

Snohomish County:

WRIA 7					
HUC	New Residential Dwellings			Rural Capacity 2019	
Name	Year Built	Public Water Areas	P-E Well Areas	Public Water Areas	P-E Well Areas
Tulalip Creek - Frontal Possession Sound	2008	38	20	379	224
	2009	16	9		
	2010	9	9		
	2011	6	9		
	2012	4	2		
	2013	14	2		
	2014	10	8		
	2015	4	7		
	2016	4	17		
	2017	16	15		
	2018	16	14		
	Total	137	112		
Percent of Total WRIA by HUC	9.09%	5.00%	4.09%		
Quilceda Creek	2008	12	22	466	747
	2009	5	7		
	2010	0	5		
	2011	0	16		
	2012	1	11		
	2013	1	5		
	2014	2	11		
	2015	2	15		
	2016	2	9		
	2017	0	13		
	2018	3	24		
	Total	28	138		
Percent of Total WRIA by HUC	6.06%	1.02%	5.04%		
Snohomish River - Frontal Possession Sound	2008	17	5	382	192
	2009	4	3		
	2010	6	1		
	2011	14	7		
	2012	18	1		
	2013	49	5		
	2014	31	6		
	2015	13	13		
	2016	23	10		
	2017	16	8		
	2018	8	6		
	Total	199	65		

Percent of Total WRIA by HUC	9.64%	7.26%	2.37%		
Little Pilchuck River	2008	11	48	834	1308
	2009	5	14		
	2010	10	7		
	2011	12	3		
	2012	6	5		
	2013	15	5		
	2014	3	18		
	2015	21	10		
	2016	25	13		
	2017	14	21		
	2018	8	15		
	Total	130	159		
Percent of Total WRIA by HUC	10.55%	4.74%	5.80%		
Lower Pilchuck River	2008	57	22	1488	821
	2009	22	7		
	2010	11	6		
	2011	13	14		
	2012	15	5		
	2013	26	2		
	2014	21	7		
	2015	26	8		
	2016	50	11		
	2017	43	12		
	2018	24	32		
	Total	308	126		
Percent of Total WRIA by HUC	15.84%	11.24%	4.60%		
French Creek	2008	24	11	904	189
	2009	2	4		
	2010	1	5		
	2011	11	8		
	2012	19	1		
	2013	45	3		
	2014	21	6		
	2015	10	6		
	2016	7	4		
	2017	12	1		
	2018	9	19		
	Total	161	68		
Percent of Total WRIA by HUC	8.36%	5.88%	2.48%		
	2008	11	4		
	2009	14	8		

Evans Creek - Snohomish River	2010	6	2	659	230
	2011	10	6		
	2012	2	4		
	2013	4	4		
	2014	13	5		
	2015	17	9		
	2016	10	6		
	2017	14	9		
	2018	20	5		
	Total	121	62		
Percent of Total WRIA by HUC	6.68%	4.42%	2.26%		
Peoples Creek - Snoqualmie River	2008	1	5	50	354
	2009	1	1		
	2010	1	5		
	2011	0	2		
	2012	0	1		
	2013	1	2		
	2014	0	2		
	2015	0	1		
	2016	5	13		
	2017	1	16		
	2018	0	6		
	Total	10	54		
Percent of Total WRIA by HUC	2.34%	0.36%	1.97%		
Upper Pilchuck River	2008	24	7	800	212
	2009	10	5		
	2010	7	3		
	2011	22	2		
	2012	20	0		
	2013	10	0		
	2014	11	3		
	2015	11	4		
	2016	14	0		
	2017	6	1		
	2018	18	2		
	Total	153	27		
Percent of Total WRIA by HUC	6.57%	5.58%	0.99%		
Woods Creek	2008	39	25		
	2009	20	7		
	2010	21	9		
	2011	17	7		
	2012	7	3		
	2013	12	1		

WOODS CREEK	2014	14	11	1206	698
	2015	32	8		
	2016	39	20		
	2017	32	16		
	2018	36	16		
	Total	269	123		
Percent of Total WRIA by HUC	14.31%	9.82%	4.49%		
Elwell Creek - Skykomish River	2008	7	19	156	437
	2009	0	10		
	2010	0	4		
	2011	3	1		
	2012	0	0		
	2013	1	3		
	2014	1	5		
	2015	1	12		
	2016	3	3		
	2017	2	4		
	2018	0	3		
	Total	18	64		
Percent of Total WRIA by HUC	2.99%	0.66%	2.34%		
Cherry Creek	2008	0	1	0	35
	2009	0	0		
	2010	0	1		
	2011	0	4		
	2012	0	0		
	2013	0	0		
	2014	0	0		
	2015	0	0		
	2016	0	0		
	2017	0	0		
	2018	0	0		
	Total	0	6		
Percent of Total WRIA by HUC	0.22%	0.00%	0.22%		
Lower Sultan River	2008	2	4	82	172
	2009	0	2		
	2010	0	0		
	2011	0	4		
	2012	0	1		
	2013	0	0		
	2014	0	6		
	2015	8	5		
	2016	13	2		
	2017	19	5		

	2018	9	0		
	Total	51	29		
Percent of Total WRIA by HUC	2.92%	1.86%	1.06%		
McCoy Creek - Skykomish River	2008	6	6	60	237
	2009	0	8		
	2010	0	1		
	2011	0	3		
	2012	0	2		
	2013	0	0		
	2014	1	3		
	2015	1	3		
	2016	1	2		
	2017	1	7		
	2018	3	2		
	Total	13	37		
Percent of Total WRIA by HUC	1.82%	0.47%	1.35%		
Olney Creek	2008	0	0	0	5
	2009	0	0		
	2010	0	0		
	2011	0	0		
	2012	0	0		
	2013	0	0		
	2014	0	0		
	2015	0	0		
	2016	0	0		
	2017	0	0		
	2018	0	0		
	Total	0	0		
Percent of Total WRIA by HUC	0.00%	0.00%	0.00%		
Wallace River	2008	1	8	182	272
	2009	1	7		
	2010	0	3		
	2011	0	1		
	2012	0	1		
	2013	0	0		
	2014	0	0		
	2015	3	2		
	2016	0	8		
	2017	1	3		
	2018	4	0		
	Total	10	33		
Percent of Total WRIA by HUC	1.57%	0.36%	1.20%		

Upper Sultan River	2008	0	0	0	2
	2009	0	0		
	2010	0	0		
	2011	0	0		
	2012	0	0		
	2013	0	0		
	2014	0	0		
	2015	0	0		
	2016	0	0		
	2017	0	0		
	2018	0	0		
	Total	0	0		
Percent of Total WRIA by HUC	0.00%	0.00%	0.00%		
Lower North Fork Skykomish River	2008	0	0	0	70
	2009	0	4		
	2010	0	0		
	2011	0	1		
	2012	0	1		
	2013	0	1		
	2014	0	0		
	2015	0	0		
	2016	0	0		
	2017	0	1		
	2018	0	0		
	Total	0	8		
Percent of Total WRIA by HUC	0.29%	0.00%	0.29%		
Lower South Fork Skykomish	2008	0	2	0	96
	2009	0	12		
	2010	0	2		
	2011	0	0		
	2012	0	1		
	2013	0	0		
	2014	0	2		
	2015	0	0		
	2016	0	2		
	2017	0	0		
	2018	0	0		
	Total	0	21		
Percent of Total WRIA by HUC	0.77%	0.00%	0.77%		
	2008	0	0		
	2009	0	0		
	2010	0	0		
	2011	0	0		

Middle North Fork Skykomish River	2012	0	0	0	45
	2013	0	0		
	2014	0	0		
	2015	0	0		
	2016	0	0		
	2017	0	0		
	2018	0	0		
	Total	0	0		
Percent of Total WRIA by HUC	0.00%	0.00%	0.00%		
Total for WRIA 7 by year	2008	250	209	7648	6346
	2009	100	108		
	2010	72	63		
	2011	108	88		
	2012	92	39		
	2013	178	33		
	2014	128	93		
	2015	149	103		
	2016	196	120		
	2017	177	132		
	2018	158	144		
Total for WRIA 7	2740	1608	1132	7648	6346
Percent	100.00%	58.69%	41.31%	54.65%	45.35%

WRIA 7 HU Growth

Forecast Options:

Average Annual Increase 249

	SCENARIOS	Total	Public Water Areas	HUs within P-E Well Areas
1	20 year projection - "past trends"	4982	2924	2058
2	20-year projection - "Comp Plan"	3536	2075	1461
3	20-year projection - OFM High (2012 data)	6590	3867	2723
4	2019 Capacity	13994	7648	6346

<u>Assumptions:</u>	<u>Under count new well potential or over count?</u>
Includes vacant parcels of .5 acre or larger in rural and resource areas; including private forest lands (based on requirements for accomodating the home, well and septic system)	under count - some smaller parcels may have new wells
Includes vacant and underdeveloped parcels that are large enough to subdivide given the underlying zoning (ex. One house on twenty acres in an R-5 zone)	neutral
Assumes that all subdivisions will use the Rural Cluster option (greatest capacity option if eligible for density bonus)	slight over count
Uses capacity analysis conducted in 2011 adjusted for new growth 2012-2018 (parcel based future capacity). This anaysis excludes known critical areas from developable land base. There are unknown critical areas where further development may be restricted thereby reducing capacity.	slight over count
<u>Exclusion Areas (assumes 0 new P-E wells in the following areas):</u>	
Cities - urban level services, most will be on public water	minimal under count potential
Unincorporated UGAs - urban level of services, most will be on public water. Since charging \$500 for new wells, zero have been located within UGA.	minimal under count potential
Govt property and parks - used for govt purposes and very unlikely to convert to other uses; with possible exception of school properties - slightly higher risk of conversion to non-govt property.	minimal under count potential
Excludes state and national forest lands - state agency lands may be sold to private holdings. (Note: Does not exclude private forest lands)	minimal under count potential
<u>Public Water Service Areas (assumes new HU will hook to public water):</u>	
Sfr parcels within 100 feet of an existing water line - rural parcels are often large, (ex. one square acre is 208'x208'). 100' is the proposed requirement in the county's draft water code.	this could go either way - extensions are known to occur at much greater distance; or water provider may not approve connection due to system issues.

Subdividable parcels within 1/4 mile of water lines - county code requires that RCS hook up to existing water system if within 1/4 mile of the system and the provider approves the hook-up. There will be some that do not hook up due to system delivery issues by the provider. No current data to test this assumption due to vesting timelines for RCS.	Most likely an under count of new wells; the providers may decline to provide service.
<u>P-E Well Areas (assumes HU that will rely on new PE well):</u>	
Rural and resource lands (ag and private forest lands included) outside of the exclusion areas and outside of the water service areas.	Over count - water service may extend further than the 100' buffer used to determine water service area.
Parcels .5 acre and larger - this size was selected based on area and separation requirements for well, septic, house	Under count - Slightly smaller parcels could be on wells (?)
Capacity assignments include subdivision potential of both vacant and underdeveloped lots based on current zoning. Rural zoning is very stable due to GMA requirements - very unlikely to upzone the rural areas. UGA expansion into rural areas would substantially increase capacity but at urban densities the only option is connect to public water.	potential overcount - subdivisions may not use RCS (unlikely)

	SNOHOMISH COUNTY WRIA 7 - HUC 12 Name	Growth Forecast Scenarios - New Homes									2019 Available Capacity			Capacity Surplus or Shortfall Current Trends Scenario -			Capacity Surplus or Shortfall Comp Plan Targets -			Capacity Surplus or Shortfall OFM High Forecast* -		
		Current Trends			V 2040 Comp Plan Targets			OFM High Forecast*			Total	Water Service Areas	P-E Well Areas									
		Total	Water Service Areas	P-E Well Areas	Total	Water Service Areas	P-E Well Areas	Total	Water Service Areas	P-E Well Areas				Total	Water Service Areas	P-E Well Areas	Total	Water Service Areas	P-E Well Areas	Total	Water Service Areas	P-E Well Areas
x	Little Pilchuck River	525	236	289	373	168	205	695	313	382	2142	834	1308	1617	598	1019	1769	666	1103	1447	521	926
x	Quilceda Creek	302	51	251	214	36	178	399	67	332	1213	466	747	911	415	496	999	430	569	814	399	415
x	Lower Pilchuck River	789	560	229	560	397	163	1044	741	303	2309	1488	821	1520	928	592	1749	1091	658	1265	747	518
x	Woods Creek	713	489	224	506	347	159	943	647	296	1904	1206	698	1191	717	474	1398	859	539	961	559	402
	Tulalip Creek - Frontal Possession Sound																					
x	Sound	453	249	204	321	177	145	599	330	269	603	379	224	150	130	20	282	202	79	4	50	-45
x	French Creek	416	293	124	296	208	88	551	387	164	1093	904	189	677	611	65	797	696	101	542	517	25
	Snohomish River - Frontal Possession Sound																					
x	Sound	480	362	118	341	257	84	635	479	156	574	382	192	94	20	74	233	125	108	-61	-97	36
x	Elwell Creek - Skykomish River	149	33	116	106	23	83	197	43	154	593	156	437	444	123	321	487	133	354	396	113	283
x	Evans Creek - Snohomish River	333	220	113	236	156	80	440	291	149	889	659	230	556	439	117	653	503	150	449	368	81
x	Peoples Creek - Snoqualmie River	116	18	98	83	13	70	154	24	130	404	50	354	288	32	256	321	37	284	250	26	224
x	McCoy Creek - Skykomish River	91	24	67	65	17	48	120	31	89	297	60	237	206	36	170	232	43	189	177	29	148
x	Wallace River	78	18	60	55	13	43	103	24	79	454	182	272	376	164	212	399	169	229	351	158	193
x	Lower Sultan River	145	93	53	103	66	37	192	123	70	254	82	172	109	-11	119	151	16	135	62	-41	102
x	Upper Pilchuck River	327	278	49	232	197	35	433	368	65	1012	800	212	685	522	163	780	603	177	579	432	147
x	Lower South Fork Skykomish River	38	0	38	27	0	27	51	0	51	96	0	96	58	0	58	69	0	69	45	0	45
x	Lower North Fork Skykomish River	15	0	15	10	0	10	19	0	19	70	0	70	55	0	55	60	0	60	51	0	51
x	Cherry Creek - SnoCo Portion	11	0	11	8	0	8	14	0	14	35	0	35	24	0	24	27	0	27	21	0	21
x	Olney Creek	0	0	0	0	0	0	0	0	0	5	0	5	5	0	5	5	0	5	5	0	5
x	Upper Sultan River	0	0	0	0	0	0	0	0	0	2	0	2	2	0	2	2	0	2	2	0	2
x	Middle North Fork Skykomish River	0	0	0	0	0	0	0	0	0	45	0	45	45	0	45	45	0	45	45	0	45
	Total WRIA 7	4981	2924	2059	3536	2075	1463	6590	3867	2723	13994	7648	6346	9013	4724	4287	10458	5573	4883	7404	3781	3623

	Excluded: (all urban or all forest)	Notes:
x	Powder Mill Gulch - Frontal Possession Sound	
x	Middle Sultan River	Growth Forecast Scenarios - New Homes - Current Trends and V Comp Plan Targets and 2019 Available Capacity prepared by Snohomish County.
x	Upper North Fork Skykomish	Growth Forecast Scenario - OFM High Forecast prepared by GeoEngineers using population data provided by OFM in 2012. These values have not been vetted and approved by the County.
x	Upper Beckler River	OFM High Forecast exceeds capacity in three HUCs
x	Lower Beckler River	
x	Rapid River	
x	Upper North Fork Tolt River - Sno Co Portion	
x		
	*OFM High Forecast Developed by GeoEngineers	

Growth Estimate Prepared by Snohomish County:

2015 Snohomish County Comp Plan			Snohomish County population growth forecast (Pop. Change 2018 to 2038)	2016 Countywide Planning Policy Population Allocation		Rural/Resource growth share by WRIA (Based on rural growth share 2008-2018)		
		Avg. Annual increase (2011-2035)		Urban share 92.1%	Rural share 7.9%	WRIA 3 & 5 (33%)	WRIA 7 (62%)	WRIA 8 (5%)
2011	2035							
717000	955257	9927	198548	182862	15685	5176	9725	784
New Housing Units by WRIA 2018-2038:						(Rural Avg HU size = 2.75)	1882	3536
Allocation of NEW HU based on SnoCounty Model for likely "Water Service Areas" and "P-E Well Areas"						Total Available HU Capacity (Sheet 1)	13994	646
						Growth Share in "Water Service Area" (Sheet 1)	59%	52%
						Growth Share in "P-E Well Area" (Sheet 1)	41%	48%
						New HU in "Water Service Area" 2018- 2038	2075	148
						New HU in "P-E Well Area" 2018- 2038	1461	137

Avg rural HU size is based on adopted growth targets; based on Population and HU increase 2011 to 2035.
Using the adopted OFM Medium Forecast produced in 2012

Growth Estimate Prepared by GeoEngineers:

2015 Snohomish County Comp Plan			Snohomish County population growth forecast (Pop. Change 2018 to 2038)	2016 Countywide Planning Policy Population Allocation		Rural/Resource growth share by WRIA (Based on rural growth share 2008-2018)		
		Avg. Annual increase (2011-2035)		Urban share 92.1%	Rural share 7.9%	WRIA 3 & 5 (33%)	WRIA 7 (62%)	WRIA 8 (5%)
2011	2035							
717000	1161003	18500	370003	340772	29230	9646	18123	1462
New Housing Units by WRIA 2018-2038:						(Rural)	3508	6590
Allocation of NEW HU based on SnoCounty Model for likely "Water Service Areas" and "P-E Well Areas"						Total Available HU Capacity (Sheet 1)	13994	646
						Growth Share in "Water Service Area" (Sheet 1)	59%	52%
						Growth Share in "P-E Well Area" (Sheet 1)	41%	48%
						New HU in "Water Service Area" 2018- 2038	3868	276
						New HU in "P-E Well Area" 2018- 2038	2722	255

Avg rural HU size is based on adopted growth targets; based on Population and HU increase 2011 to 2035.
Using the OFM High Forecast produced in 2012 (Note: not adopted or vetted as official forecast)

Growth Estimate Prepared by GeoEngineers:

2015 Snohomish County Comp Plan			Snohomish County population growth forecast (Pop. Change 2018 to 2038)	2016 Countywide Planning Policy Population Allocation		Rural/Resource growth share by WRIA (Based on rural growth share 2008-2018)		
		Avg. Annual increase (2011-2035)		Urban share 92.1%	Rural share 7.9%	WRIA 3 & 5 (33%)	WRIA 7 (62%)	WRIA 8 (5%)
2011	2035							
717000	802384	3558	71153	65532	5621	1855	3485	281
New Housing Units by WRIA 2018-2038:						(Rural)	675	1267
Allocation of NEW HU based on SnoCounty Model for likely "Water Service Areas" and "P-E Well Areas"						Total Available HU Capacity (Sheet 1)	13994	646
						Growth Share in "Water Service Area" (Sheet 1)	59%	52%
						Growth Share in "P-E Well Area" (Sheet 1)	41%	48%
						New HU in "Water Service Area" 2018- 2038	748	53
						New HU in "P-E Well Area" 2018- 2038	520	49

Avg rural HU size is based on adopted growth targets; based on Population and HU increase 2011 to 2035.
Using the OFM Low Forecast produced in 2012 (Note: not adopted or vetted as official forecast)