



Schroader, Kathy

From: Orjiako, Oliver
Sent: Wednesday, November 18, 2015 9:03 AM
To: Euler, Gordon; Alvarez, Jose, Anderson, Colete, Albrecht, Gary, Hermen, Matt, Kamp, Jacqueline, Lebowitz, Laurie, Lumbantobing, Sharon
Cc: Schroader, Kathy
Subject: FW: Additional Comments for Nov 19 Planning Commission Public Hearing on the Preferred Alternative
Attachments: Futurewise Comments to PC on Comp Plan Preferred Alt Nov 17 2015 pdf, WRIA 27-28 Reservations ESTIMATES.xlsx

FYI and for the record Thanks

From: Wiser, Sonja
Sent: Tuesday, November 17, 2015 3:28 PM
To: Planning Commission
Cc: Orjiako, Oliver; Euler, Gordon
Subject: Additional Comments for Nov 19 Planning Commission Public Hearing on the Preferred Alternative

From: Tim Trohimovich [<mailto:Tim@futurewise.org>]
Sent: Tuesday, November 17, 2015 2:29 PM
To: Cnty 2016 Comp Plan; Cnty Community Planning
Subject: Comments for Nov 19 Planning Commission Public Hearing on the Preferred Alternative

Dear Sirs and Madams:

Enclosed please find Futurewise's comments on the preferred alternative for Final SEIS on the county's next growth management plan for this Thursday's Planning Commission public hearing. We will be sending you some of the referenced supporting materials in a second 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 17, 2015

Mr. Steve Morasch, Chair
Clark County Planning Commission
Clark County Community Planning
PO Box 9810
Vancouver, Washington 98666-9810

Dear Chair Morasch and Planning Commission Members:

Subject: Comments on the preferred alternative for Final SEIS on the county's next growth management plan.

Sent via email to: comp.plan@clark.wa.gov; communityplanning@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 Planning Commission's November 19, 2015 public hearing. In short, Futurewise continues to support the Planning Commission's Sept. 17 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 you to continue to recommend it 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.

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

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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.”¹

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.² Enclosed with this letter are an email and two spreadsheets and, in a separate email, maps that show the status of those reserves as of the end of June 2015. Ecology 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.³ This totals 4,859 new households or occupied housing units.⁴ 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.⁵

However, Clark County currently has 5,042 existing vacant lots in the rural areas and on resource lands as of 2014.⁶ 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

¹ *Kittitas Cty v. E Washington Growth Mgmt. Hearings Bd.*, 172 Wn 2d 144, 178, 256 P 3d 1193, 1209 (2011).

² 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, 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) 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.

³ The enclosed spreadsheet WRIA 27-28 Reservations ESTIMATES w Totals for Clark County by Category totals the Ecology data for Clark County.

⁴ The Spreadsheet WRIA 27-28 Reservations ESTIMATES w Totals for Clark County by Category.

⁵ *Foster v Washington State Dep't of Ecology*, No. 90386-7, 2015 WL 5916933, at *4 (Wash Oct. 8, 2015).

⁶ *Clark County Buildable Lands Report* p. 13 (June 2015) accessed on Nov 17, 2015 at: http://www.clark.wa.gov/thegrnd/documents/061015WS_2015BUILDABLE_LANDS_REPORT.pdf and cited page enclosed with this letter.

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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.⁷ 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.⁸ The court concluded that the GMA does not apply the county population projection to areas outside the urban growth areas.⁹

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*.¹⁰ 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.¹¹ 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

⁷ 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.

⁸ *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).

⁹ *Clark Cty Nat. Res. Council v. Clark Cty Citizens United, Inc.*, 94 Wn. App. at 676, 972 P 2d at 943 - 44.

¹⁰ *Clark Cty. Nat. Res. Council v. Clark Cty Citizens United, Inc*, 94 Wn App. at 675 - 77, 972 P 2d at 943 - 44.

¹¹ 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."

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population growth based on past growth trends.¹² 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.¹³ These water limitations will affect future rural growth trends.

Why the Planning Commission Should Continue to Recommend the Sept. 17 Recommendation as the Preferred Alternative

The Planning Commission Sept. 17 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.¹⁴ They found that the per capita costs of most public services declined with density and increased where urban areas were large.¹⁵ 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.¹⁶

The Planning Commission Sept. 17 recommendation will protect water quality

The *Draft SEIS*, in Figure 2-3: Soil Limitations to Septic Sewer Systems on page 2-6, documents that most of Clark County is "very limited" for the use of onsite sewer systems. 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

¹² *Proposed Changes to Planning Assumptions 11/9/2015* pp *3 - 4.

¹³ 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)

¹⁴ 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.

¹⁵ *Id* at 518.

¹⁶ 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.

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contamination from septic tanks is the density of the systems.¹⁷ Lot sizes associated with ground water contamination cases ranged from less than a quarter acre to three acres.¹⁸ 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.”¹⁹ The greater the density of septic tanks the greater the likelihood of diarrheal disease.²⁰ And the highest septic tank densities studied were one septic tank per 11 acres.²¹

Given the large areas of the county that are “very limited” for the use of onsite septic systems and that most of the rest of the county is “somewhat limited,” the Planning Commission recommendation will protect water quality.

The Planning Commission Sept. 17 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.”²² 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.”²³ 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.²⁴

¹⁷ 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.ngwa.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.

¹⁸ Marylynn V. Yates, *Septic Tank Density and Ground-Water Contamination* 23 GROUND WATER 586, p 590 (1985).

¹⁹ 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/ehp0111-000742.pdf> and enclosed with the paper original of Futurewise's Sept 10, 2015 letter commenting on the DSEIS. Environmental Health 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.

²⁰ 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, pp. 745 - 47 (2003)

²¹ *Id.* at 747.

²² 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).

²³ 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).

²⁴ Personal Communication from Coyote Ridge Ranch to Tim Trohímovich (April 02, 2015) enclosed with the paper original of Futurewise's Sept. 10, 2015 letter commenting on the DSEIS

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As was documented above, when Ecology adopted the instream flow rules for WRIAs 27 and 28, Ecology established reserves for future domestic uses.²⁵ The reserved in Clark County can serve another 4,859 new households or occupied housing units.²⁶ However, Clark County currently has 5,042 existing vacant lots in the rural areas and on resource lands as of 2014.²⁷ 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 Planning Commission Sept. 17 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.²⁸ The *Clark County Coordinated Water System Plan Update* states that the rural areas "are not expected to accommodate large amounts of population growth."²⁹ So the Planning Commission Sept. 17 recommendation is more consistent with the plans of the county's water providers.

The Planning Commission Sept. 17 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.

²⁵ 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).

²⁶ The Spreadsheet WRIA 27-28 Reservations ESTIMATES w Totals for Clark County by Category.

²⁷ *Clark County Buildable Lands Report* p. 13 (June 2015) accessed on Nov. 17, 2015 at: http://www.clark.wa.gov/thegrnd/documents/061015WS_2015BUILDABLE_LANDS_REPORT.pdf and cited page enclosed with this letter

²⁸ 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.

²⁹ *Id.* at p. 15.

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Changes we recommend to the Planning Commission Sept. 17 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.³⁰ 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.³¹ Based on the plain language of the GMA, the Washington State Supreme Court held that the comprehensive plan itself must include a variety of rural densities and the Kittitas County Comprehensive Plan violated this requirement.³²

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

³⁰ RCW 36.70A.070(5); *Thurston County v. Western Washington Growth Management Hearings Board*, 164 Wn.2d 329, 357, 190 P.3d 38 (2008).

³¹ *Kittitas Cnty. v. E. Washington Growth Mgmt Hearings Bd.*, 172 Wn 2d 144, 167, 256 P.3d 1193, 1204 (2011)

³² *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 "

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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.³³

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.

Please do not include the urban growth area expansions in the recommendation

Urban growth areas may only be expanded to accommodate the County's need for housing and jobs.³⁴ The existing urban growth areas can already accommodate the County's housing and employment projections.³⁵ So we urge the Planning Commission to not include the urban growth area expansions, such as 3.a (Battle Ground) and 3.b. (La Center) in its recommendation. Maintaining properly sized urban growth areas will save money for taxpayers and ratepayers.³⁶

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

³³ *Kittitas Cnty.*, 172 Wn 2d at 169, 256 P.3d at 1205.

³⁴ *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.

³⁵ *Clark County Buildable Lands Report* pp. 9 - 14 (June 2015) accessed on Nov. 17, 2015 at http://www.clark.wa.gov/thegnd/documents/061015WS_2015BUILDABLE_LANDS_REPORT.pdf and enclosed with Futurewise's Sept 16, 2015 comment letter on the DSEIS

³⁶ John Carruthers and Gudmaundur Ulfarsson, *Urban Sprawl and the Cost of Public Services* 30 ENVIRONMENT AND PLANNING B: PLANNING AND DESIGN 503, 518 (2003)

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Very Truly Yours,

A handwritten signature in black ink, consisting of two stylized, overlapping loops that resemble the letters 'S' and 'T'.

Tim Trohimovich, AICP
Director of Planning & Law

Enclosures



Wed 10/14/2015 3:59 PM

Hoff, Tryg (ECY) <THOF461@ECY.WA.GOV>

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

To: Tim Troshnovich

You forwarded this message on 10/14/2015 5:21 PM.

Message WRJA 27-28 Reservations ESTIMATES.xlsx (14 KB) WRJA27withReservations.jpg (2 MB) WRJA28withReservations.jpg (2 MB)

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Here are our estimates at the end of June this year

Let me know if you have any questions.

Tryg

	Reservation Benefit (CFS)	Households Served	New Water Wells (ecv)	Public est* systems(doh)	CFS Permitted	TOTAL	RESERVATION % Used	Remaining Household Capacity
Kalama River Subbasin								
Kalama	1.92	1551					0	1,551
Small Community Water Systems - Cowlitz Co.	0.37	299	1				1	298
Domestic Wells - Cowlitz Co. NA 141.0.52 0.16 0.00 0.16	0.16	432	48				48	384
North Fork Lewis River Subbasin								
Small Community Water Systems - Cowlitz Co.	0.37	299	1				1	298
Small Community Water Systems - Clark Co.	0.75	606	3				3	603
Small Community Water Systems - Skamania Co.	0.4	323	0				0	323
Domestic Wells - Cowlitz Co.	0.07	189	82				82	107
Domestic Wells - Clark Co.	0.12	324	81				81	243
Domestic Wells - Skamania Co.	0.4	1,080	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	3,554
Small Community Water Systems - Clark Co.	0.37	299	2	19			21	278
Small Community Water Systems - Skamania Co.	0	0	0	0			0	0
Domestic Wells - Clark Co.	0.47	1,269	122				122	1,147
Domestic Wells - Skamania Co.	0.02	54	0				0	54
Salmon Creek Subbasin								
CPU, Battle Ground and Ridgefield	0.25	202	7				7	195
Small Community Water Systems - Clark Co.	0	0	0				0	0
Domestic Wells - Clark Co.	0.12	324	92				92	232
Burnt Bridge Creek Subbasin								
Vancouver	0	0	0				0	0
Small Community Water Systems - Clark Co.	0	0	0				0	0
Domestic Wells - Clark Co.	0	0	0				0	0
Lacamas Creek Subbasin								
Camas	1	808					0	808
Clark Public Utilities (CPU)	0.6	485					0	485
Small Community Water Systems - Clark Co.	0.37	299	3	8			11	288
Domestic Wells - Clark Co. NA	0.17	459	71				71	388
Washougal River Subbasin								
Washougal	0	0					0	0
Small Community Water Systems - Clark Co.	0.37	299		10			10	289
Small Community Water Systems - Skamania Co.	0.2	162					0	162
Domestic Wells - Clark Co.	0.17	459	32				32	427
Domestic Wells - Skamania Co.	0.64	1,728	26				26	1,702
Columbia River Tributaries Subbasin								
Small Community Water Systems - Clark Co.	0.21	170	0				0	170
Small Community Water Systems - Skamania Co.	0.21	170	3				3	167
Domestic Wells - Clark Co.	0.12	324	14				14	310
Domestic Wells - Skamania Co.	0.12	324	10				10	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

Clark County

2016 Comprehensive Growth Management Plan Update



CHECKING IN ON OUR FUTURE

Proposed Changes to Planning Assumptions

An Evidence Based Proposal by Councilor David Madore

11/4/2015

This document focuses primarily on the rural components of the Comp Plan, particularly Alternative 1 and Alternative 4. The proposal contrasts existing choice A with the proposed choice B and provides the factual basis for each. Table 1 provides the assumptions that define the methods for calculating the capacity for rural parcels to accommodate population growth. Table 2 provides the general planning assumptions for population growth, accommodate that growth, GMA considerations, and logical conclusions. The Reference Section provides relevant evidence, the historical basis, and supporting calculations for the two tables. The purpose of this document is to present decision makers with the compelling need to revise the original draft assumptions with more accurate, appropriate, realistic, and evidence based foundations and to apply the insight gained from staff, cities, citizens, the GIS database, and actual historical records.

Table 1: GIS Rural Vacant Buildable Lands Model (VBLM) Assumptions

Ref	A (existing)	B (proposed)
1	<p>Remainder lots of already developed cluster developments with permanent covenants prohibiting further development shall be counted as rural parcels that will develop.</p>	<p>Parcels that cannot reasonably be expected to develop should not be counted as likely to develop. Those include remainder lots of already developed cluster developments that are prohibited from further development.</p> <p><u>No concrete data is available to support findings regarding the number of remainder lots. Cluster remainder lots have not been excluded from the rural capacity estimates because there is no systemic way of identifying them and excluding them. We are working on identifying those subdivisions that are in the Tidemark system since 1999 and providing parcel level data to GIS to digitize. Those cluster developments prior to 1994 will require identification through the data we have on microfilm.</u></p> <p>These parcels have not been legally identified. Plat notes have not been reviewed to determine whether further division is actually precluded on these parcels. Staff has not been advised which land is excluded as cluster remainders, and has no basis to conclude how much land is excluded, or whether the exclusion of this land is appropriate.</p>
2	<p>Parcels located in areas far from any infrastructure with continuous long term commercial forestry operations are counted as rural parcels that will develop.</p> <p><u>Parcels meeting this criterion were excluded from the number of developable lots in the DSEIS. Nothing in CCC would prohibit development, and their owners may be relying upon the developability of those lands. Those parcels should have been included in the calculations.</u></p>	<p>Parcels located in areas far from any infrastructure with continuous long term commercial forestry operations likely to continue should not be counted as likely to develop. This conclusion is contrary to law.</p>
3	<p>Rural parcels including 100% of environmentally constrained areas that lack the necessary area for septic systems and well clearances shall be counted as rural parcels that will develop.</p>	<p>Rural parcels that have less than 1 acre of environmentally unconstrained land necessary for septic systems and well clearances should not be counted as likely to develop.</p> <p><u>. The Habitat Ordinance, CCC 40.440.020.B.(3), and the Wetlands Ordinance, CCC 40.450.010.(B).(4).(c), ordinances each have a</u></p>

		<p><u>reasonable use provision which states: "This chapter shall not be used to deny or reduce the number of lots of a proposed rural land division allowed under applicable zoning density." New advanced septic technologies allow for systems where lots not previously considered feasible for development are now developable.</u></p> <p>To determine whether any particular parcel can be developed it must be reviewed on an individual basis. Rural parcels may share wells with neighbors, and septic drain fields may be placed on neighboring properties.</p>
4	<p>The adopted "Never to Convert" deductions used by the VBLM inside the Urban Growth Boundaries shall be omitted outside the Urban Growth Boundaries. All built and all vacant rural parcels shall be counted as rural parcels that will develop.</p>	<p>The adopted VBLM used for urban areas assumes that a percentage of properties that have an existing residence will likely not divide further. That same 30% "Never to Convert" assumption should apply to already built rural parcels as well. The adopted VBLM used for urban areas assumes that a percentage of vacant properties will likely not divide further. That same 10% "Never to Convert" assumption should apply to vacant rural parcels as well.</p> <p><u>This would be a BOCC policy decision.</u></p>
5	<p>Lots that are up to 10% smaller than the minimum lot size should be considered as conforming lots and counted as likely to develop as provided by current county code.</p>	<p>Same</p>
6	<p>All nonconforming parcels with <u>at least 1 acre</u> shall be counted as rural parcels that will develop.</p>	<p>10% of <u>(legal?)</u> nonconforming parcels with at least 1 acre of unconstrained area will likely develop at the same rate indicated by historical records. <u>No concrete data is available to support these findings. This would be a BOCC policy decision.</u></p>
7	<p>The 15% Market Factor used for urban parcels to provide some margin for the law of supply and demand to satisfy the GMA affordable housing goal inside the UGB shall not apply outside the UGB.</p> <p><u>The market factor is an addition to the land needed in an urban growth area to accommodate 20-year growth projections, because of assumed fluctuating demand for that area. WAC 365-196-310(4)(b)(ii)(F). Market factor is a tool used to size the UGA and does not directly impact the number of lots under study. The market factor is not used to satisfy the affordable housing goals.</u></p>	<p>A deduction of up to 7.5% is appropriate to provide some margin for the law of supply and demand of rural parcels to help satisfy the GMA affordable housing goal.</p> <p><u>The market factor is not used to satisfy the affordable housing goals. It is used to size an area, not to determine the number of lots in the area.</u></p> <p>Market factor, the use of which is authorized by the WAC, is an addition to the amount of land available for development, not a subtraction. It is extremely unlikely that all of the lots designated as available for development over a 20-year period will develop over 8 years, after which time</p>

		a new GMA update will be due, and can make any revisions that are then needed. Subtracting an arbitrary number of lots from the 20-year supply is not supportable in law or reason.
8	A 27.7% infrastructure deduction is use for urban parcels. But because rural parcels are larger, the rural infrastructure deduction is assumed to be small. No deduction shall be used for rural parcels for any infrastructure such as roads, storm water, parks, schools, fire stations, conservation areas, lakes, streams, protected buffers, Etc.	Same <u>An infrastructure deduction in the rural area would be unsupportable because infrastructure needs do not reduce the number of available lots there, given code allowances for inclusion of land associated with roads and private stormwater facilities.</u>

Table 2: Planning Assumptions

Planning Assumption	A (existing)	B (proposed)
1	The 20 year urban population is forecasted to increase by 116,609.	Same <u>577,431-448,845 *.9= 115,727 (urban) 12,858 (rural)</u>
2	The actual historical urban/rural split has consistently been 86/14. But a 90/10 split shall be used instead to lower the rural population growth forecast to only 12,957 persons. <u>The urban/rural split means the allocation of the population growth, not the allocation of the population itself, between the urban and rural areas. The population itself may have been split 86%/14% over the period from 1994 to 2014, but that is not the same as the population growth split, which was 89%/11% during that period.</u>	The actual historical urban/rural split that has consistently been 86/14 should be used as the factual basis to forecast a realistic rural population growth of 16,325 persons. <u>Urban/Rural split is a planning assumption used to determine the percentage of growth that is anticipated in the urban and rural areas respectively. The 1994 plan used an 80/20 split. The 2004 and 2007 plan updates both used a 90/10 split. The attached table indicates the total annual population of the county and rural areas from 1994 to 2014. The percentage of county population residing in the rural area has declined from 15.47% to 13.87% in the 20 year period. This decline is captured in the 11.18% percent of total growth going to the rural area in the same time interval. From 2007 to 2014 the percent of rural growth has been 10.42% of total county growth. See 6th column on page 5. The urban/rural split is based on the future growth, not the population, for a particular year.</u>
3	The annual county-wide population growth rate is forecasted to be 1.25%. Increasing from 447,865 in 2015 to 577,431 in 2035 is a total increase of 129,566 persons which is 1.279% per year. <u>448,845 is the estimated population</u>	The county-wide population with the 86/14 split is forecasted to increasing from 447,865 in 2015 to 580,799 in 2035 for a total increase of 132,934 persons which is 1.308% per year. (0.029% higher than A). 580,799 is 0.58% higher than 577,431.

	for the 2015 base year. GIS and Planning use natural log versus Average Annual Compound Growth rate to calculate growth rate. What is the derivation of the 1.279%?	
4	The above assumptions assert that Alternative 1 can accommodate 18,814 new persons which is 45% too high in the rural areas. (18,814 / 12,957)	The above updated assumptions show that Alternative 1 can only accommodate 8,182 new persons which is 50% too low. Thus Alternative 1 is not viable since it cannot comply with the GMA requirement to provide for the forecasted growth. (8,182 / 16,325) The urban/rural split is based on the future growth, not the population, for a particular year.
5	The above assumptions assert that Alternative 4 can accommodate 32,987 new persons which is 155% too high and therefore stated by the SDEIS to have too much impact. (32,987 / 12,957)	The above assumptions assert that Alternative 4 can accommodate 16,332 new persons to fit the forecasted rural population growth nearly exactly.
6	The Alternative 4 map without mitigation revisions does not preserve large parcels near the UGBs for future employment, removes 20 acre AG zoning, and is said by the SDEIS to change the rural character.	The Alternative 4 updated map includes mitigation that increases the variety of parcels, preserves large parcels near the UGBs for future employment, and better preserves the rural character by including 20 acre AG minimum lot sizes.
7	Cluster options may be but are not necessarily included in any Alternative and therefore may not be available to preserve open space or large areas of habitat. Clustering is currently allowed by code in the Rural zones. Code changes that would govern clustering should be adopted, consistent with GMA, after a preferred alternative is selected.	Rural cluster options are to be integrated into Alternative 4 per previous direction given by the Board for all rural zones to preserve open space and to better provide for large areas of habitat. Residential cluster development in the agricultural areas would need to comply with RCW 36.70A.177 , as well as other GMA provisions concerning protection of resource industries.
8	Alternative-1 defines 60% of existing R parcels as nonconforming, 70% of existing AG parcels as nonconforming, and 80% of existing FR parcels as nonconforming. The DSEIS does not recommend the selection of any alternative. The numbers cited are not a legal problem, but rather describe the rural landscape.	The updated Alternative-4 definition and map should be adopted to correct the mismatch between Alternative 1 and the actual ground truth, to respect predominant lots sizes, to resolve some spot zoning problems, and to best accommodate the forecasted population. Some of the issues include the following: Legal lots, spot zoning, low-density rural sprawl, protection of resource lands, rural character, capital facilities needed to accommodate growth, and water supply.

Reference Section – the factual basis for assumptions

The following table documents the actual urban / rural split for the last 20 years:

Year	County-wide Population	Rural Population	Percent Rural Population	Urban / Rural Split	<u>Percent of Population Growth in Rural Area</u>
1995	279,522	43,254	15.5	84/16	<u>na</u>
1996	293,182	44,882	15.3	85/15	<u>11.9</u>
1997	305,287	46,409	15.2	85/15	<u>12.6</u>
1998	319,233	48,104	15.1	85/15	<u>12.2</u>
1999	330,800	49,429	14.9	85/15	<u>11.5</u>
2000	346,435	51,182	14.8	85/15	<u>11.2</u>
2001	354,870	52,002	14.7	85/15	<u>9.7</u>
2002	369,360	53,548	14.5	85/15	<u>10.7</u>
2003	375,394	54,146	14.4	86/14	<u>9.9</u>
2004	384,713	54,869	14.3	86/14	<u>7.8</u>
2005	395,780	56,009	14.2	86/14	<u>10.3</u>
2006	406,124	57,551	14.2	86/14	<u>14.9</u>
2007	414,743	58,608	14.1	86/14	<u>12.3</u>
2008	419,483	59,042	14.1	86/14	<u>9.2</u>
2009	424,406	59,623	14.0	86/14	<u>11.8</u>
2010	427,327	59,858	14.0	86/14	<u>8.0</u>
2011	432,109	60,544	14.0	86/14	<u>14.3</u>
2012	435,048	60,845	14.0	86/14	<u>10.2</u>
2013	443,277	61,489	13.9	86/14	<u>7.8</u>
2014	446,785	61,948	13.9	86/14	<u>13.1</u>

Source: Clark County Assessor GIS records based on the population. From 1995 through 2014, the total population of the county grew from 279,522 to 446,785, which is total growth of 167,263. During the same time, the county's rural population grew from 43,254 to 61,948, or 18,694 additional residents in the rural area. The overall percent of the county's total population growth from 1995 through 2014 that occurred in the rural area was 11.2, and the urban/rural split, as that term is generally used for comprehensive planning, was 89/11.

The following table documents the actual capacity of the rural area to accommodate the potential population increase for Alternative-1 and Alternative-4 using proposed choice B assumptions compared to the existing choice A assumptions considered in the DSEIS.

	Alt-1 Capacity per DSEIS Choice A (existing)	Alt-1 Actual Capacity Choice B (proposed)	Alt-4 Capacity per DSEIS Choice A (existing)	New Alt-4 Actual Capacity Choice B (proposed)
Rural Zone	5,684	2,570	9,880	4,710
Agriculture Zone	970	286	1,958	733
Forest Zone	419	162	563	1,097
Nonconforming likely		183		74
Other Rural Zones		124		124
Gross potential growth home sites	7,073	3,325	12,401	6,638
7,5% Market Factor deduction <u>The market factor is an addition to the land needed in an urban growth area to accommodate 20-year growth projections, because of assumed fluctuating demand for that area. WAC 365-196-310(4)(b)(ii)(F).</u>	0	-249	0	-498
Net potential growth of home sites	7,073	3,076	12,401	6,140
Potential population growth	18,814	8,182	32,987	16,332

Source: Clark County GIS: Columns 1 and 3 are from the DSEIS. GIS did supply numbers that appear in Columns 2 and 4, based upon Councilor Madore's requests and assumptions. New Alt 4 was not studied in the DSEIS.

The following table provides the forecasted population for choices A and B.

ref	Year	County-wide Population A	County-wide Growth A	Urban Growth A & B	Rural Growth B	County-wide Growth B	County-wide Population B
0	2015	447865 Should be 448,845	0	0	0	0	447865 Should be 448,845
1	2016	453591	5726	5153	721	5874	453739
2	2017	459391	11526	10373	1452	11825	459690
3	2018	465265	17400	15660	2192	17852	465717
4	2019	471213	23348	21013	2942	23955	471820
5	2020	477238	29373	26436	3701	30137	478002
6	2021	483340	35475	31928	4470	36398	484263
7	2022	489520	41655	37490	5249	42739	490604
8	2023	495779	47914	43123	6037	49160	497025
9	2024	502118	54253	48828	6836	55664	503529
10	2025	508538	60673	54606	7645	62251	510116
11	2026	515040	67175	60458	8464	68922	516787
12	2027	521626	73761	66385	9294	75679	523544
13	2028	528295	80430	72387	10134	82521	530386
14	2029	535050	87185	78467	10985	89452	537317
15	2030	541891	94026	84623	11847	96470	544335
16	2031	548819	100954	90859	12720	103579	551444
17	2032	555837	107972	97175	13605	110780	558645
18	2033	562943	115078	103570	14500	118070	565935
19	2034	570141	122276	110048	15407	125455	573320
20	2035	577431	129566	116609	16325	132934	580799

Thus the 2035 rural population growth forecasted using assumptions choice B is 16,325 that leaves the forecasted urban growth rate the same but updates the urban/rural split to 86/14.

Correcting the population growth planning assumptions:

The planning assumptions published on Table S-1 on page of the SDEIS show the following:

Total population projection for 2035 = 577,431

Projected new residents = 129,566

The 2015 population = 577,431 – 129,566 = 447,865

Annual population growth rate = 1.25%

Urban/rural population growth split = 90% urban, 10% rural

Thus the 2035 urban population growth = 129,566 This number is incorrect; the correct number is 128,616, and is shown on Table 1-1 Summary of Planning Assumptions on page 1-2 of the DSEIS. $*0.9 = 116,609$

Thus the 2035 rural population growth = $129,566 * 0.1 = 12,957$

The more precise annual population growth rate using the original choice A assumptions is calculated as follows:

$577,431 / 447,865 = 1.2893$

The 20th root of 1.2893 = 1.279 which translates to a 1.279% annual growth rate.

Councilor Madore’s calculation of the growth rate results in the average annual geometric growth rate compounded annually. Planning and GIS, however calculate an average annual exponential growth rate with continuous compounding.

The corrected annual population growth rate is calculated as follows:

$580,799 / 447,865 = 1.29682$

The 20th root of 1.29682 = 1.01308 which translates to a 1.308% annual growth rate.

Councilor Madore’s calculation of the growth rate results in the average annual geometric growth rate compounded annually. Planning and GIS, however calculate an average annual exponential growth rate with continuous compounding.

Thus, the forecasted annual population growth rate using choice A assumptions is 0.029% higher than the forecast of choice A assumptions.

(1.308% - 1.279% = 0.029%) The method used to calculate the growth rate here results in the average annual geometric growth rate compounded annually. Planning and GIS, however calculate an average annual exponential growth rate with continuous compounding.

The proposed planning assumptions for choice B are as follows:

Total population projection for 2035 = 580,799 (0.58% different)

Total county-wide increase = 132,934 persons (2.6% different, 132,934 / 129,566)

Annual county-wide population growth rate = 1.308% (0.029% different)

Urban/rural population growth split = 86% urban, 14% rural (updated from 90/10)

Thus the 2035 urban population growth = 116,609 persons (same)

Additional details will be provided.

Population Comparisons

	DSEIS	Corrected 2015 base population	Proposed	Proposed with 2015 base population adjustment
2015 Base	448,815	448,845	447,865	448,845
Growth	128,616	128,586	132,934	131,954
2035 forecast	577,431	577,431	580,799	580,799
Average Annual Exponential Growth Rate (Continuous Compounding)	1.26	1.26	1.30	1.29
Average Annual Geometric Growth Rate (Compounding Annually)	1.27	1.27	1.31	1.30

Planning and GIS have provided a corrected 2015 base population of 448, 845. Based on that number, the countywide growth over 20 years is estimated to be 128,586. The estimated growth rate would then be 1.29 %.

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	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	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					