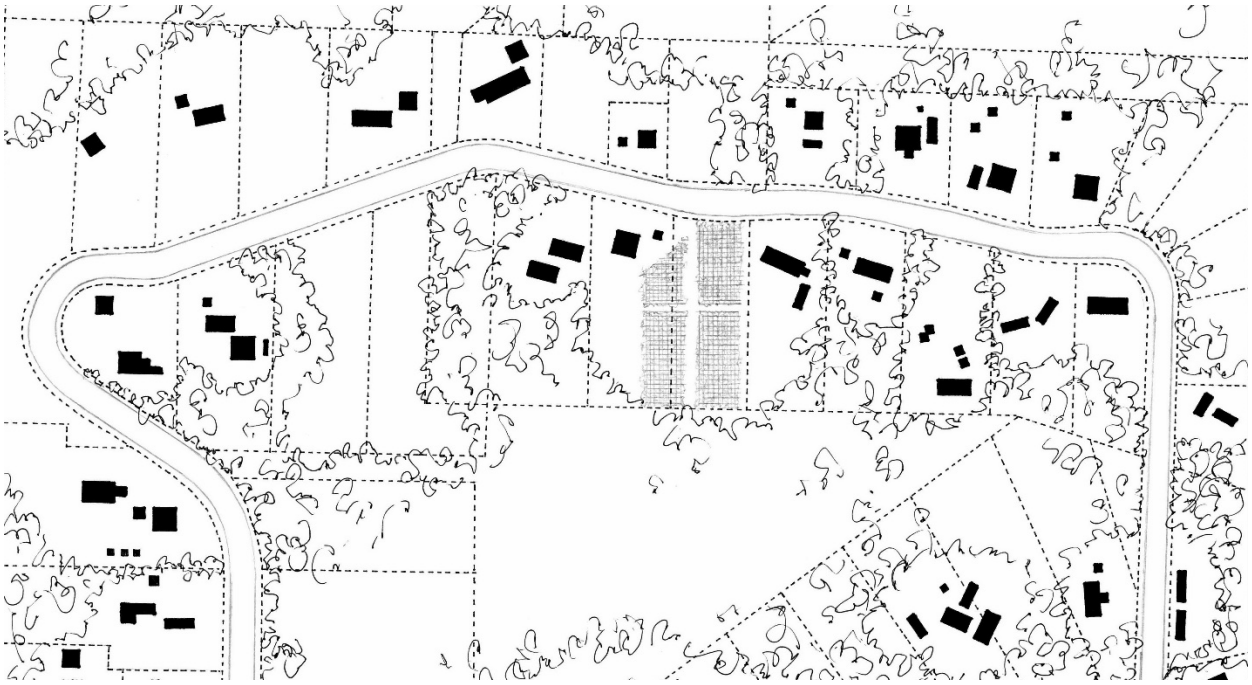
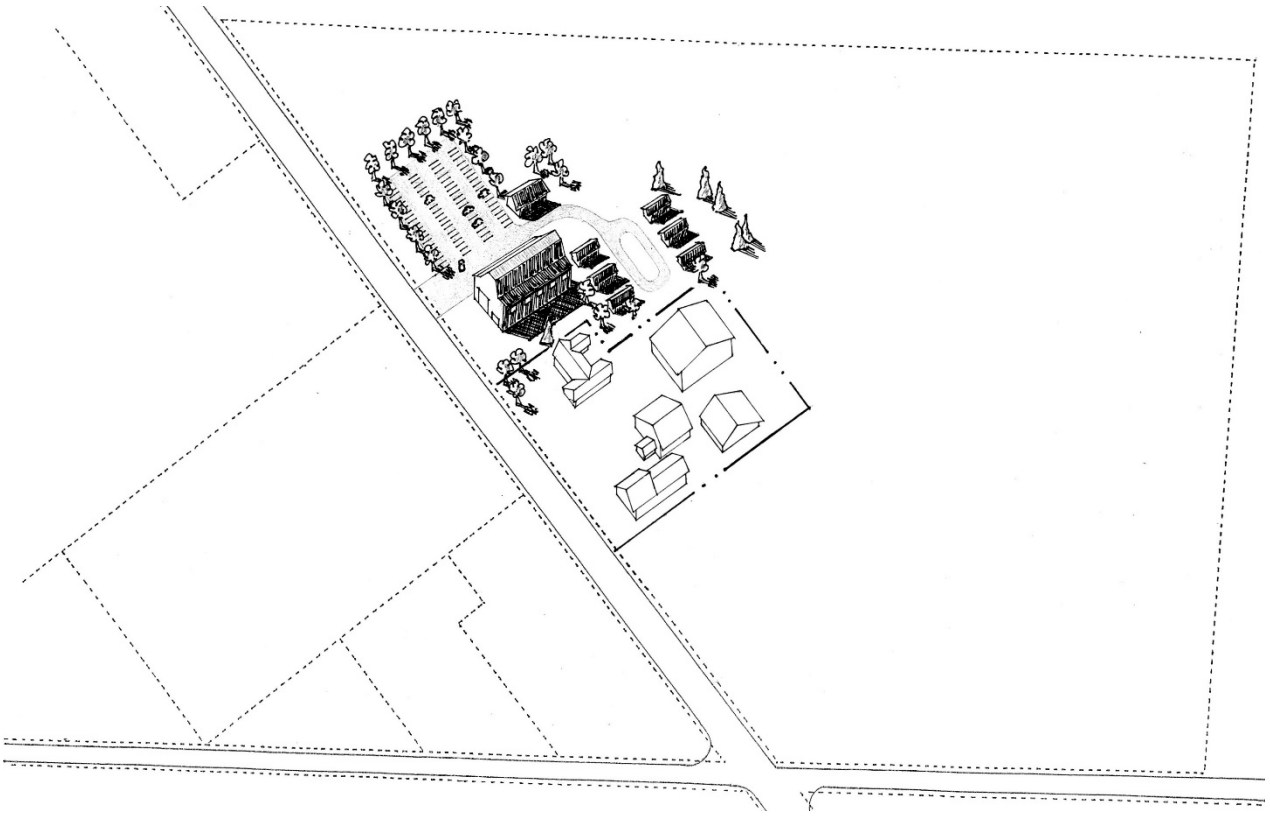


Rural Housing Alternative
Analysis and Results

February 15, 2023



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More information on the Rural Housing Update is available at
https://lewiscountywa.gov/departments/community-development/rezones/comprehensive-plan-and-development-regulation-amendments/rural-housing-update/

Table of Contents

1. Purpose and Process

The purpose of the Rural Housing Alternative (RHA) is to explore housing options in Lewis County to enable development of new housing that is affordable for low to middle incomes and fits in the county's rural character.

Why consider more housing options in rural Lewis County? The Growth Management Act (GMA) has the laudable goal of encouraging responsible, cost-effective growth for the long-term health of communities. This includes both compact urban development as well as "traditional rural lifestyles, rural-based economies, and opportunities to both live and work in rural areas."[1] But, the GMA has an unintended side effect: its incentives are prejudiced against poor people in rural areas. This is because the GMA funnels rural residential development into large single-family homes on sizeable lots, a very expensive form of housing. As real estate prices rise, housing in rural areas is increasingly unaffordable to all but the wealthiest.

For example, data discussed below in the GMA section shows that median home sale prices have risen dramatically in Lewis County over the last decade—from a 180% increase in the most urban area to an over 330% increase in one of the most rural areas of the county.

The Rural Housing Alternative (RHA) attempts to solve the housing affordability and displacement problems that arise as an unintended consequence of the GMA, while satisfying its core goals and policies about reducing development impacts from sprawl and preserving resource lands.

The Update's analysis begins with this report, exploring regulations that will apply to housing options in rural Lewis County and drawing conclusions about what kinds of housing could be allowed without the need for urban services. The report will be vetted with stakeholders and presented to the Board of County Commissioners.

It is anticipated that this report will lead to an RHA Recommendations document that outlines next steps and regulatory updates to the Lewis County Code (LCC). Any recommended updates to the LCC will require a public hearing before the Lewis County Planning Commission, who would deliberate, hold a hearing, and make a recommendation to the Board of County Commissioners, who would also hold a public hearing before making a final decision. This process is expected to occur in 2023, and will address not merely the regulatory matters in this document, but also aesthetic and policy issues about rural character. The latter requires public input on local land use preferences about what should be allowed, beyond what merely could be allowed. Staff will therefore carry out a public engagement program.

[1] *See* RCW 36.70A.030(23) (defining rural character); RCW 36.70A.070(5) (requiring a rural element satisfying this character).

2. Septic and Well in Rural Development Districts

A. Background and Assumptions

In the early 2000s, Lewis County designated Rural Development District (RDD) zones using densities of one dwelling per 5, 10, and 20 acres—a practice encouraged under the GMA to provide for a variety of rural densities.[2] At that time, the only allowed residential uses were single family residences, with the possibility of associated family member units as accessory uses.[3]

As time progressed, accessory dwelling units (ADUs) became more common in GMA jurisdictions as a rural land-use innovation. Also increasingly common were clustered subdivisions that transferred density from a large portion of a site to one area of the site, to protect substantial open space and preserve the same underlying density for the site as a whole.

In 2017, in an effort to make more innovative use of rural lands as encouraged by the GMA,[4] Lewis County adopted a comprehensive set of development regulations for both clustering and ADUs, replacing the "family member unit" accessory use with ADUs.[5] At that time, Lewis County also inserted duplexes as an allowed primary use on RDD lots with a doubled minimum lot size, essentially as a single-lot form of clustering (two units with a doubled lot size retains the same underlying density).[6]

There was no concurrent discussion, however, of the incongruity between allowing a single family residential (SFR) plus ADU — which is two dwelling units — on a single lot, while requiring a duplex to have a double-sized lot for the same increase to two units.[7] Presumably, the increase in density from the ADU was tempered by three factors: (1) the ADU and primary home were required to be interdependent and couldn't subdivide the lot;[8] (2) the ADU was limited in size;[9]

[2] *See* Ordinance 1179 (2002) at Chapter 17.100, modifying Ordinance 1170B (2000) that originally provided for only a one-dwelling-per-5-acre density.

[3] Ordinance 1179 at 17.42.040, first few table entries.

[4] *See* RCW 36.70A.070(5)(b) (permitting counties to "provide for clustering, density transfer, design guidelines, conservation easements, and other innovative techniques that will accommodate appropriate rural economic advancement, densities, and uses that are not characterized by urban growth and that are consistent with rural character."); Laws of 1995, Ch. 400 sec. 3 (first inserting similar language into the GMA).

[5] Ordinance 1283 (2017) at Ch. 16.18, Ch. 17.102, and 17.42.040 Table 2's first few entries.

[6] Ordinance 1283 at 17.42.040 Table 2 "Duplex".

[7] *See generally* Staff Report, Sept. 28, 2017 for Lewis County Planning Commission Public Hearing (including in the Board of County Commissioners' hearing records for Ordinance 1283); *see also* Planning Commission Letter of Transmittal, Oct. 24,2 2017 (including findings and conclusions presented to the Board of County Commissioners for passage of Ordinance 1283).

[8] *See* Ordinance 1283 at 17.102.020; 17.102.050(1)(a)-(e), (2).

[9] *See* Ordinance 1283 at 17.102.050(1)(f).

and (3) the Washington State Department of Commerce's longstanding guidance on housing explicitly referenced ADUs as a permissible tool for counties.[10]

In hindsight, it is unclear why these rationales did not apply to a duplex, provided that the duplex shares the same primary lot access, cannot be used to subdivide the lot, and has reasonable size constraints. Generally, duplexes are not double the size of a single family home; rather, they are conjoined and each unit is smaller than a standalone single family residence. And, "multifamily housing" appears in the same provision as ADUs, listing counties' options for increasing affordable housing.[11] So, if duplexes are constrained in the manner ADUs are often constrained, it would seem consistent with the GMA rules concerning rural character to site one on large rural lots served by well and septic, just as it is to site an SFR+ADU under the same circumstances. This mismatch, as well as a desire to explore housing options in light of the lack of rural affordability, were one of the impetuses for the exploration of well and septic capability in this report—namely, to answer the question of whether it is possible to serve multifamily dwellings via well and septic.

B. On-site Well and Septic for Single Family Residential, Duplex and Accessory Dwelling Uses

Rural areas typically do not have urban services like municipal water and sewer. One of the main physical constraints for the density of housing therefore is the area needed to provide on-site well and septic. The question is, how much area is needed to provide on-site well and septic for different densities of residential development?

i. Individual Wells

Table 1: Minimum Land Area for Housing Based on Individual Wells

Residence Type	Unit Vols. of Sewage	Method I (Table)		Method II (Expert)
		Soil Type		*All soil types, if conditions allow*
		1 or 4	***5***	
3-bedroom SFR	1	1 acre	2 acre	1 acre
3-bedroom SFR + 2-bedroom ADU	1.33	1.33 acre	2.66 acre	1.33 acre
Duplex, two conjoined 3-bedroom SFR rentals	1.6	1.6 acre	3.2 acre	1.6 acre
Duplex, two conjoined single-ownership SFR regardless of size	2	2 acre	4 acre	2 acre

Table 1 shows the minimum required land areas for sample developments using septic systems and individual wells not meeting full Group B requirements. These land minimums derive from the water and septic code analysis below. It is important to note that these land areas may not, in

[10] WAC 365-196-410(2)(f)(i)(A) (promulgated in 2010).

[11] *See* WAC 365-196-410(2)(f)(i)(A).

practice, be large enough depending on site conditions (e.g., shoreline buffers, critical areas, topography) and the proposed development. However, these regulatory minimums are useful for area-wide planning purposes, leaving site-specifics to the design and permitting process.

Adding an ADU to a residence, or siting a duplex, usually requires Group B public water system compliance, which includes a sanitary control area taking up at least 0.72 acres of land. Under both local and state law, each dwelling unit served by a well is a "service connection" for public water purposes.[12] A public water system that serves fewer than 15 service connections is a Group B system, regulated by local county water code.[13] Lewis County defines public water systems as "any system providing water for human consumption through pipes or other constructed conveyances, excluding a system serving only one single-family residence and a system with four or fewer service connections all of which serve residences on the same farm."[14] Therefore, siting an SFR+ADU or a duplex would create a Group B public water supply under Lewis County's code[15] unless it were "on the same farm," i.e., "a parcel of land or series of parcels connected by covenants and devoted to the production of livestock or agricultural commodities for commercial purposes."[16]

An SFR+ADU, like other one-or-two-service-connection systems regulated under Lewis County's Group B water code, has reduced compliance requirements compared to most Group B systems. These reduced requirements nevertheless include a sanitary control area, which is a reserved, open circle of land around a well to protect it from contamination. [17] The area must have a radius of at least 100 feet unless a smaller radius is justified by an expert report. [18] A circle with a 100-foot radius is 0.72 acres of land. This 0.72 acres is incorporated into the minimum septic land area requirements discussed below. [19] It is not an additional land area on top of the septic land area.

The sanitary control area is important to keep in mind when considering whether a development can, in practice, fit within the septic minimum land area. The development must fit all of its buildings, driveways, or other structures onto the lot within any setback requirements, plus have at least 0.72 acres for the sanitary control area, plus have a septic drainfield and reserve drainfield area, plus any stormwater facilities. Moreover, critical areas, poor soils, and slopes may make some land less usable or unusable for these things. Poor soils can also dictate the type of septic system required and increase the required size of the drainfield and drainfield reserve, even though the minimum land area under the code would remain the same. As a result, area-wide planning may responsibly rely on the regulatory minimum land area in the septic code, but site-specific design and permitting must address these practical limitations.

[12] WAC 246-291-010(55), (61); LCC 8.55.040(73), (80).
[13] WAC 246-291-005.
[14] LCC 8.55.040(69).
[15] LCC 8.55.020.
[16] LCC 8.55.040(75).
[17] LCC 8.55.110(4).
[18] 18 LCC 8.55.110(4)(b).
[19] *See* LCC 8.40.310(2)(b) (echoing the sanitary control area requirement in the septic code).

Bearing in mind the practical preface above, septic requirements for a development include minimum land areas under the county septic code. Under state law, local on-site septic rules apply to uses designed for less than 3500 gallons per day (gpd) of residential sewage.[20] It is extremely unlikely that a SFR+ADU or a duplex will exceed this 3500 gpd limit,[21] so the local county code will typically apply.

The county code defines default minimum land areas for developments that use septic systems,[22] including for dwellings with on-site individual wells that do not employ full Group B compliance.[23] Depending on soil type, the minimum land areas are either 1 or 2 acres of land per "unit volume of sewage," which is defined as 450 gallons of sewage per day for these types of uses (gpd).[24] These land areas are meant to encompass the area in which the whole development can minimally fit, including building(s), driveway, well sanitary control area, septic system, drainfield, and drainfield reserve area.[25]

To determine the number of unit volumes of sewage a duplex or SFR+ADU would create, one would have to count the total combined number of bedrooms in both units and multiply by 120 gpd.[26] For example, consider a three-bedroom house plus a two-bedroom ADU. Five bedrooms times 120 gpd is 600 gpd, which is 1.33 unit volumes of sewage. As a second example, a duplex consisting of a three-bedroom rental unit on each side would be (6 bedrooms x 120 gpd) / 450 gpd = 1.6 unit volumes of sewage.

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[20] WAC 246-272A-0020.

[21] For single-family residences, required design flows are 60 gallons per capita per day (gpcd), presuming two people per bedroom, for a total of 120 gpd per bedroom, and with a minimum of 240 gpd per single-family residence. WAC 246-272A-0230(d)(i). Other uses are to have design flows in accordance with a 2002 US EPA manual. WAC 246-272A-0230(d)(ii). However that manual is consistent with residential sewage design flows of 60 gpcd for long-term residential uses. *See* "On-site Wastewater Treatment Systems Manual," USEPA, EPA-625/R-00/008 (2002) (showing a median gpcd of 60 for apartments, with dormitory uses being lower at a median of 40 gpcd but hotel usage being higher). Assuming for argument's sake that the duplex or residence-plus-ADU used a single septic system, at 120 gpd per bedroom, the development would have to have 30 total bedrooms to exceed 3500 gpd.

[22] LCC 8.40.310(2)(d) Table X. State law has similar requirements. WAC 246-272A-0320(2)(d) Table X.

[23] The table refers to "individual" and "public" water supplies. Longstanding county interpretation of that code is that one- or two-connection wells with the limited amount of Group B compliance under LCC 8.55.020(3)(b) Table 1 are individual, not public, water supplies for purposes of this table. In contrast, a fully Group B compliant well is a public water supply for purposes of LCC 8.40.310. Because a well for and SFR+ADU or duplex, alone, would be a two-connection well with limited Group B compliance, the individual lot sizes apply. A well serving three or more units not on the same farm, or even a two-connection well that the owner upgraded to full Group B compliance, could access smaller lot sizes for public water supplies.

[24] A single family residence or a site in a mobile home park is defined to use one unit volume of sewage. LCC 8.40.040. But for uses exceeding those—like a duplex or an ADU added to a residence—the 450 gpd metric controls. LCC 8.40.040; LCC 8.40.310.

[25] *Compare* LCC 8.40.310(2)(d) Method I (using pre-set minimum lot sizes) *with* Method II (allowing an expert to consider all of these things in a system design to provide its adequacy).

[26] *See* LCC 8.40.170(2)(d) (paralleling WAC 246-272A-0230(d)); *see also* footnote 20, above.

Importantly, a duplex consisting of rental units gets different treatment under the county code than a duplex consisting of two separately-owned conjoined residences (a townhome duplex). A duplex consisting of two separately-owned residences, especially if the land is owned separately and can be sold with the separate homes, has traditionally been treated like two single family residences. Each single family residence would be deemed to use one unit volume of sewage regardless of size, for a total of 2 unit volumes for the townhome duplex.[27]

These 1.33, 1.6, and 2 unit volumes of sewage respectively correspond to minimum land areas of 1.33, 1.6, and 2 acres on lots of soil types 1 through 4; or 2.66, 3.2, or 4 acres of land on lots of soil types 5 or 6.[28] The most common soil types in Lewis County are 1, 4 and 5—making it difficult to generalize which minimum land areas apply without reference to a specific development on a specific lot. However all minimum lot sizes are less than the minimum allowed RDD lot size of 5 acres. Table 1, at the beginning of this section, provides examples of each development on each soil type for comparison.

Finally, it is worth noting that a septic designer can, through expert analysis, sometimes justify a different minimum acreage than the analysis above.[29] However, for individual water supplies (i.e., those not fully complying with at least Group B requirements), the minimum is never less than one acre per unit volume of sewage.[30] So, only for type-5 soils could this expert method make any difference to the analysis above, and only to the extent that the analysis would be the same as a type-4 soil site. Therefore, the type-1-or-4 minimums shown above are true minimums to use for area-wide planning purposes, even with expert justification.

ii. Public Water Supplies (Fully Compliant Group A or B Wells)

Table 2, below, shows the minimum land area per unit volume of sewage when a development uses a public water supply (i.e., a fully compliant Group B well or Group A well). Table 3 shows the minimum land area for sample developments using these public-water-supply minimums.

Table 2: Minimum Land Area per Unit Volume of Sewage Using Public Water Supplies

Soil Type	1	2	3	4	5	6
Min. Land Area	.5 acre[31]	12,500 sq ft	15,000 sq ft	18,000 sq ft	20,000 sq ft	22,000 sq ft

[27] *See* LCC 8.40.040 ("unit volume of sewage" definition (a)). There have been few or no examples in the rural county of shared land ownership with separately-owned units, such as a condominium, so it is unclear whether such a development would be treated as a multi-unit structure like a rented ADU or a pair of SFRs like a townhome duplex.

[28] LCC 8.40.310(d).

[29] LCC 8.40.310(2)(d) Method II.

[30] LCC 8.40.310(2)(d) Method II(iii).

[31] Type I soils require more land area than other types because they are too porous to treat wastewater well; sand must be added and the drainfield increased so that the soil adequately cleans the wastewater.

Table 3: Minimum Land Area for Sample Developments Using Public Water Supplies

Residence Type	Unit Vols. of Sewage	Method I (Table) *Soil Type*			Method II (Expert)
		1	*4*	*5*	*All soil types, if conditions allow*
3-bedroom SFR	1	0.5 acre	0.41 acre	0.46 acre	.29 acre
3-bedroom SFR + 2-bedroom ADU	1.33	0.67 acre	0.54 acre	0.61 acre	0.38 acre
Duplex, two conjoined 3-bedroom rentals	1.6	0.8 acre	0.66 acre	0.74 acre	0.46 acre
Duplex, two separately-owned conjoined houses regardless of size	2	1 acre	0.83 acre	0.92 acre	0.574 acre

The figures in Table 2 and 3 derive from the analysis below. Much of the analysis is the same as for Table 1: a Group B water system requires a sanitary control area, and the same practical limitations based on development and site conditions would apply and need to be addressed in design and permitting. A key difference, however, is that full Group B compliance would affect the septic minimum land area. Such a water supply is a public water supply under the septic code, resulting in the minimum land areas shown above in Table 2.[32]

What's more, an expert is permitted to justify a smaller minimum lot area consisting of up to 3.5 unit volumes of sewage per acre (12,445 sq ft per unit volume) based on specific site conditions.[33] Because of the public water supply, even if a townhome-duplex were considered two separate single-family residences, an expert would be permitted to justify a lot of 12,500 square feet per single-family residence.[34]

Consequently, the presence of a fully compliant Group B water system markedly reduces the minimum land area requirements. It also makes it easier to site a septic system, drainfield, and reserve area, since there may be no need to avoid a well sanitary control area on the same lot. (Group B systems often have a well on one lot serving multiple separate lots.)

[32] LCC 8.40.310(2)(d) Method I.

[33] LCC 8.40.310(2)(d) Method II(ii)(2)(b).

[34] LCC 8.40.310(2)(d) Method II(ii)(2)(a). This is only for the minimum land area in code, of course; practically, the drainfield and reserve would still have to fit on the lot. So, two conjoined mansions with 9 bedrooms each would have drainfield and reserve sizes that, in practice, dictate a larger lot size than 12500 sq ft.

The prior examples from subsection i were as follows: (1) a three-bedroom SFR plus a two-bedroom ADU; (2) a duplex consisting of two 3-bedroom rentals; and (3) a townhome-style duplex of two separately owned, attached dwellings regardless of size. These three sample developments represent 1.33, 1.6, and 2 unit volumes of sewage, respectively. For the three common soil types in Lewis County (1, 4, and 5), the resulting minimum lot sizes are in Table 3.

Comparing Table 3, public water supply, to Table 1, individual water supply, the use of a fully compliant Group B well halves the land area requirements (under Method I), and can quarter the land area requirements if justified by an expert (under Method II). It is important to remember that the smaller the lot, the greater the practical limitations on siting a septic system and reserve area along with other development necessities. But, as a matter of minimums, the presence of the Group B markedly reduces the needed land.

C. On-site Well and Septic for Triplex or Quadplex Residential Uses

First, local well and septic codes will apply to triplex or quadplex developments:

- Under public water law, a Group B system can have up to 15 service connections and permanently serve up to 24 people per day.[35] Each dwelling unit is a "service connection,"[36] and each dwelling unit is imputed 2.5 permanent residents.[37] A triplex or quadplex, therefore, would have 3 or 4 services connections and be deemed to serve 7.5 or 10 residents. It falls under local Group B regulations.

- Under on-site sewage law, the local code controls for systems designed for a capacity of up to 3500 gallons per day.[38] The septic code uses a benchmark of 60 gallons of sewage per capita per day (gpcd) for long-term residential uses, with two people imputed to each bedroom, for a total of 120 gpd per bedroom.[39] A residential development would therefore need to exceed 3500/120 = 29 bedrooms to exceed the local septic code's requirements. Even an unusually large quadplex of four four-bedroom units would have only 16 bedrooms. Therefore, local code applies.

Having established that local codes apply, the analysis then parallels the one for Tables 2 and 3, above. As discussed above, full Group B compliance is necessary for these three- or four-connection developments,[40] and practical limitations may derive from the specific site and

[35] WAC 246-291-005(1).

[36] WAC 246-291-010(55), (61).

[37] WAC 246-291-200(a) (2.5 people per dwelling unit).

[38] WAC 246-272A-0020.

[39] WAC 246-272A-0230(d)(i)(B) (single-family residences); WAC 246-272A-0230(d)(ii) (using the 2002 US EPA manual for other development types). The US EPA manual is consistent with residential sewage design flows of 60 gpcd for long-term residential uses. See "On-site Wastewater Treatment Systems Manual," USEPA, EPA-625/R-00/008 (2002) (showing a median gpcd of 60 for apartments, with dormitory uses being lower at a median of 40 gpcd but hotel usage being higher).

[40] *See* LCC 8.55.020 (applying to a three-connection system with full force).

development plan. Also, the minimum septic land area requirements will be those for public water supplies shown in Table 2, above, or will be up to 3.5 unit volumes of sewage per acre if justified by an expert under Method II.[41]

Because the range of possible triplex and quadplex configurations is broad, it makes sense to dispense with sample developments and calculate the land area requirements with regard to the number of bedrooms the developments would have. The number of bedrooms multiplied by 120 gpcd is the design capacity, which divided by 450 gpd is the number of unit volumes of sewage for the development.[42] Those unit volumes then produce the minimum land area required, depending on soil type.[43] Using this analysis, triplexes and quadplexes will have the minimum land area requirements in Table 4, below.

Table 4: Minimum Land Area for Triplex and Quadplex by Number of Bedrooms

Bedrooms	Unit Vols. of Sewage	Minimum Land Area (Acres)			
		Method I (Table) ***Soil Type***			**Method II (Expert)** ***All soil types, if conditions allow***
		1	**4**	**5**	
3	0.8	0.4 acre	0.33 acre	0.37 acre	0.23 acre
4	1.07	0.53 acre	0.44 acre	0.49 acre	0.30 acre
5	1.33	0.67 acre	0.55 acre	0.61 acre	0.38 acre
6	1.6	0.8 acre	0.66 acre	0.73 acre	0.46 acre
7	1.87	0.93 acre	0.77 acre	0.86 acre	0.53 acre
8	2.13	1.07 acre	0.88 acre	0.98 acre	0.61 acre
9	2.4	1.2 acre	0.99 acre	1.1 acre	0.69 acre
10	2.67	1.33 acre	1.10 acre	1.22 acre	0.76 acre
11	2.93	1.47 acre	1.21 acre	1.35 acre	0.84 acre
12	3.2	1.6 acre	1.32 acre	1.47 acre	0.91 acre
13	3.47	1.73 acre	1.43 acre	1.59 acre	0.99 acre
14	3.73	1.87 acre	1.54 acre	1.71 acre	1.07 acre
15	4	2 acre	1.65 acre	1.84 acre	1.14 acre
16	4.27	2.13 acre	1.76 acre	1.96 acre	1.22 acre

Note – The analysis is for total bedrooms. For example, a triplex with 2 bedrooms per unit has a total of 6 bedrooms.

As before, these minimum land area requirements must be balanced against site-specific considerations that can practically affect whether a drainfield and drainfield reserve area can be properly sited within such limited space.

Also important to remember is that the figures above are for triplexes or quadplexes under common ownership, usually as a rental. If the tri- or quadplex were a series of separately-owned

[41] LCC 8.40.310(d).

[42] *See* LCC 8.40.170(2)(d) (design capacity) *and see* fn. 39, above; LCC 8.40.040 ("unit volume of sewage").

[43] LCC 8.40.310(d).

townhomes each with its own swath of underlying land, each unit would be considered an SFR producing one unit volume of sewage, altering the analysis as follows in Table 5.

Table 5: Minimum Land Area for Separately-Owned Townhomes

Number of Townhomes (of any size)	Unit Vols. of Sewage	Minimum Land Area (Acres)			
		Method I (Table) *Soil Type*			Method II (Expert) *All soil types, if conditions allow*
		1	4	5	
3	3	1.5 acre	1.24 acre	1.38 acre	0.86 acre
4	4	2 acre	1.65 acre	1.84 acre	1.15 acre

County staff have not had experience with hybrid models, such as condominiums or cooperatives, in which the land is owned in common but each unit is separately owned. It is not clear whether such a model would receive the treatment of multifamily rentals or the treatment of townhomes in separate ownership.

3. Septic and Well in Limited Areas of More Intense Rural Development (LAMIRDs)

Certain areas within the County's rural lands have the status of Limited Areas of More Intense Rural Development (LAMIRDs). Not all LAMIRDs permit residential development, but the LAMIRDs below do. Some of them have water or sewer services, which can affect development potential. In each service category below, the LAMIRDs are listed from west to east, geographically.

LAMIRDs largely without any public water or sewer systems:

- Doty
- Galvin
- Kiona

LAMIRDs with isolated public water systems, but not sewer service:

- Hwy 603, Shorey Rd
- Jackson Highway south of Napavine
- Ethel
- Salkum
- Silver Creek
- Mayfield Kamper Club
- Lakeview Park and Lakeview Terrace
- Mt View Drive and Lake Mayfield Estates
- Harmony (partially a Group A water system)
- Mineral
- Glenoma

- Leroy Rd
- Paradise Drive
- Tower Rock / Cispus
- High Valley

LAMIRDs with formal public water utilities, but no sewer service:

- Curtis (Boistfort water)
- Boistfort (Boistfort water)
- Adna (Boistfort water)
- Claquato (Boistfort water)
- Harmony (partially Mossyrock city water)
- Randle (WSD 1)
- Timberline (Timberline water, operated by Thurston PUD)
- Packwood (WSD 3) [Note - sewer to arrive in 2026.]

LAMIRDs with public water and sewer service:

- Mayfield Village (WSD 6)

A. LAMIRDs with No Centralized Services

A few LAMIRDs above have no centralized water or sewer services. For these LAMIRDs, the land requirements for SFR+ADUs, duplexes, triplexes, or quadplexes would parallel those in rural areas outside of LAMIRDs. This is because the land use designation or comprehensive plan treatment of land as a LAMIRD does not affect the well or septic code requirements for a parcel—those requirements derive from public health and environmental standards independent of land use laws.

B. LAMIRDs with Group A or B Well Systems

The majority of LAMIRDs have water available through Group A or B public water systems that are less fully developed than a formal utility. Often, they were set up for specific developments by the homeowners or a homeowners' association. For such LAMIRDs, the presence of the public water system makes developments in those areas parallel the analysis for Group B wells, above, reducing the potential septic land area needed for development. But, they are distinguishable from the LAMIRDs with formal water utilities, listed below, because the Group A and B wells for the LAMIRDs in this section often were not set up with additional connections or growth in mind. Frequently, these systems are the product of permit-exempt well siting for a single development, and are tailored by design, water rights, equipment, or other practical considerations to suit the one or small group of developments they were intended to serve.

As a result, obtaining water for development in these LAMIRDs may often require more than requesting a connection from an existing utility. It may instead require setting up a new Group B or Group A water system. The developments under consideration in this report constitute at most

4 connections (quadplex), and so would only require a Group B water system. Group B water systems are eminently doable, although they are more expensive and require more regulatory compliance than an individual well for a single family residence.

Within these LAMIRDs, there are likely many lots large enough to formally accommodate an SFR+ADU, duplexes, smallish triplex or smallish quadplex. Through the expert-report method (Method II, above) these developments would range from needing 0.38 acres for an SFR+ADU to 0.61 acres for a quadplex of two-bedroom units. However, because one would need to site and design a new Group B system for many such developments, the practical constraints on the well and septic design will be an important factor. Indeed, siting these small multifamily units in LAMIRDs of this type might actually be harder than siting them in the rural area, where the lot sizes are often enormous compared to small LAMIRD lots. Individual developments will have to proceed on a case-by-case basis with their designers, through permitting, to determine whether these practical constraints can be met.

C. LAMIRDs with Formal Public Utility Water

Several other LAMIRDs have a formal water system that is either operated by or is analogous to a public utility. In these LAMIRDs, the public utility systems often, but not always, administer additional water connections. Obtaining water for a development may be as simple as paying for a connection from the existing system—although it may require purchasing a water share from some systems, such as Boistfort, which can be very expensive. Home builders or developers must inquire with the water system or utility in their property area to determine water availability, and the terms on which it is available.

Because these areas have no centralized wastewater treatment, developments in these districts rely on septic systems. The land area for such systems will match the analysis above for septic systems served by Group B wells / public water systems. As noted in that analysis, these land area requirements are much less than when using an on-site individual well for a development. This is one of the reasons that LAMIRDs can support smaller lots and greater density than more rural areas without water services.

In general, if water is available from the formal public utility in one of these LAMIRDs, it is anticipated that most SFR+ADUs and duplexes, as well as modestly sized triplexes or quadplexes, could find enough land area to be successful. Through the expert-report method (Method II, above) these developments would range from needing 0.38 acres for an SFR+ADU to 0.61 acres for a quadplex of two-bedroom units. Not every lot in a LAMIRD will suffice, but many LAMIRD lots are larger than these minimums and may support such a development. As always, developments must proceed on a case-by-case permit-level analysis to account for the many practical site configuration issues that can affect septic design, but the presence of the formal public water system usually makes such design easier and more environmentally friendly.

D. LAMIRDs with Centralized Water and Wastewater Treatment

The final type of LAMIRD is quite rare in Lewis County: one in which both centralized water and wastewater systems are present. Two rural areas meet this description, Mayfield Village and Onalaska, but Onalaska ceased to be a LAMIRD when it was designated an Urban Growth Area, leaving only Mayfield Village as a fully water-and-sewer-serviced LAMIRD.

In this LAMIRD, both water and wastewater treatment are obtained via connection to Water Sewer District 6 facilities, pursuant to that district's policies. Subject to limitations in the district's policies, its number of water connections, or its sewer treatment capacity, developments in this LAMIRD could have as many units as desired.[44]

Packwood will join this category of LAMIRD in 2026, unless it is designated as a UGA (which may occur prior to that date).

4. Water Rights

The public water rules for Group B wells discussed above, deriving from Department of Health regulations, are distinct from the right to use and consume water. The latter is governed by state law and regulations administered by the Department of Ecology.

To the extent that a rural SFR, SFR+ADU, duplex, triplex, or quadplex obtains water from a municipal water supply such as a utility, the municipal water supply's number of authorized service connections corresponds to its water right(s). Therefore, the individual residential development does not need to worry about water rights—by paying for a connection from the municipal water system, the development lawfully obtains water.

In contrast, when a development relies on its own well, which is true in most RDD designated lands and in most LAMIRDs, water rights constrain the potential development. In Washington, a property owner may drill a well to use up to a certain quantity of water for a group of domestic uses without needing a permit or other means of obtaining the right to use the water. This is called a "permit-exempt well" and can withdraw up to 5000 gallons per day (gpd) for domestic use,[45] or a lesser amount in some basins. The Chehalis Basin's permit-exempt well limitation is 3000 gpd, for example, while the Cowlitz Basin retains the maximum 5000 gpd.[46] (These are per-

[44] This wasn't always true. But, under a recent amendment to the GMA, the law now permits intensification of residential uses when services are present. RCW 36.70A.070(5)(d)(1)(C).

[45] RCW 90.44.050

[46] *See* RCW 90.94.020(5)(f)(ii), (8) (limiting permit exempt wells in the Chehalis basin to 3000 average annual gpd but not wells in the Cowlitz basin); *see* RCW 90.94.030 (also not limiting the Chehalis basin).

project limitations, not per-well limitations.[47]) Permit-exempt wells of this type are the most common source of water for rural developments.

According to the southwest regional manager of the Department of Ecology's water resources program, Mike Gallagher, Ecology frequently uses a 75 gpd per person (gpcd) metric for residential uses to determine how much water a development will use. As is true in public water and septic regulations, each bedroom is imputed two occupants.

Table 6, below, shows that an SFR, SFR+ADU, duplex, triplex, or quadplex will not exceed the permissible amount of water from a permit-exempt well (3,000 or 5,000 gpcd). Table 6, like Table 4 above, lists the number of bedrooms in the development, but then calculates how much water the development would use pursuant to Ecology's standard metric.

Table 6: Imputed Water Usage for Developments by Number of Bedrooms

Bedrooms in Development	Imputed Occupants	Imputed Water Usage (75 gpcd * No. Occupants)
3	6	450 gpd
4	8	600 gpd
5	10	750 gpd
6	12	900 gpd
7	14	1050 gpd
8	16	1200 gpd
9	18	1350 gpd
10	20	1500 gpd
11	22	1650 gpd
12	24	1800 gpd
13	26	1950 gpd
14	28	2100 gpd
15	30	2250 gpd
16	32	2400 gpd

Note – The analysis is for total bedrooms. For example, a triplex with 2 bedrooms per unit has a total of 6 bedrooms.

Table 6 drastically inflates the likely number of occupants anticipated in a quadplex. Per the US Census, the average household size in Lewis County is roughly 2.5 people, and has been gradually decreasing over several decades.[48] It is likely that each unit of a quadplex would have roughly 2.5 people on average, even if it had four bedrooms per unit (which would be larger than normal for a quadplex). Nevertheless, positing two occupants per bedroom and 4 bedrooms per unit (a total of 16 bedrooms) the quadplex is still well within the 3000 or 5000 gpd limitations for a permit exempt well in the Chehalis or Cowlitz basins, respectively.

[47] *See generally State Dept. of Ecology vs. Campbell & Gwinn*, 43 P.3d 4 , 146 Wn.2d 1 (2002) (holding that the 5000-gpd limit applies to groups of domestic uses, so a single project proposing a group of domestic uses, such as a subdivision, is limited to 5000 gpd total for all of the units in the project).

[48] Steven Manson et al. IPUMS National Historical Geographic Information System: Version 16.0 [dataset]. Minneapolis, MN: IPUMS. 2022. http://doi.org/10.18128/D050.V16.0

One further reference to Health Department public water regulations is necessary. As mentioned above, these public water regulations do not formally encompass water rights. But, because these regulations involve approving water supplies, they contain a benchmark for when one should direct the development to obtain a water right before it can been approved: 350 gallons per dwelling unit per day.[49] By this metric, everything from an SFR to a quadplex is also within permit-exempt limits: a quadplex (at the top end of the spectrum of developments being discussed) would be imputed only 1400 gpd.

Using either Ecology's water-rights metric or public water regulations' benchmark for when water rights are required, an SFR, SFR+ADU, duplex, triplex, or quadplex can lawfully be served by a permit-exempt well. Only if a developer attempted to build multiple structures of these types as part of a single project would the development potentially exceed the gpd limits.

In some areas of Washington, permit-exempt wells are either disallowed or highly problematic because, despite these wells not needing a permit under state law, they nevertheless take water that is already legally allocated to someone else. This is most obviously true in "adjudicated basins"—such as the Yakima basin—in which all water rights have been allocated by a court, and no withdrawal is permitted except pursuant to that case. A basin can also be "closed" or "overappropriated" if some water rights holders are unable to withdraw the water to which they are entitled due to shortage. One special circumstance of this type closing many basins is that an Ecology-specified minimum water flow for a river (an "in-stream flow") is not met at all times of the year; the in-stream flow counts as a water right, and so if it is not met, the basin is overappropriated.[50]

In a famous court case, the Washington State Supreme Court held that because permit-exempt wells can take water from aquifers connected to surface rivers, the water from permit-exempt wells is not legally available if any connected surface rivers fail to meet their in-stream flow rules.[51] Moreover, it held that counties have a duty under the Growth Management Act to police the legal availability of water in such situations through their development regulations. A later-passed statute, the Streamflow Restoration Act, codified this rule and clarified how permit-exempt wells would be policed, creating a procedure by which wells would be temporarily allowed and directing watershed plans for enumerated basins to determine whether permit-exempt wells must require mitigation.[52] Mitigation usually means buying water from one source to repurpose it to another use, exactly offsetting the amount of water one will appropriate.

[49] This is a statewide benchmark, which is incorporated into Lewis County's public water regulations. *See* LCC 8.55.110(3)(e) (citing Group B Water System Design Guidelines, DOH 331-467, December 2012, Chapter 3, Estimating Water Demands, Section 3.0.1).

[50] *See generally Whatcom County v. Western Washington Growth Board et al.*, 381 P.3d 1, 186 Wn.2d 648 (2016) (discussing the prior appropriation doctrine and in-stream flow rules).

[51] *Id.* This decision is usually referred to as the "*Hirst* decision," after one of the litigants, Eric Hirst.

[52] Ch. 90.94 RCW.

Luckily for Lewis County, water is not as overappropriated in its basins as in many other areas of the state. The two principal basins in Lewis County are the Chehalis and Cowlitz basins. The Cowlitz basin has no in-stream flow rule and is open for new appropriations—it is almost unique in the state in that there are no water rights holders in danger of losing their ability to withdraw their allotted water. The Chehalis basin has in-stream flows set, and they are not always met, so, it faces a shortage. However, the shortage is less pronounced than elsewhere. The Chehalis Basin Partnership prepared an addendum to its watershed management plan for the basin to carry out the Streamflow Restoration Act's requirements; the plan concludes that permit-exempt wells can persist in the Chehalis basin because the plan fully mitigates for the water they consume.[53]

As a consequence, although permit-exempt wells are highly problematic in some areas of the state, Lewis County is well-positioned to accommodate them. Because permit-exempt wells can serve SFRs+ADUs, duplexes, triplexes, and quadplexes, water rights are not an impediment to those uses in Lewis County's rural areas.

5. Fire, School, and Road Services in Rural Districts

The Growth Management Act requires that counties plan for adequate public facilities to support growth.[54] One aspect of this planning, known as concurrency, is the principal that adequate facilities must exist at the time a development is occupied and needs them.[55]

This concept is more malleable under the GMA than one might expect: the GMA requires concurrency only for transportation, and even then only requires that transportation facilities be available within six years of development.[56] The GMA and its implementing regulations give counties the discretion to decide what other facilities are essential to development and require concurrency, and on what timeline.[57] Counties may even conclude that some services are essential but not required to be concurrent.[58]

Therefore, for land use and development purposes, the authority governing fire and school service adequacy in Lewis County is the county's own adopted policies and regulations. Lewis County's Countywide Planning Policies include the following provision.

> **12. Public Facilities and Services**
> Ensure that those public facilities and services necessary to support development shall be adequate to serve the development at the time the development is available

[53] The Chehalis Basin Partnership, *Addendum to the Chehalis Watershed Management Plan* (Nov. 17, 2020) at 56, *available at* https://chehalisbasinpartnership.org/wp-content/uploads/2021/01/ChehalisAddendumFinal_ Approved_111720.pdf.

[54] RCW 36.70A.070(3), (6); WAC 365-196-415(5).

[55] WAC 365-196-840.

[56] RCW 36.70A.070(6)(b).

[57] WAC 365-196-840(2); WAC 365-196-415(5)(b)(i).

[58] WAC 365-196-415(5)(b)(ii).

for occupancy and use without decreasing current service levels below locally established minimum standards.

The provision above led to this Comprehensive Plan language in the Capital Facilities element:

UCF GOAL 4.0 | Ensure adequate utilities, public facilities and services exist or can be provided concurrent with development.

POLICY UCF 4.1
Strive to monitor the capacity of existing utilities and capital facilities to understand when existing facilities are reaching their available capacity.

Chapter 17.130 of the Lewis County Code implements this portion of the Comprehensive Plan. It requires "a determination of adequate facilities for all projects" other than a few exceptions.[59] A duplex, triplex, or quadplex would have to satisfy this chapter. In addition to requiring adequate water and wastewater facilities (discussed above in a separate section) and a few others, the chapter requires adequate fire/emergency and school services:[60]

(3) Fire/Emergency Service.

(a) For residential uses 35 feet tall or less and commercial uses two stories or less and 50,000 square feet or less, the local fire district has the equipment and personnel to serve the new facility without a change in the current level of service for similar facilities existing in the district.

* * *

(c) Fire districts can provide or secure adequate emergency services.

(4) Schools.

(a) For residential uses, that the school can reasonably accommodate the school population anticipated from the new development with existing facilities, together with state or federal funds expected as a result of growth or changes within the district.

* * *

[59] LCC 17.130.010.
[60] LCC 17.130.020(3)-(4).

These standards are based on local levels of service[61] and rely on districts in the development area to determine whether a development poses any specific concern. As a matter of local practice, when a development application is submitted, Lewis County sends adequate facilities forms to the affected districts to inquire whether these standards are met. If the district returns the form indicating that it can adequately serve the facility, the development proceeds. If the district does not do so, the applicant is encouraged to inquire with the district and to work out any mitigation or change to the application needed to allow for adequate service. In this manner, the county ensures that services are concurrent to development.

The procedures above could limit duplexes, triplexes, and quadplexes in rural areas if the fire or school district could not serve the proposed development. Notably, the county has the power to do more than simply deny development applications if concurrency cannot be established.[62] Generally, however, the county's practice has been to require concurrency for all developments through this adequate facilities review.

Because the county's code and practice solicits input from fire and school districts at the time of development application, the county will seek input from fire districts and school districts as part of a public engagement program for any potential code change that could allow more multifamily dwelling units in the rural area. This input can inform whether any land use or development regulations constraints are necessary to allow the districts to absorb the potential growth from these uses, or whether the existing adequate facilities code will suffice.

Although not discussed above, the same analysis applies to road and transportation services. The County has defined transportation standards and requires adequate facilities review for almost all developments.[63] The County solicits input from Lewis County Public Works at the time of permitting concerning concurrency, and can therefore limit, disallow, or negotiate conditions for developments to maintain adequate levels of road and transportation service.

6. Stormwater

Lewis County is not required by the state to regulate stormwater, because it is not one of the jurisdictions subject to a Phase I or Phase II Municipal Stormwater Permit from the Department of Ecology.[64] Nevertheless, Lewis County regulates stormwater via LCC Chapter 15.45. Any subdivision and/or any development requiring a building permit is subject to this code.[65] A stormwater plan and facilities are required for, among other things, any development consisting

[61] This is consistent with WAC 365-196-210(3), which defines "adequate public facilities" as "capacity to serve development without decreasing levels of service below locally established minimums."

[62] WAC 365-196-840(6).

[63] LCC 17.130.010; LCC 17.130.020(5)

[64] 2019 Stormwater Management Manual for Western Washington ("2019 Manual"), Section I-2.5.

[65] LCC 15.45.030.

of more than 5000 sq ft of impervious surfaces.[66] Impervious surfaces include building footprints, covered parking regardless of paving, paved or gravel areas, walkways, patios, and similar disturbances of natural water absorption.[67]

Single family residences get special treatment under this code. In addition to the normal regulatory cutoff of 5,000 sq feet, SFRs are exempt from stormwater regulation if the impervious surfaces in the development do not exceed 15% of the lot size.[68] Per the code, multifamily residences do not get the benefit of this special exemption, nor would a development consisting of more than one SFR.[69] (However, the 5,000 sq ft cutoff would still apply.)

In general, county staff report that stormwater concerns are generally meant to address impacts to neighboring properties, the environment, or the road in small-lot configurations, where accumulated runoff can be harmful. In large-lot configurations, the natural environment usually can dissipate the accumulated stormwater without much difficulty.

For developments requiring stormwater management, there must be enough space reserved for a pond or ditch with grass as a bioretention facility. On most RDD lots (which are more than 5 acres in size), there would be ample space for the facility; it can be at some distance away on the lot if needed. However, such facilities requiring engineering and earthwork, which can cost $10,000 to $40,000. They also require periodic maintenance.

Applying these rules to SFR+ADUs, duplexes, triplexes, and quadplexes, it is possible that some such developments would be under the regulatory threshold of 5000 sq ft of impervious surfaces. If so, stormwater rules would not apply. For example, a 2000 sq ft house with a 400 sq ft garage and a 640 sq ft driveway (3040 sq ft total) could potentially add a 1000 sq ft ADU and an additional 320 sq ft of driveway for a total of 4360 sq ft, under the regulatory threshold. A duplex or triplex could be even simpler: a 3000 sq ft duplex or triplex building with tuck-under parking, plus a sizeable driveway of around 1024 sq ft, would remain below the threshold. The same would be true of a quadplex with smaller units, such as a 3200 sq ft quadplex building (four 800 sq ft units) atop tuck-under parking, with a 1024 sq ft driveway.

For developments exceeding 5000 sq ft of impervious surfaces (perhaps through the inclusion of a barn or outbuilding), stormwater compliance would be necessary. The single-family residence exemption for 15% of the lot area would not apply. On large rural lots, compliance would not be overly burdensome due to space on the lot. Consider: the calculations in the preceding well and septic section showed that most of the relevant developments would need less than two acres of land under those codes, which would leave at least three acres on large rural lots for the buildings and stormwater facility (likely enough space). Compliance would be more difficult in LAMIRDs

[66] LCC 15.45.090. This is a simplification of the standards in the 2019 Manual, but roughly corresponds to an exemption therein. *See* 2019 Manual, section I-3.3, Figure I-3.1.

[67] LCC 15.45.020(31).

[68] LCC 15.45.100(5).

[69] *See id.* (exempting only "*Individual* single family residences" (emphasis added)).

with small lots, and might require that only smaller facilities be built on such lots. From a Growth Management Act perspective, that is good, because it demonstrates that the existing code is equipped to mitigate for such stormwater impacts, and will limit development on lots where the natural environment cannot adequately handle the stormwater.

7. Growth Management Act Considerations

The GMA requires counties to encourage compact urban development in existing urban areas and urban growth areas, and to prohibit sprawling, low-density development. The sprawl outlawed by the GMA is the type associated with car-centric, post-war suburbia, in which urban services are extended at great public expense to outlying neighborhoods of single-family residences on largish lots. In contrast, the GMA allows development below the threshold at which no urban services are needed: this is sparse, open-space-oriented rural development, which is consistent with rural character.

A. Rural Character

Under the GMA, "rural character" is a locally established and defined concept in the comprehensive plan, but it must be patterns of development:

(a) In which open space, the natural landscape, and vegetation predominate over the built environment;
(b) That foster traditional rural lifestyles, rural-based economies, and opportunities to both live and work in rural areas;
(c) That provide visual landscapes that are traditionally found in rural areas and communities;
(d) That are compatible with the use of the land by wildlife and for fish and wildlife habitat;
(e) That reduce the inappropriate conversion of undeveloped land into sprawling, low-density development;
(f) That generally do not require the extension of urban governmental services; and
(g) That are consistent with the protection of natural surface water flows and groundwater and surface water recharge and discharge areas.[70]

Such development "can consist of a variety of uses and residential densities, including clustered residential development, at levels that are consistent with the preservation of rural character and the requirements of the rural element."[71] But it may only use rural services, i.e., public services historically and typically delivered in rural areas, at the intensity found in rural areas—which may not include storm or sanitary sewers, except in very limited circumstances.[72] The services generally consist of individual wells or small water systems for drinking water, septic systems for wastewater,

[70] RCW 36.70A.030(23).
[71] RCW 36.70A.030(24).
[72] RCW 36.70A.030(25).

and natural systems to manage stormwater, at a density that allows "the ability of natural systems to provide these services without compromising either public health or the vitality of the surrounding ecosystem."[73] Fire, police, transportation, school, electrical, gas, or telecommunications services are also typical, at a level of service consistent with wide rural areas, such as the idea that rural roads do not usually handle large volumes of traffic.[74]

Counties are instructed to "adopt a locally appropriate definition of rural character" that is "diverse in visual character and in density," including "a variety of densities and uses."[75] In using this definition in future land use designations and development regulations, the County has flexibility to employ "innovative zoning techniques" that "allow greater flexibility in rural development regulations . . . [than] conventional large-lot zoning."[76] Indeed, the GMA explicitly encourages rural "clustering, density transfer, design guidelines, conservation easements, and other innovative techniques that will accommodate appropriate rural economic advancement, densities, and uses that are not characterized by urban growth and that are consistent with rural character", which is a specific rural instance of the GMA's general directive that counties use innovative land use management techniques.[77]

Although encouraged, rural land use innovations cannot be too exuberant. They must include measures to "protect the rural character of the area, as established by the county, by:

(i) Containing or otherwise controlling rural development;
(ii) Assuring visual compatibility of rural development with the surrounding rural area;
(iii) Reducing the inappropriate conversion of undeveloped land into sprawling, low-density development in the rural area;
(iv) Protecting critical areas, as provided in RCW 36.70A.060, and surface water and groundwater resources; and
(v) Protecting against conflicts with the use of agricultural, forest, and mineral resource lands designated under RCW 36.70A.170."[78]

Rural character also includes limited areas of more intensive rural development, or LAMIRDs. LAMIRDs are clusters of development predating the GMA that are allowed to persist within their existing logical geographic boundary.[79] There are many specific rules concerning development or redevelopment within LAMIRDs, but for purposes of this report, the relevant rule is a recent change allowing intensification of residential uses within LAMIRDs if services exist there to support such uses.[80] Thus, within the limited confines of LAMIRDs, if sufficient supportive services exist (as explored elsewhere in this report), increased-intensity residential uses such as SFR+ADUs,

[73] WAC 365-196-425(4)(d).
[74] WAC 365-196-425(4)(a), (e)-(f).
[75] WAC 365-196-425(2)(c).
[76] WAC 365-196-425(5)(a).
[77] *See* RCW 36.70A.070(5)(b) (rural areas specifically); RCW 36.70A.090 (land use generally).
[78] *See* RCW 36.70A.070(5)(c).
[79] *See generally* RCW 36.70A.070(5)(d).
[80] RCW 36.70A.070(5)(d)(1)(C).

duplexes, triplexes, or quadplexes would explicitly be allowed. This is in contrast with rural lands outside of LAMIRDs, in which such uses must be squared with the GMA constraints on rural developments (such as rural visual character), even if supportive services clearly exist.

B. The "1-in-5 Rule" and Its Impact on Rural Land Use

In the 1990s and early 2000s, the administrative law construing the GMA produced a benchmark that density in rural areas must be no greater than one unit in five acres. These rulings concede that the GMA requires a variety of rural densities, and it permits LAMIRDs to persist in locations that were denser than this benchmark when the GMA was passed. Outside of these legacy locations, however, a widespread practice developed that the "variety of rural densities" in the GMA should be a variety equal to or less dense than one dwelling in five acres.[81] This practice is often referred to as the "1-in-5 rule" in the parlance of builders, developers, planners, and land use attorneys.

Since the "1-in-5 rule" emerged, two state Supreme Court cases have chastised the Growth Board that such a bright-line rule is not permitted.[82] Instead, counties have considerable discretion to consider local conditions in setting rural densities, provided that they provide written justification as to how their rural development regulations conform to GMA requirements and goals. (One can see from the recitation of the GMA and WAC standards in the rural character section, above, that the standards are considerably more vague and subject to local interpretation than the "1-in-5 rule".) Notwithstanding these court cases' explicit language, however, the "1-in-5 rule" is widely used in planning circles as if it were the legal requirement.[83]

Even if is illegal for it to be a bright-line rule, the superseded Growth Board cases articulating the "1-in-5 rule" militate against certain rural zoning changes—most notably an upzone to a smaller lot size such as 1-unit-in-2.5-acres with no other changes. Such an upzone would be scrutinized closely by the Growth Board because it reduces open space rural feel, reduces room for the natural environment to dissipate stormwater, and increases the risk of groundwater contamination from the proximity of wells and septic systems. Moreover, tracts carved into 2.5-acre lots for sale would be difficult to re-consolidate for farming or other large-lot purposes. And, to the extent they were near a city's UGA, they would pose a risk of "leapfrogging" semi-urban development instead of compact growth within the UGA. Because it lacks specific protections for rural character and could

[81] *See* Amy L. Kosterlitz, "Avoiding Sprawl in Rural Areas" (August 1997) at 2-7 to 2-9 (surveying early GHMB cases' elevation of density and sprawl prevention as the key factors delimiting rural development), *available at* https://mrsc.org/explore-topics/planning/development-types-and-land-uses/rural-land-use-regulation-development.

[82] Thurston County v. Western Washington Growth Management Hearings Board, 164 Wn.2d 329 (2008); Kittitas County v. Eastern Washington Growth Management Hearings Board, 172 Wn.2d 144 (2011).

[83] This is true despite the fact that later Growth Board cases have continued to reiterate the Supreme Court's advisement about county discretion and case-specific analysis. *See, e.g.*, *Golden Gate Ventures v. City of Chelan*, GMHB No. 18-1-0002 (Eastern Region), Final Decision and Order (July 10, 2018) at 5-6; *see also 1000 Friends of Washington (n/k/a Futurewise) v. Thurston County*, GMHB No. 05-2-0002 (Western Region), Order On Remand Finding Compliance (Rural Lands) (Feb. 1, 2018) at 8.

undermine a nearby city's growth, such an upzone would look like suburban sprawl—the biggest prohibition of all under the GMA. Some counties have explored a straight reduction in minimum lot size, without success.

An outgrowth of this orthodox-GMA rural development pattern is that rural residential development generally consists of one single-family residence on a large lot of five or more acres. This is an extremely expensive form of housing. Because a builder or developer can obtain only one unit per large lot, the unit must be profitable and low-risk enough to earn a return. A large home for sale, marketed to a wealthier clientele, fits that profile. A small home, "starter" home, or a rental does not—either because it fails to fetch a high enough price to obtain a return or because renting a single unit is too risky to justify the investment. Consequently, the GMA's strategy of encouraging urban growth and discouraging rural growth works: the scarcity of rural units makes them expensive and encourages development and movement of population, over time, to urban areas. The effect is exacerbated when, as now, prices are rising everywhere.

8. History of Residential Land Use and Home Prices in Lewis County

As noted in the background section for the well and septic analysis, above, when Lewis County refined its post-GMA land use regulations in the early 2000s, it designated RDD zones of rural character using densities of one dwelling per 5, 10, and 20 acres—a practice encouraged under the GMA to provide for a variety of rural densities.[84] At that time, only single family residences were allowed on the lots, with the possibility of associated family member units as accessory uses.[85] As time progressed, ADUs became more common in GMA jurisdictions as a rural land-use innovation. Also increasingly common were clustered subdivisions that transferred density from a large area to a smaller area surrounded by substantial open space, preserving the same underlying density for the large area as a whole.

In 2017, in an effort to make more innovative use of rural lands as encouraged by the GMA,[86] Lewis County adopted a comprehensive set of development regulations for both clustering and ADUs, replacing the "family member unit" accessory use with ADUs.[87] At that time, Lewis County also inserted duplexes as an allowed primary use on RDD lots with a doubled minimum lot size,

[84] *See* Ordinance 1179 (2002) at Chapter 17.100, modifying Ordinance 1170B (2000) that originally provided for only a one-dwelling-per-5-acre density.

[85] Ordinance 1179 at 17.42.040, first few table entries.

[86] *See* RCW 36.70A.070(5)(b) (permitting counties to "provide for clustering, density transfer, design guidelines, conservation easements, and other innovative techniques that will accommodate appropriate rural economic advancement, densities, and uses that are not characterized by urban growth and that are consistent with rural character."); Laws of 1995, Ch. 400 sec. 3 (first inserting similar language into the GMA).

[87] Ordinance 1283 (2017) at Ch. 16.18, Ch. 17.102, and 17.42.040 Table 2's first few entries.

presumably out of deference to the 1-in-5 rule.[88] Viewed today, Lewis County rural housing largely parallels the 1-in-5 rule and generally consists of single-family residences.

The impact of GMA policies to prefer single family residential development on large (greater than 5 acre) lots has results in a significant mismatch between home sale price and household income in rural areas. This phenomenon can been seen in historical Redfin data reflecting median home sale prices each month by ZIP code. Table 7, below, shows the three-month rolling average median home sale price in four Lewis County ZIP codes between 2013 and 2022. (Using a three-month average smoothed out some of the volatility from these relatively small sample areas, and 2013 was used instead of 2012 because the data from the latter was not available.)

The first area is Centralia, the most urbanized ZIP code in the county; the next is Mossyrock, a small city less urbanized than Centralia; the third is the rural area of Curtis (about 8-10 miles from an urban area), and the fourth is the more-rural area of Packwood (30 miles from any urban area).

The data show a strong upswing in home prices everywhere over the 9-year period, but the increase in Centralia (180%) is smaller than in less-urbanized Mossyrock (217%), which is smaller than in rural Curtis (285%), which is smaller still than in ultra-rural Packwood (334%). The more rural the ZIP code, the greater the increase in price over the same period—perhaps a reflection of the fact that in urban areas there are apartments or other smaller units on smaller lots, so buyers can downsize or rent to keep prices down. In rural areas, however, there are few rentals, few small units, and few small lots—usually the only option is an SFR on a large lot.

Table 7: Median home sale prices rose faster in more rural areas of Lewis County

ZIP Code	Character	March-May 2013	March-May 2022	Percent Increase
Centralia - 98531	Most Urban	$127,000	$356,000	**180%**
Mossyrock - 98564	Urban	$144,000	$457,000	**217%**
Curtis - 98538	Rural	$144,000	$498,000	**285%**
Packwood - 98361	Most Rural	$112,000	$484,000	**334%**

Source: https://www.redfin.com/news/data-center/

The growth in home prices drastically outstripped income growth over the same period. The federal Department of Housing and Urban Development calculates median family income each year to determine eligibility for subsidized housing programs; this figure is a very commonly used affordable housing metric. The HUD median family income rose by about 45% from 2013 ($54,600) to 2022 ($79,200).[89] Although 45% growth over nine years seems healthy, it is paltry compared with the 180% to 334% increases in home prices. This mismatch, particularly acute in rural areas, is why rural housing under the orthodox GMA model is increasingly unaffordable for even middle-class families in Lewis County. This is in direct conflict with GMA goal to "foster traditional rural lifestyles, rural-based economies, and opportunities to both live and work in rural

[88] Ordinance 1283 at 17.42.040 Table 2 "Duplex".

[89] https://www.huduser.gov/ portal/datasets/il.html.

areas." Traditional rural-based economies included agriculture and forestry, economic sectors that provide a lower-to-median household income.[90]

The mismatch seems particularly ironic because of changing demographics, which point towards a need for smaller housing stock. Households today are smaller than the rural family farms of yesteryear. The average household size of occupied households in Lewis County in 1940 was 3.40, which has decreased steadily to an average of 2.52 in 2020.[91] This represents a 26% decrease in average household size. The 2020 American Community Survey 5-year estimates show that of Lewis County's 31,118 occupied housing units, 19,984 of them (64%) have only 1 or 2 occupants. Yet, the same survey shows that of Lewis County's 35,426 total housing units, 21,976 (62%) have three or more bedrooms.[92] In other words, roughly two thirds of Lewis County's housing stock is bigger than needed for the large majority of Lewis County households.

It is also important to consider home sale price's effect not only on new residents moving to Lewis County, but also on existing residents. As home sale prices go up, the assessed value of existing houses goes up. If assessed values go up unevenly, some property owners end up bearing an unfair portion of property tax increases. Since rural areas have experienced higher increases in median home value over the last decade than urban home prices, this means that rural taxpayers are shouldering a greater portion of the property tax burden. For the low-income or fixed-income portion of the rural population who were lucky enough to purchase a home years ago when they were less expensive, this increased tax burden is unwelcome and hard to manage.

9. Equity Lens

One consequence of the GMA is that people who cannot or choose not to live in large single family residential homes on 5-acre or larger lots must move to urban areas to find smaller housing units that are more compact. This is the GMA's design: to promote compact urban development in urban areas and reduce development in rural areas. As it succeeds in its purpose over time, however, the GMA fails to consider the question, "Whom are we asking to move?"

It is not rich people, who can afford large homes on large lots. It is poorer people, who need smaller units or rentals. These populations, and sometimes even these individuals when the change is rapid enough, must relocate to urban areas that may be a considerable distance away. This unintended, disproportionate burden on the poor is regressive and actually at odds with the

[90] Source: Salary.com stating the average salary for a farmer in Washington is $48,478 per year (December 2022).

[91] Source: Steven Manson, Jonathan Schroeder, David Van Riper, Tracy Kugler, and Steven Ruggles. IPUMS National Historical Geographic Information System: Version 16.0 [dataset]. Minneapolis, MN: IPUMS. 2021. http://doi.org/10.18128/D050.V16.0.

[92] Data.census.gov, tables S2501 and DP04.

GMA's stated goals of maintaining affordable housing at all income levels,[93] and allowing people to live and work in the rural area.[94]

It also leads to destructive displacement. Modern public health policy notes that when you uproot individuals from their social networks to house them far away, they are more vulnerable to economic and health disruptions. Because they no longer live near their social network including their parents, their friends, their church, etc., if something goes wrong they are less likely to have a nearby support system who can help. This results in a greater proportion of uprooted people who cannot easily recover from losing a job or a house or falling ill, and instead are at risk for a greater need of social services, poor health outcomes and in extreme situations homelessness.

The practice of examining a policy in terms of its outcomes on different demographics is called an "equity lens." Viewed through an equity lens, the "1-in-5 rule" produces the same type of gentrification and displacement problems more often discussed in urban areas. Indeed, the state legislature recently passed House Bill 1220, which explicitly requires GMA-planning jurisdictions to consider populations at risk from gentrification and displacement, to use such information in zoning, and to establish antidisplacement policies.[95] Housing affordability has also been the subject of dozens of laws in recent years, including GMA amendments. These statutory changes breathe new significance into the GMA instruction that "rural character" must foster "opportunities to both live and work in rural areas."[96] Countering pressures that force poor people out of rural housing is a fundamental realization of that goal.

Besides, the pressures moving poorer people out of rural areas are threatening middle-income families as well. "Affordable housing," sometimes thought to be a watchword for subsidized housing projects for the lowest income spectrum, now represents the basic idea that a healthy budget has one spend no more than 30% of income on housing. Because real estate prices have risen much faster than incomes, housing has begun to outstrip the 30% benchmark for many families further up the income spectrum.

10. A Fresh Look at Rural Multi-Family Housing

Given the impact of the "1-in-5 Rule" land use patterns, which have produced a small number of increasingly expensive single family residences on large lots, it is worth considering what forms of multifamily housing are consistent with and permissible under GMA rural character. Just as the GMA regulations have long encouraged ADUs and cluster housing in provisions applicable to both rural and urban areas, those same provisions list "multifamily housing" as a consideration when attempting to encourage affordable housing for all economic segments of the population,

[93] RCW 36.70A.020(4)
[94] RCW 36.70A.011 & RCW 36.70A.030(23)(b)
[95] RCW 36.70A.070(2)(g)-(h) (added by HB 1220 in 2021).
[96] RCW 36.70A.030(23)(b)

including in rural areas.[97] The state Supreme Court invited counties to consider densities on a local basis, without regard to bright lines, if they can demonstrate in writing how their chosen density meets the GMA requirements.[98] From this background, despite the "1-in-5 Rule", it appears that some multifamily developments could be allowed.

The real limitations come not from the use characterizations of "single-family" versus "multifamily," but rather from substantive policy limitations on the extension of urban services into the rural area. When considering any multifamily use in the rural area, the questions are as follows: Is the use consistent with (a) protection of groundwater and critical areas, (b) well and septic service, (c) natural dissipation of stormwater, and (d) an intensity that will not overwhelm the roads, schools, or fire/EMS/police services? If so, will such a use preserve the open feel of rural lands and allow wildlife passage? Is such a use constrained to prevent it from outstripping these rural character concerns over time? These issues ultimately determine whether a type of development is permissible on rural lots under the GMA. If a multifamily unit can be served by rural services, limits sprawl, and preserves rural character as required, it should be permissible.

Lewis County's specific circumstances suggest that such units are possible here. As outlined above in the well and septic section, many multifamily uses could comfortably fit in far less acreage that 5 acres, consistent with groundwater protection. Water rights are available for such uses in Lewis County, which is unusual in the state. Lewis County has a fully-fledged critical areas code that would apply equally to these units as to other developments. Stormwater can be managed if the resulting units have enough land area for appropriate natural facilities. The County's adequate facilities review can protect against uses that overwhelm roads, fire districts, or schools. Thus, many of the GMA requirements and standards are already addressed in Lewis County's development regulations. If the County were to allow multifamily uses in such a way as to preserve rural open space feel, protect resource lands and wildlife passage, and hook the uses into code constraints to safeguard the above policies, the fact that these uses are multifamily should not bar them.

Based on the foregoing, it appears that Lewis County can and should explore the possibility of permitting SFR+ADUs, duplexes, triplexes, and/or quadplexes in both RDD designated areas and LAMIRDs. Such uses are now explicitly permitted in LAMIRDs if adequate services exist, and this report suggests that services may be adequate in many locations. Furthermore, such uses may well be allowed in RDD designated areas if they are conscientiously and carefully constrained to preserve rural character and comply with the GMA policies and requirements for rural areas.

[97] *Id.*

[98] *Thurston County v. Western Washington Growth Management Hearings Board*, 164 Wn.2d 329 (2008*); Kittitas County v. Eastern Washington Growth Management Hearings Board, 172 Wn.2d 144* (2011).

11. Conclusions

A. Rural Development Districts

Using an on-site individual well, the minimum lot area under the septic code for an SFR+ADU or a duplex is two acres, if all else (e.g., critical areas) is equal and site conditions allow. The minimum lot size in the RDD is 5 acres. Therefore, under well and septic regulations, an SFR+ADU or a duplex could be allowed in the RDD zoned areas throughout Lewis County.

Using a Group B well system that serves multiple lots, the minimum lot area under the septic code for an SFR+ADU or a duplex is less than one acre, if all else (e.g., critical areas) is equal and site conditions allow. Similar to the conclusion above, all RDD could allow SFR+ADU or duplex.

Using a Group B well system, the range of minimum lot areas under the septic code for a triplex or quadplex, depending on the number of bedrooms, is 0.23 acres to 2.13 acres, if all else (e.g., critical areas) is equal and site conditions allow. Similar to the conclusion above, all RDD could allow triplex or quadplex development.

Therefore, any of the developments under consideration could be allowed in the RDD on lots that are at least 5 acres in size, consistent with the local and state health codes.

The amount of water for such developments could be supplied, lawfully, by a permit-exempt well, which is the most common water source in rural areas, and which is less problematic in Lewis County than in many locations. It would be a Group B well, also a common occurrence in rural areas and reasonable for a small development to permit and maintain.

Lewis County's existing stormwater code and existing concurrency requirements would constrain such developments if they exceeded the level of service that the natural environment (for stormwater) or the fire district, school district, or roads (for concurrency) could support. These codes are already equipped to handle such developments.

The real limitation on any such developments in rural areas would come not from the constraints above (which are satisfied), but rather from longstanding GMA principles concerning rural character. Any RDD development containing more than one unit in five acres will have to:

- preserve the open space feel of rural areas;
- preserve traditional wildlife passage through rural lands;
- be constrained to prevent urban levels of service or urban growth;
- continue to protect groundwater and critical areas; and
- preserve and minimize uses conflicting with resource lands.

These limitations will shape resulting development regulations, but they are not insurmountable. Innovative techniques for rural housing are encouraged, and strategies such as interdependency

(e.g., ADUs), clustering, and form/impacts regulation already exist to provide housing flexibility within constraints like these. These tools can be used to design housing regulations meeting all of the above requirements, informed by public engagement and feedback from stakeholders within the county.

B. LAMIRDs

In LAMIRDs, in contrast, the constraints will not come from the GMA because residential uses within a LAMIRD's historical footprint are now permitted to intensify, if adequate services are present. But, due to LAMIRDs' smaller lot sizes and tighter configurations, services will not always be adequate within the available land area:

- Although the well-and-septic, stormwater, and water-rights analyses will be the same, the practical constraints regarding whether one can fit the minimum land area, plus the development itself, plus any stormwater facility within the lot or lots available could be much more influential.
- Sanitary control areas for wells will be more likely to take up a large portion of a lot, or overlap multiple lots.
- The proximity of many potential residential units to a single permit-exempt well could make the maximum permit-exempt water limit for groups of domestic uses more of a constraint.
- The proximity of multiple residences could outstrip fire and school services or overtax roads.

Despite these practical constraints in LAMIRDs, many LAMIRDs are equipped to handle them. Some LAMIRDs have centralized services that will ease or eliminate space concerns. Developments in LAMIRDs could reduce their size and impervious surfaces to fall below the stormwater regulatory threshold. And, adequate facilities review can conform growth to the services available. Indeed, some LAMIRDs have need of growth to support the continuation of the existing level of service—such as the White Pass School District, which has seen heavy student declines in its district (perhaps from a lack of affordable family housing), and could benefit from more students to support its existing facilities and staff.

The best way to gauge the plausibility and efficacy of adding ADUs, duplexes, triplexes, or quadplexes to LAMIRDs is public engagement and outreach to the affected areas and districts to see how such uses would fit with the areas' needs and capabilities. In general, such uses are highly plausible based on the research in this report; the question is whether they will work well in a given area specifically, in practice.

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