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David Madore, Chairman
Office of Clark County Councilors

Dear Councilor,

This is a response to your inquiry about septic systems when rural parcels have sensitive land areas. Hopefully the information presented will assist in developing a rural Vacant Land Model.

- *On-site septic systems are not allowed in wetlands*
- *Septic systems are required to maintain 100 foot setbacks from surface water (wetland) and wells.*
- *By and large, the areas within wetland buffers are poor soils. On pre-existing parcels with failed septic systems, waivers can be obtained to place septic systems within 100 feet of wetlands. However, this is very uncommon due to the soils being generally poorer close to wetlands.*
- *Septic systems are not allowed on geologically constrained areas without a full geotechnical engineering and approval. This is a costly endeavor. Statistically, we as an industry group estimate that less than 0.2% of (less than one in five hundred) on-site systems permitted within the past 10 years have went through the rigorous and costly reviews.. Under platting rules, it is likely that full geotechnical review would be required as well. It is more common for developers to simply avoid these areas with septic systems.*
- *Well setbacks are also an important feature to this discussion that should not be left out. Table X under WAC 246-272A (septic code) requires a 2 acre minimum lot size for lots served by septic and wells under the most common (silt loams and clay loam) soil types 5 in Clark County, (See enclosed information). It would be prudent to adjust the required unconstrained parcel area upward to accommodate this. Approximately 10-20% of the available land outside the urban growth boundaries in the county is soil type 4 (loams and gravelly loams), resulting in a requirement of on 1 acre.*

In summary, for the most part septic systems are not placed in sensitive land areas. However sensitive land areas can exist on a parcel on the condition all health requirements pertaining to septic systems are met such as lot size, soil conditions and setbacks are met.

If you have any questions feel free to contact us.

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Enclosure:

Single-Family Residence or Unit Volume of Sewage

Type of Water Supply	Soil Type (defined by WAC 246-272A-0220)					
	1	2	3	4	5	6
Public	0.5 acre	12,500 sq. ft.		15,000 sq. ft.		18,000 sq. ft.
		20,000 sq. ft.		22,000 sq. ft.		
Individual, on each lot	2.5 acre[1]					
	1.0 acre	1 acre	1 acre	1 acre	2 acres	2 acres
	2.5 acres[1]					

[1] See WAC 246-272A-0234(6).

METHOD II. A minimum land area proposal using Method II is acceptable only when the applicant:

(i) Justifies the proposal through a written analysis of the:

(A) Soil type and depth;

(B) Area drainage, and/or lot drainage;

(C) Public health impact on ground and surface water quality;

(D) Setbacks from property lines, water supplies, etc.,

(E) Source of domestic water;

(F) Topography, geology, and ground cover,

(G) Climatic conditions;

(H) Availability of public sewers;

(I) Activity or land use, present, and anticipated;

(J) Growth patterns;

(K) Reserve areas for additional subsurface treatment and dispersal;

(L) Anticipated sewage volume;

(M) Compliance with current planning and zoning requirements;

(N) Types of proposed systems or designs, including the use of systems designed for removal of nitrogen;

(O) Existing encumbrances, such as those listed in WAC 246-272A-0200 (1)(c)(v) and 246-272A-0220 (2)(a)(vii); and

(P) Estimated nitrogen loading from OSS effluent to existing ground and surface water;

(Q) Any other information required by the local health officer.

(ii) Shows development with public water supplies having:

(A) At least twelve thousand five hundred square feet lot sizes per single-family residence;

(B) No more than 3.5 unit volumes of sewage per day per acre for developments other than single-family residences; and

(iii) Shows development with individual water supplies having at least one acre per unit volume of sewage, and

(iv) Shows land area under surface water is not included in the minimum land area calculation, and

(e) Regardless of which method is used for determining required minimum lot sizes or minimum land area, submittal to the health officer of information consisting of field data, plans, and reports supporting a conclusion the land area provided is sufficient to.

WAC 246-272A-0320 Developments, subdivisions, and minimum land area requirements.

(1) A person proposing a subdivision where the use of OSS is planned shall obtain a recommendation for approval from the local health officer as required by RCW 58.17.150

(2) The local health officer shall require the following prior to approving any development

(a) Site evaluations as required under WAC 246-272A-0220, excluding subsections (3)(a)(i) and (4)(d);

(b) Where a subdivision with individual wells is proposed

(i) Configuration of each lot to allow a one hundred-foot radius water supply protection zone to fit within the lot lines; or

(ii) Establishment of a one hundred-foot protection zone around each existing and proposed well site;

(c) Where preliminary approval of a subdivision is requested, provision of at least one soil log per proposed lot, unless the local health officer determines existing soils information allows fewer soil logs;

(d) Determination of the minimum lot size or minimum land area required for the development using Method I and/or Method II:

METHOD I. Table X, Single-Family Residence Minimum Lot Size or Minimum Land Area Required Per Unit Volume of Sewage, shows the minimum lot size required per single-family residence. For developments other than single-family residences, the minimum land areas shown are required for each unit volume of sewage However, the local health officer may require larger lot sizes where the local health officer has identified nitrogen as a concern either through planning activities described in WAC 246-272A-0015 or another process.