WRIA 27-28 Reservations ESTIMATES w Totals for Clark County by Category" enclosed with this letter

²⁸ *Foster v. Washington State Dep't of Ecology*, No. 90386-7, 2015 WL 5916933, at *4 (Wash. Oct. 8, 2015)

²⁹ *Clark County Buildable Lands Report* p. 13 (June 2015) accessed on Nov. 17, 2015 at: http://www.clark.wa.gov/thegrid/documents/061015WS_2015BUILDABLE_LANDS_REPORT.pdf and cited page enclosed with this letter.

³⁰ Personal Communication from Coyote Ridge Ranch to Tim Trohimovich (April 02, 2015) enclosed with the paper original of Futurewise's Sept 10, 2015 letter commenting on the DSEIS

³¹ *Clark Cty. Nat. Res. Council v. Clark Cty. Citizens United, Inc.*, 94 Wn. App. 670, 675, 972 P.2d 941, 943 (1999) review denied by *Clark County Citizens United, Inc. v. Clark County Natural Resources Council*, 139 Wn.2d 1002, 989 P.2d 1136 (1999)

Clark County Board of County Councilors
November 23, 2015
Page 8

GMA does not apply the county population projection to areas outside the urban growth areas.³²

Yet, the *Proposed Changes to Planning Assumptions 11/9/2015*, on page 3, erroneously states that the GMA requires the population projection to be used to size the population capacity of the rural area: "Thus Alternative 1 is not viable since it cannot comply with the GMA requirement to provide for the forecasted growth." This is an error of law. The GMA does not require the population projection to be used outside the urban growth area and the statement violates the holding of *Clark County Natural Resources Council v. Clark County*.³³ This is the second fatal flaw.

The third fatal flaw is that the *Proposed Changes to Planning Assumptions* violate the GMA by applying a requirement applicable to the rural element to agricultural lands of long-term commercial significance. The *Proposed Changes to Planning Assumptions 11/9/2015*, on page *3, erroneously states the "Alternative 4 updated . . . better preserves the rural character by including 20 acre AG minimum lot sizes." However, the requirement for a variety of rural densities applies to rural lands, not agricultural lands of long-term commercial significance.³⁴ The AG zone is not a rural zone, but a natural resource zone.

In addition to the fatal flaws, Alternative 4 ignores basic facts about Clark County's rural area. For example the alternative justifies an 86/14 urban-rural split in population growth based on past growth trends.³⁵ But Alternative 4 ignores that the rural water reserves can only provide water to another 4,859 lots and the county already has 5,042 existing vacant lots in the rural areas and on resource lands.³⁶ These water limitations will affect future rural growth trends.

Thank you for considering our comments. If you require additional information please contact me at telephone 206-343-0681 Ext. 118 and email tm@futurewise.org

³² *Clark Cty Nat Res Council v Clark Cty Citizens United, Inc*, 94 Wn App at 676, 972 P 2d at 943 - 44

³³ *Clark Cty Nat Res Council v Clark Cty. Citizens United, Inc*, 94 Wn. App. at 675 - 77, 972 P 2d at 943 - 44.

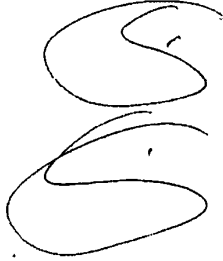
³⁴ RCW 36 70A.070(5) & (5)(b), *Thurston Cty v W Washington Growth Mgmt. Hearings Bd*, 164 Wn 2d 329, 357, 190 P.3d 38, 51 (2008) "natural resource areas, including agricultural and forestry lands of long-term commercial significance, are not included in a rural element "

³⁵ *Proposed Changes to Planning Assumptions 11/9/2015* pp *3 - 4

³⁶ The enclosed spreadsheet WRIA 27-28 Reservations ESTIMATES w Totals for Clark County by Category totals the Ecology data for Clark County, *Clark County Buildable Lands Report* p 13 (June 2015)

Clark County Board of County Councilors
November 23, 2015
Page 9

Very Truly Yours,

A handwritten signature in black ink, consisting of two large, stylized, overlapping loops that resemble the letters 'S' and 'S'.

Tim Trohimovich, AICP
Director of Planning & Law

Enclosures

11/23/15
11/23/15



10/14/2015 3:52 PM

Hofmann, Tyg (ECY) <THOF461@ECY.WA.GOV>

RE: Q about remaining water reserves for residential uses in WRIAs 27 and 28 in Clark Co

1 - 10/14/2015

You forwarded this message on 10/14/2015 3:21 PM

Message: WRIA 27 28 Reservations ESTIMATES.xlsx (14 KB) WRIA27withReservations.jpg (2 MB) WRIA28withReservations.jpg (2 MB)

1 - 10/14/2015

1 - 10/14/2015

Here are our estimates as of the end of JUNE this year

Let me know if you have any questions

Tyg

WR1A 27-28

	Reservation Benefit (CFS)	Households Served	New Water Wells (ecy)	Public est* systems(doh)	CFS Permitted	TOTAL	RESERVATION % Used
Kalama River Subbasin							
Kalama	1.92	1551				0	0.0%
Small Community Water Systems - Cowlitz Co	0.37	299		1		1	0.3%
Domestic Wells - Cowlitz Co NA 141 0 52 0 16 0 00 0 16	0.16	432	48			48	11.1%
North Fork Lewis River Subbasin							
Small Community Water Systems - Cowlitz Co	0.37	299		1		1	0.3%
Small Community Water Systems - Clark Co	-0.75	606		3		3	0.5%
Small Community Water Systems - Skamania Co	0.4	323		0		0	0.0%
Domestic Wells - Cowlitz Co	0.07	189	82			82	43.4%
Domestic Wells - Clark Co	0.12	324	81			81	25.0%
Domestic Wells - Skamania Co	0.4	1080	0			0	0.0%
Commercial - Skamania County	0.21		0			0	
Ridgefield (Not applicable, due to location in tidally influenced area (8))							
East Fork Lewis River Subbasin							
CPU, Battle Ground and Ridgefield	4.4	3554			0.67	0	15.2%
Small Community Water Systems - Clark Co	0.37	299		2	19	21	7.0%
Small Community Water Systems - Skamania Co	0	0		0		0	0.0%
Domestic Wells - Clark Co	0.47	1269	122			122	9.6%
Domestic Wells - Skamania Co	0.02	54	0			0	0.0%
Salmon Creek Subbasin							
CPU, Battle Ground and Ridgefield	0.25	202		7		7	3.5%
Small Community Water Systems - Clark Co	0	0		0		0	
Domestic Wells - Clark Co	0.12	324	92			92	28.4%
Burnt Bridge Creek Subbasin							
Vancouver	0	0		0		0	0.0%
Small Community Water Systems - Clark Co	0	0		0		0	0.0%
Domestic Wells - Clark Co	0	0		0		0	0.0%
Lacamas Creek Subbasin							
Camas	1	808				0	0.0%
Clark Public Utilities (CPU)	0.6	485				0	0.0%
Small Community Water Systems - Clark Co	0.37	299		3	8	11	3.7%
Domestic Wells - Clark Co NA	0.17	459	71			71	15.5%
Washougal River Subbasin							
Washougal	0	0				0	0.0%
Small Community Water Systems - Clark Co	0.37	299			10	10	3.3%
Small Community Water Systems - Skamania Co	0.2	162				0	0.0%
Domestic Wells - Clark Co	0.17	459	32			32	7.0%
Domestic Wells - Skamania Co	0.64	1728	26			26	1.5%
Columbia River Tributaries Subbasin							
Small Community Water Systems - Clark Co	0.21	170		0		0	0.0%
Small Community Water Systems - Skamania Co	0.21	170		3		3	1.8%
Domestic Wells - Clark Co	0.12	324	14			14	4.3%
Domestic Wells - Skamania Co	0.12	324	10			10	3.1%
Total	14.58	16,490					

	Reservation Benefit (CFS)	Households Served	New Water Wells (ecy)	Public est* systems(doh)	CFS Permitted	TOTAL	RESERVATION % Used	Remaining Household Capacity
Kalama River Subbasin								
Kalama	1.92	1551				0	0.0%	1,551
Small Community Water Systems - Cowlitz Co	0.37	299	1			1	0.3%	298
Domestic Wells - Cowlitz Co NA 141.0.52 0 16 0 00 0 16	0.16	432	48			48	11.1%	384
North Fork Lewis River Subbasin								
Small Community Water Systems - Cowlitz Co	0.37	299	1			1	0.3%	298
Small Community Water Systems - Clark Co	0.75	606	3			3	0.5%	603
Small Community Water Systems - Skamania Co	0.4	323	0			0	0.0%	323
Domestic Wells - Cowlitz Co	0.07	189	82			82	43.4%	107
Domestic Wells - Clark Co	0.12	324	81			81	25.0%	243
Domestic Wells - Skamania Co	0.4	1080	0			0	0.0%	1,080
Commercial - Skamania County	0.21		0			0		0
Ridgefield (Not applicable, due to location in tidally influenced area) (8)								0
East Fork Lewis River Subbasin								
CPU, Battle Ground and Ridgefield	4.4	3554			0.67	0	15.2%	3,554
Small Community Water Systems - Clark Co	0.37	299	2	19		21	7.0%	278
Small Community Water Systems - Skamania Co	0	0	0			0	0.0%	0
Domestic Wells - Clark Co	0.47	1269	122			122	9.6%	1,147
Domestic Wells - Skamania Co	0.02	54	0			0	0.0%	54
Salmon Creek Subbasin								
CPU, Battle Ground and Ridgefield	0.25	202	7			7	3.5%	195
Small Community Water Systems - Clark Co	0	0	0			0		0
Domestic Wells - Clark Co	0.12	324	92			92	28.4%	232
Burnt Bridge Creek Subbasin								
Vancouver	0	0	0			0	0.0%	0
Small Community Water Systems - Clark Co	0	0	0			0	0.0%	0
Domestic Wells - Clark Co	0	0	0			0	0.0%	0
Lacamas Creek Subbasin								
Camas	1	808				0	0.0%	808
Clark Public Utilities (CPU)	0.6	485				0	0.0%	485
Small Community Water Systems - Clark Co	0.37	299	3	8		11	3.7%	288
Domestic Wells - Clark Co NA	0.17	459	71			71	15.5%	388
Washougal River Subbasin								
Washougal	0	0				0	0.0%	0
Small Community Water Systems - Clark Co	0.37	299		10		10	3.3%	289
Small Community Water Systems - Skamania Co	0.2	162				0	0.0%	162
Domestic Wells - Clark Co	0.17	459	32			32	7.0%	427
Domestic Wells - Skamania Co	0.64	1728	26			26	1.5%	1,702
Columbia River Tributaries Subbasin								
Small Community Water Systems - Clark Co	0.21	170	0			0	0.0%	170
Small Community Water Systems - Skamania Co	0.21	170	3			3	1.8%	167
Domestic Wells - Clark Co	0.12	324	14			14	4.3%	310
Domestic Wells - Skamania Co	0.12	324	10			10	3.1%	314
Total	14.58	16,490						15,855
Cities in Clark County								808
CPU for Cities								3,749
Clark Public Utilities (CPU)								485
Small Community Water Systems - Clark Co								1,627
Domestic Wells - Clark Co								2,747
Total Outside Cities								4,859