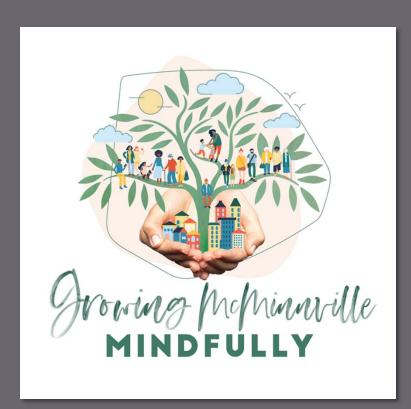


From MINDFULLY



MCMINNVILLE'S UGB REMAND RESPONSE:

CITY COUNCIL UPDATE

We are responding to the LCDC remand to the City of McMinnville for the MGMUP 2003-2023, first submitted in 2003 and modified in 2005. LCDC remand based on Court of Appeals remand to LCDC.



PUTTING IT ALL IN PERSPECTIVE









THE COURT'S DECISION

"The City erred in its application of ORS 197.298, and that a correct application of the law could compel a different result."

- 1) Determine Land Needed
- 2) Refine Study Area
- 3) Identify Buildable Land in the Study Area
- 4) Apply ORS 197.298 Land Selection for Locational Analysis
- 5) Evaluate Land per Goal 14 Location Factors



TONIGHT'S WORKSESSION

1. NEED DECISIONS

- -- Exception Lands Capacity
- Affordable Housing

2. BUILDABLE LAND DECISIONS

- Serviceability
- -- Grandhaven Conservation Easement
- -- Hazards



DETERMINATION OF NEED

- 1. Using HNA and BLI in the public record for the remand.
- 2. 20-year planning horizon (2003-2023)
- 3. Population Forecast in 2023 = 44,055
- 4. Persons per household = 2.54
- 5. Number of new housing units = 6014



DETERMINATION OF NEED

Table 2: Forecast of needed new dwelling units and need by type, MGMUP 2003-2023

| Housing type | Number of DU | Needed DU by Type | Density (DU/ Net Res Acre) | Density (DU/Gross Res Acre) |
|------------------------------|-----------------|----------------------|----------------------------------|-----------------------------------|
| Single-family | 3,607 | 60.0% | 5.4 | 4.3 |
| Detached (R-1) | 601 | 10.0% | 4.5 | 3.3 |
| Detached (Other) | 1,804 | 30.0% | 5.5 | 4.1 |
| Manufactured in subdivisions | 601 | 10.0% | 5.5 | 5.0 |
| Manufactured in parks | 601 | 10.0% | 6.5 | 5.9 |
| Multi-family | 2,407 | 40.0% | 14.0 | 11.6 |
| Row/Townhouse/Duplex | 722 | 12.0% | 10.0 | 7.5 |
| Apartment | 1,685 | 28.0% | 17.0 | 15.0 |
| Total | 6,014 | 100.0% | 7.2 | 5.7 |



DETERMINATION OF NEED

Table 3 Need forecast of housing, land need (gross acres) and needed density by zoning and housing type, MGMUP (2003-2023)

| | Zoning | | | | | |
|---------------------------------|--------|-------|-----|-------|-------|-------|
| Housing type | R-1 | R-2 | R-3 | R-4 | R-5 | Total |
| Number of Dwelling Units | | | | | | |
| Single-family | 721 | 1,985 | 540 | 360 | - | 3,607 |
| Detached (R-1) | 601 | - | - | - | - | 601 |
| Detached (Other) | - | 1,504 | 300 | - | - | 1,804 |
| Manufactured in subdivisions | 120 | 481 | - | - | - | 601 |
| Manufactured in parks | - | - | 240 | 360 | - | 601 |
| Multi-family | - | - | 301 | 1,023 | 1,083 | 2,407 |
| Row/townhouse | - | - | 301 | 421 | - | 722 |
| Apartment | - | - | - | 602 | 1,083 | 1,685 |
| Total | 721 | 1,985 | 841 | 1,383 | 1,083 | 6,014 |
| Land Need (Gross Acres) | | | | | | |
| Single-family | | | | | | |
| Detached (R-1) | 180 | - | - | - | - | 180 |
| Detached (Other) | - | 368 | 74 | - | - | 441 |
| Manufactured in subdivisions | 24 | 97 | - | - | - | 122 |
| Manufactured in parks | - | - | 41 | 62 | - | 103 |
| Multi-family | | | | | | |
| Row/townhouse | - | - | 40 | 56 | - | 96 |
| Apartment | - | - | - | 40 | 72 | 112 |
| Total | 204 | 465 | 155 | 158 | 72 | 1,053 |
| | | | | | | |
| Implied Density (DU/Gross Acre) | 3.5 | 4.3 | 5.4 | 8.8 | 15.0 | 5.7 |

BUILDABLE LAND NEED

2003 Net Land
Need Outside the
UGB sans 110
Commercial land
need - ~1140 acres
total

Table 12. Total additional acres needed in the McMinnville UGB, 2003-2023

| Category | Needed Gross Res Acres |
|----------------------|---------------------------|
| New housing | 536.9 |
| Group Quarters | 13.3 |
| Parks | 314.0 |
| Schools | 96.0 |
| Private Schools | 1.5 |
| Religious | 47.6 |
| Government | 0.9 |
| Semi-Public Services | 22.5 |
| Infrastructure | 2.6 |
| Total | 1,035.4 |

Source: City of McMinnville, ECONorthwest

Note: Parkland need assumes the City standard of 14.0 acres per 1,000 residents will be met. The recent \$9 million park bond is a strong indication of the City's commitment to this standard.



BUILDABLE LAND NEED

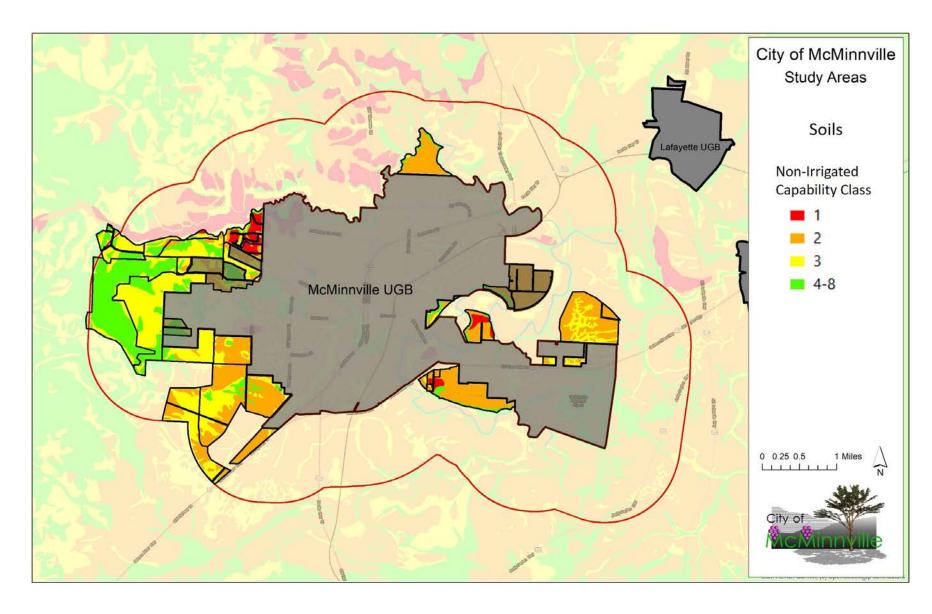
2006 Corrected Record - New Land Need

Table 14. Comparison of land supply and demand, McMinnville UGB, 2003-2023

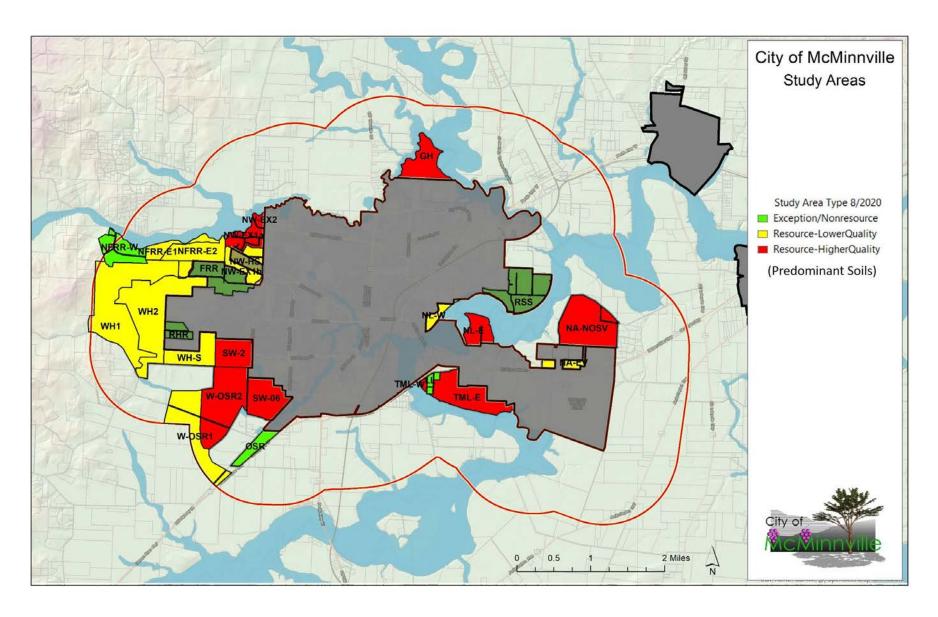
| Plan Designation | Land Need (2003-2023) | Gross Buildable Acres (Jan 2003) | Deficit (Surplus) |
|--|--------------------------|---|----------------------|
| Residential ^a | 1,538.4 | 881.1 <u>880.5</u> | 1019.2 1019.8 |
| Commercial | 219.1 | 102.4 | 106.0 |
| Industrial | 269.7 | 326 <u>327.1</u> | (44.7) (46) |
| Total Buildable Land Need Outside UGB | 2,027.2 | 1309.5 <u>1312.9</u> | 1125.2 1125.8 |

Source: ECONorthwest, 2003



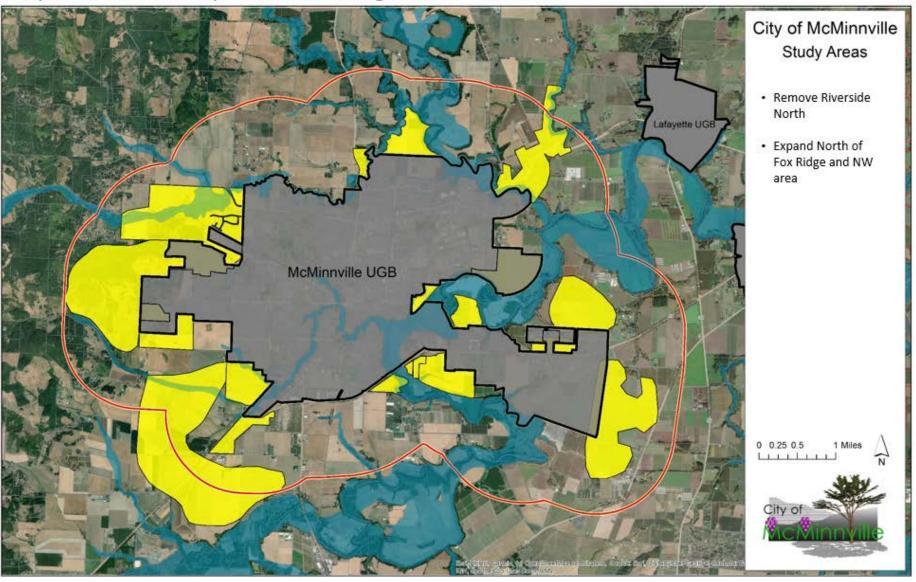


Map is a draft, and could change with future refinements

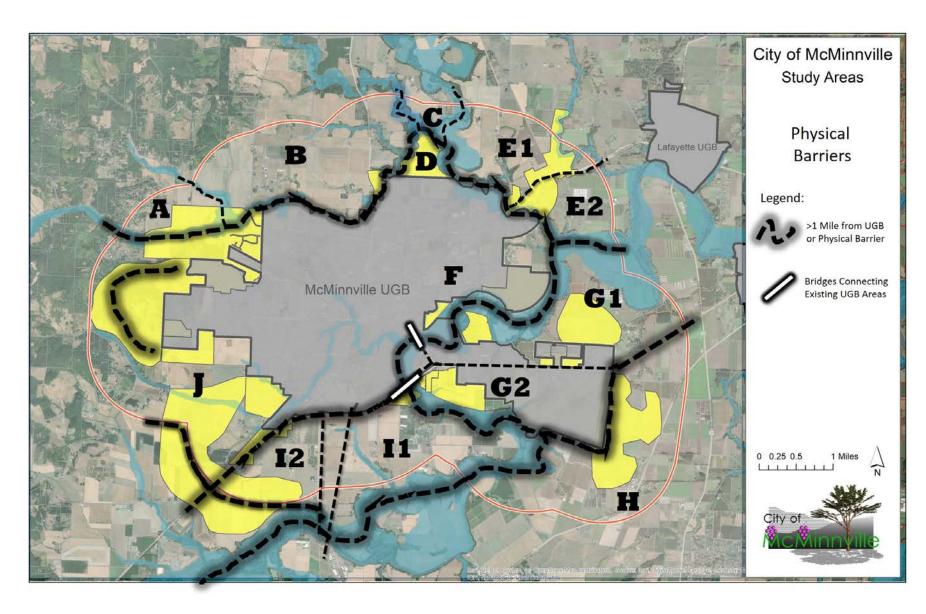


Map is a draft, and could change with future refinements

Map 3. Revised Study Areas Reflecting Court's Direction

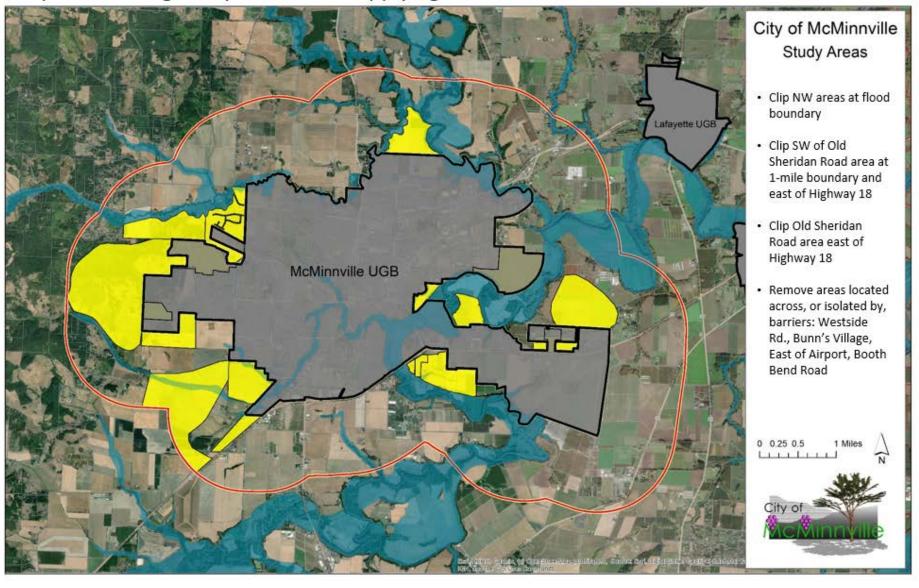


Map is a draft, and could change with future refinements

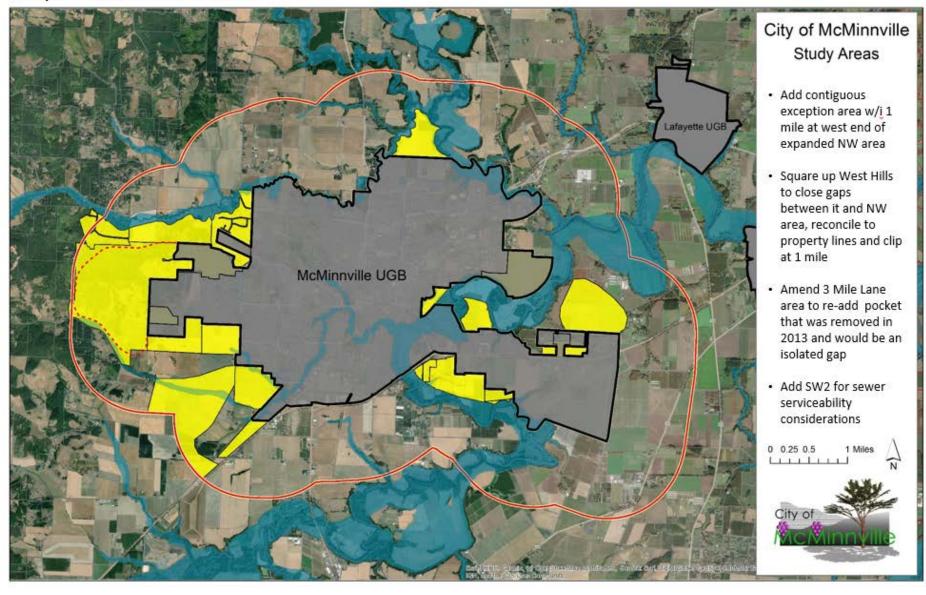


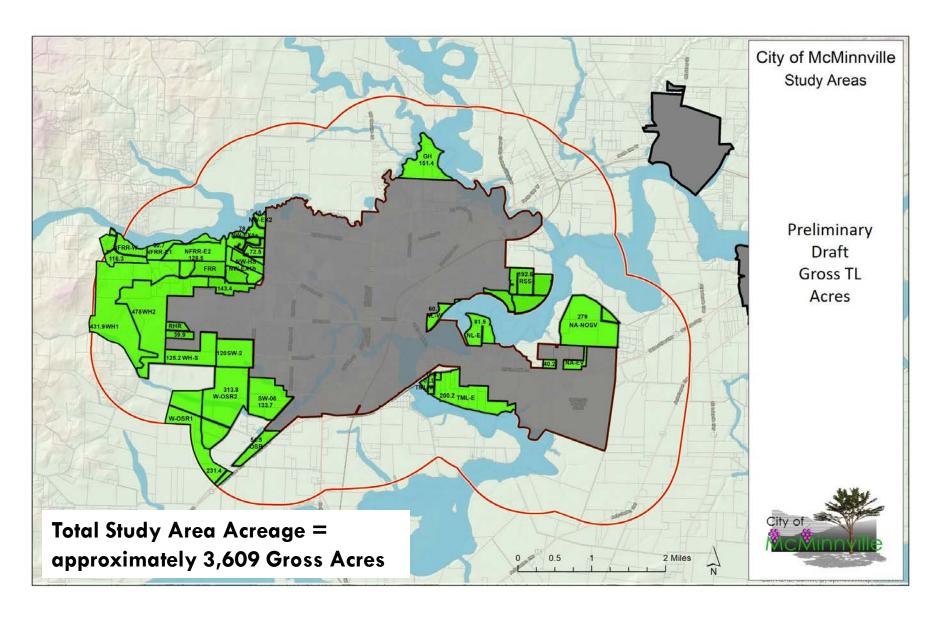
Map is a draft, and could change with future refinements

Map 5. Resulting Study Areas After Applying Barriers Filters

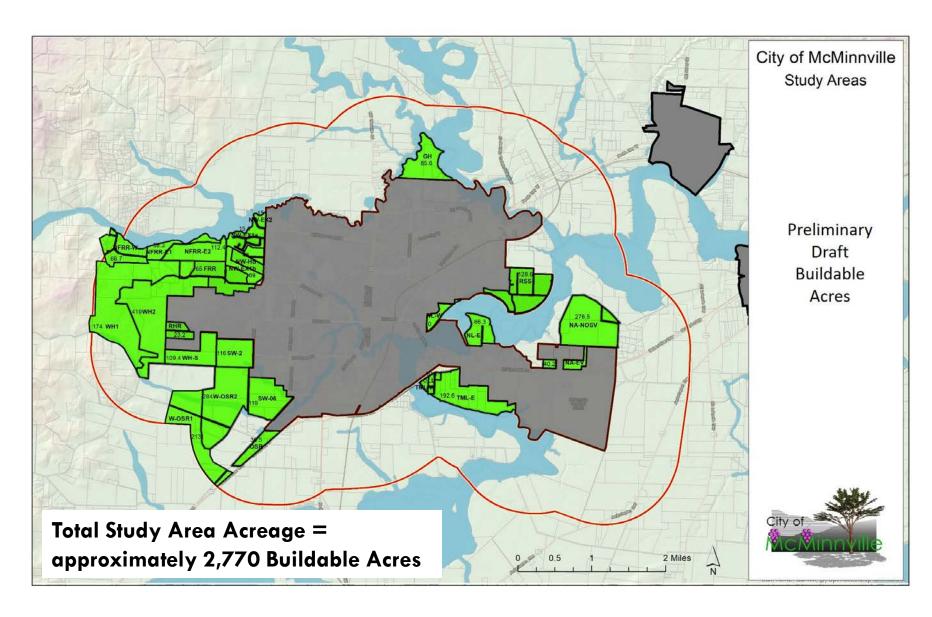


Map 6. Further Revisions





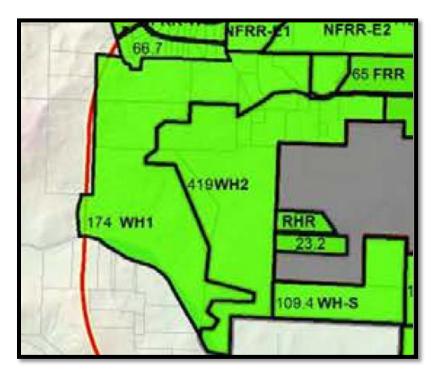
Map is a draft, and could change with future refinements



Map is a draft, and could change with future refinements

GROSS VS. BUILDABLE





WH1: 431.9

WH2: 478.0

WH-S: 125.2

RHR: 39.9

WH1: 174.0

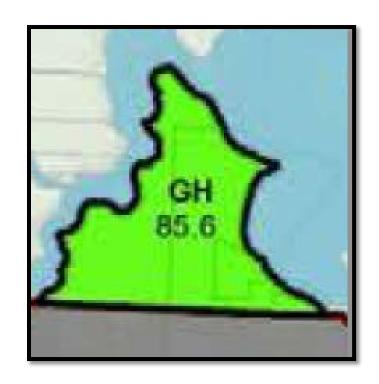
WH2: 419.0

WH-S: 109.4

RHR: 23.2

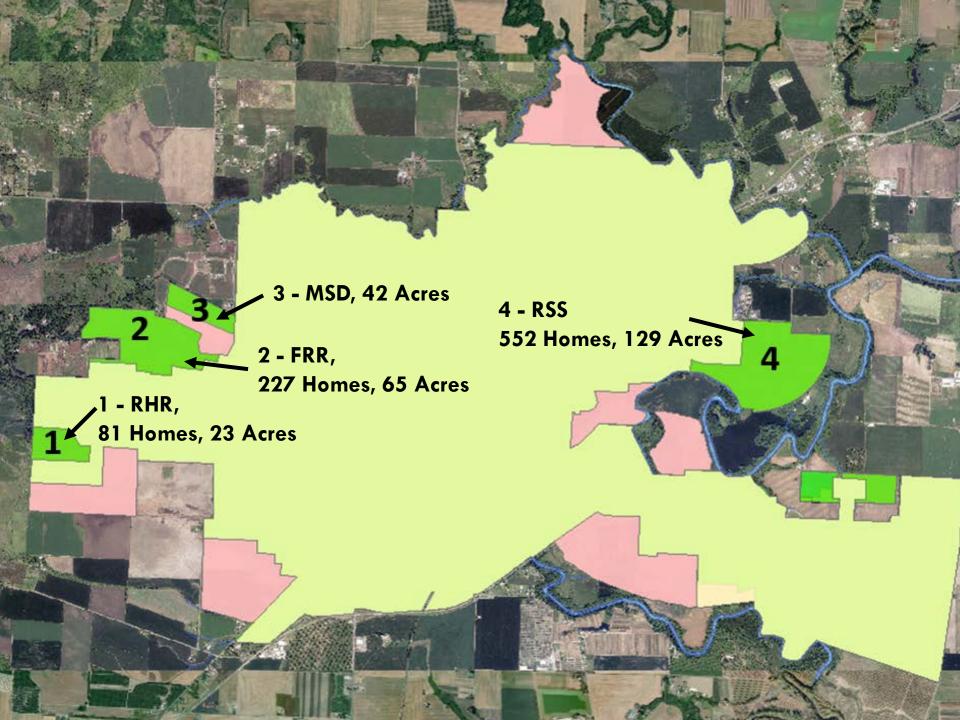
GROSS VS. BUILDABLE





GH: 151.4 GH: 85.6

| 16: Summary of land supply (MGMUP 2003-2023) Housing: | Land Need (measured in dwelling units) | Land Need (measured in acres) | Gros Densi |
|--|--|-------------------------------------|---------------|
| Housing unit need | 6,014 | 1053.00 | 5 |
| Housing unit rieed Housing unit capacity (inside UGB) | 2,949 | 1033.00 | |
| Unmet housing unit need | 3,065 | 538.00 | 5 |
| Proposed Measures To Increase Residential Land Capacity (inside UGB): | -, | | |
| Allow ADU's in residential zones | 200 | 35.09 | |
| Rezone portion of West Hills from R-1 to R-2 | 204 | 35.79 | |
| Rezone other residential and non-residential properties | 80 | 14.04 | |
| Direct increased density to transit corridors | 90 | 15.79 | |
| Direct increased density to Northwest Neighborhood Activity Center | 238 | 41.75 | |
| Direct increased density to Northwest Neighborhood Activity Center | 143 | 25.09 | |
| Add downtown upper floor housing opportunities to buildable land inventory | 61 | 10.70 | |
| Total Proposed Measures Adjustments | 1,016 | 178.25 | |
| Adjusted Housing Unit Capacity (inside UGB): | 3,965 | | |
| Adjusted Housing Unit Need: | 2,049 | 359.75 | |
| | _,-,- | | |
| Housing Unit Capacity (outside existing UGB): | 006 | 227 54 | |
| Exception Lands Riverside South | 906 552 | 227.51 | • |
| | | 128.60 | • |
| Lawson Lane | 46 | 10.76 | • |
| Redmond Hill Road | 81 | 23.15 | ; |
| Fox Ridge Road | 227 | 65.00 | ; |
| Resource Lands | 4,082 | 653.15 | (|
| Northwest | 876 | 140.22 | (|
| Grandhaven | 857 | 137.06 | |
| Southwest | 950 | 151.97 | |
| Norton Lane | 414 | 66.27 | |
| Three Mile Lane | 985 | 157.63 | |
| Total Housing Unit Capacity (outside existing UGB): | 4,988 | 880.66 | : |
| Housing Unit Surplus or (Deficit) (in du's) | 2,939 | 500.04 | |
| Acres surplus or (deficit) (assumes 5.7 du/gr ac) | 515.65 | 520.91 | |
| Other lands need (acres): | | | |
| Public schools | 96.00 | 96.00 | |
| Public parks | 254.00 | 254.00 | |
| Religious | 47.60 | 47.60 | |
| Commercial land | 106.00 | 106.00 | |
| Other | 27.50 | 27.50 | |
| Total Other Land Need (acres): | 531.10 | 531.10 | |
| | | | |
| Total Acres Surplus or (Deficit) | (15.45) | (10.19) | |



| e 16: Summary of land supply (MGM Housing: | UP 2003-2023) | Land Need (measured in dwelling units) | Land Need (measured in acres) | Gros Densi |
|--|--------------------|--|-------------------------------------|---------------|
| Housing unit need | | 6,014 | 1053.00 | 5 |
| Housing unit capacity (inside UGB) | | 2,949 | | |
| Unmet housing unit need | | 3,065 | 538.00 | 5 |
| Proposed Measures To Increase Residential Land Capa | city (inside UGB): | | | |
| Allow ADU's in residential zones | | 200 | 35.09 | |
| Rezone portion of West Hills from R-1 to R-2 | | 204 | 35.79 | |
| Rezone other residential and non-residential properties | | 80 | 14.04 | |
| Direct increased density to transit corridors | | 90 | 15.79 | |
| Direct increased density to Northwest Neighborhood Activ | ity Center | 238 | 41.75 | |
| Direct increased density to Grandhaven Neighborhood Ac | • | 143 | 25.09 | |
| Add downtown upper floor housing opportunities to buildal | • | 61 | 10.70 | |
| Total Proposed Measures Adjustments | • | 1,016 | 178.25 | |
| Adjusted Housing Unit Capacity (inside UGB): | | 3,965 | | |
| Adjusted Housing Unit Need: | | 2,049 | 359.75 | 5 |
| | | | | |
| Housing Unit Capacity (outside existing UGB): | | 200 | 007.54 | |
| Exception Lands | (100 A) | 906 | 227.51 | 4 |
| Riverside South | (129 Acres) | 552 | 128.60 | 4 |
| Lawson Lane | (23 Acres) | 46 | 10.76 | 4 |
| Redmond Hill Road | | 81 | 23.15 | 3 |
| Fox Ridge Road | (65 acres) | 227 | 65.00 | 3 |
| Resource Lands | | 4,082 | 653.15 | 6 |
| Northwest | | 876 | 140.22 | 6 |
| Grandhaven | | 857 | 137.06 | 6 |
| Southwest | | 950 | 151.97 | 6 |
| Norton Lane | | 414 | 66.27 | 6 |
| Three Mile Lane | | 985 | 157.63 | 6 |
| Total Housing Unit Capacity (outside existing UGB): | | 4,988 | 880.66 | 5 |
| Housing Unit Surplus or (Deficit) (in du's) | | 2,939 | | |
| Acres surplus or (deficit) (assumes 5.7 du/gr ac) | | 515.65 | 520.91 | |
| Other lands need (acres): | | | | |
| Public schools | (42 Acres) | 96.00 | 96.00 | |
| Public parks | , | 254.00 | 254.00 | |
| Religious | | 47.60 | 47.60 | |
| Commercial land | | 106.00 | 106.00 | |
| Other | | 27.50 | 27.50 | |
| Total Other Land Need (acres): | | 531.10 | 531.10 | |
| | | | | |
| Total Acres Surplus or (Deficit) | | (15.45) | (10.19) | |

| e 16: Summary of land supply (MGMUP Housing: | 2003-2023) | Land (measu dwelling | ıred in | Land Need (measured in acres) | Gross Density |
|---|-------------|----------------------------|---------------------|-------------------------------------|------------------|
| Housing unit need | | | 6,014 | 1053.00 | 5. |
| Housing unit capacity (inside UGB) | | | 2,949 | | |
| Unmet housing unit need | | | 3,065 | 538.00 | 5. |
| Proposed Measures To Increase Residential Land Capacity (i | nside UGB): | | | | |
| Allow ADU's in residential zones | , | | 200 | 35.09 | |
| Rezone portion of West Hills from R-1 to R-2 | | | 204 | 35.79 | |
| Rezone other residential and non-residential properties | | | 80 | 14.04 | |
| Direct increased density to transit corridors | | | 90 | 15.79 | |
| Direct increased density to Northwest Neighborhood Activity Cer | nter | | 238 | 41.75 | |
| Direct increased density to Grandhaven Neighborhood Activity C | | | 143 | 25.09 | |
| Add downtown upper floor housing opportunities to buildable lan | | | 61 | 10.70 | |
| Total Proposed Measures Adjustments | • | | 1,016 | 178.25 | |
| Adjusted Housing Unit Capacity (inside UGB): | | | 3,965 | | |
| Adjusted Housing Unit Need: | | 1,189 | 2,049 | 359.75 | 5. |
| | | | • | | |
| Housing Unit Capacity (outside existing UGB): Exception Lands | | | 906 | 227.51 | 4 |
| Riverside South | (129 Acres) | | 552 | 128.60 | 4. 4. |
| Lawson Lane | (127 ACIES) | | 46 | 10.76 | 4. 4. |
| Redmond Hill Road | (23 Acres) | | 81 | 23.15 | 4. 3. |
| Fox Ridge Road | (65 acres) | | 227 | 65.00 | 3. |
| Resource Lands | (OS acres) | | 4,082 | 653.15 | 3. 6. |
| Northwest | | | 4,062 876 | 140.22 | 6. |
| Grandhaven | | | 857 | 137.06 | 6. |
| Southwest | | | 950 | 151.97 | 6. |
| Norton Lane | | | 414 | 66.27 | 6. |
| Three Mile Lane | | | 985 | 157.63 | 6. |
| Total Housing Unit Capacity (outside existing UGB): | | | 4,988 | 880.66 | 5. |
| Housing Unit Surplus or (Deficit) (in du's) | | | 2,939 | 000.00 | J. |
| Acres surplus or (deficit) (assumes 5.7 du/gr ac) | | | 515.65 | 520.91 | |
| | | | 010.00 | 020.01 | |
| Other lands need (acres): | | | 00.00 | 00.00 | |
| Public schools | (42 Acres) | 54 Acres | 96.00 | 96.00 | |
| Public parks | | | 254.00 | 254.00 | |
| Religious | | | 47.60 | 47.60 | |
| Commercial land | | | 106.00 | 106.00 | |
| | | | 27.50 | 27.50 | |
| Other | | | E04 45 | =- 1 | |
| Other Total Other Land Need (acres): | | | 531.10 | 531.10 | |

| e 16: Summary of land supply (MGMUP Housing: | 2003-2023) | Land (measu dwelling | ıred in | Land Need (measured in acres) | Gross Densit |
|---|---------------|----------------------------|---------------------|-------------------------------------|-----------------|
| Housing unit need | | | 6,014 | 1053.00 | 5. |
| Housing unit capacity (inside UGB) | | | 2,949 | | |
| Unmet housing unit need | | | 3,065 | 538.00 | 5. |
| Proposed Measures To Increase Residential Land Capacity (i | inside UGB): | | | | |
| Allow ADU's in residential zones | · | | 200 | 35.09 | |
| Rezone portion of West Hills from R-1 to R-2 | | | 204 | 35.79 | |
| Rezone other residential and non-residential properties | | | 80 | 14.04 | |
| Direct increased density to transit corridors | | | 90 | 15.79 | |
| Direct increased density to Northwest Neighborhood Activity Ce | nter | | 238 | 41.75 | |
| Direct increased density to Grandhaven Neighborhood Activity (| Center | | 143 | 25.09 | |
| Add downtown upper floor housing opportunities to buildable lar | nd inventory | | 61 | 10.70 | |
| Total Proposed Measures Adjustments | - | | 1,016 | 178.25 | |
| Adjusted Housing Unit Capacity (inside UGB): | | | 3,965 | | |
| Adjusted Housing Unit Need: | | 1,189 | 2,049 | 359.75 | 5. |
| | | | _,,,,,,, | | - |
| Housing Unit Capacity (outside existing UGB): | | | 000 | 007.54 | |
| Exception Lands Riverside South | /120 A ava a\ | | 906 552 | 227.51 | 4. |
| | (129 Acres) | | 55∠ 46 | 128.60 10.76 | 4. 4. |
| Lawson Lane Redmond Hill Road | (23 Acres) | | 81 | 23.15 | 4. 3. |
| Fox Ridge Road | (65 acres) | | 227 | 65.00 | 3. 3. |
| Resource Lands | (OS acres) | | 4,082 | 653.15 | 5. 6. |
| Northwest | | | 4,002 876 | 140.22 | 6. |
| Grandhaven | | | 857 | 137.06 | 6. |
| Southwest | | | 950 | 151.97 | 6. |
| Norton Lane | | | 414 | 66.27 | 6. |
| Three Mile Lane | | | 985 | 157.63 | 6. |
| Total Housing Unit Capacity (outside existing UGB): | | | 4,988 | 880.66 | 5. |
| Housing Unit Surplus or (Deficit) (in du's) | | | 2,939 | 000.00 | 0. |
| Acres surplus or (deficit) (assumes 5.7 du/gr ac) | | | 515.65 | 520.91 | |
| · · · · · · · · · · · · · · · · · · · | | | | | |
| Other lands need (acres): | (40 A) | E A A | 06.00 | 96.00 | |
| Public schools Public parks | (42 Acres) | 54 Acres | 254.00 | 254.00 | |
| Religious | | | 47.60 | 47.60 | |
| Commercial land | | | 106.00 | 106.00 | |
| Other | | | 27.50 | 27.50 | |
| Total Other Land Need (acres): | | | 531.10 | 531.10 | |
| Total Othor Earla Hood (aoreo). | | | 551.10 | 331.10 | |
| | | | | | |

EXCEPTION LANDS

HOUSING NEED?



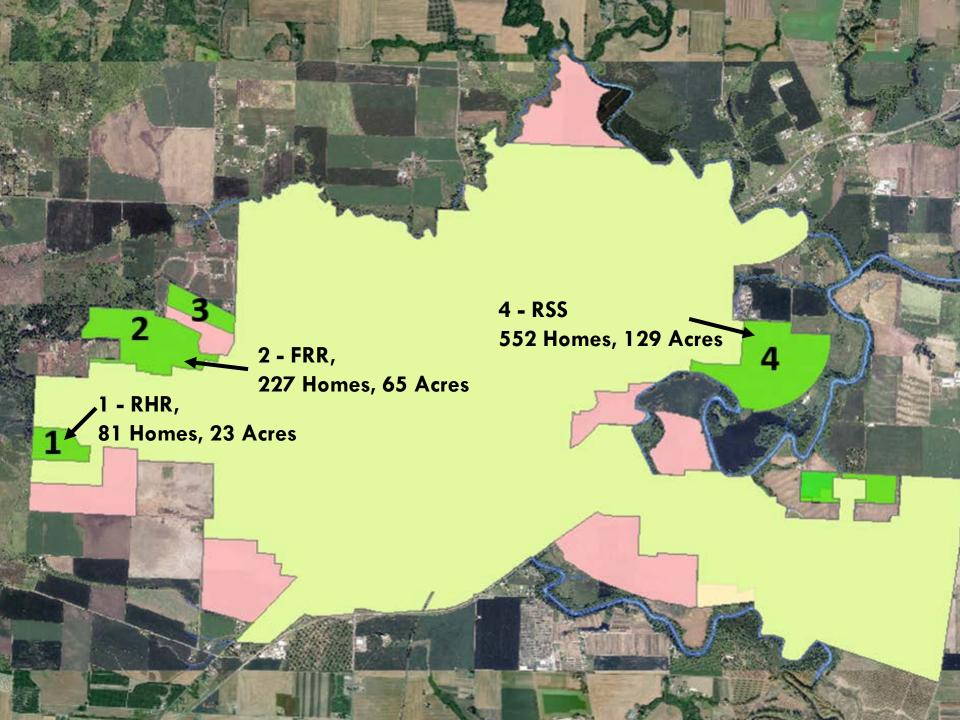
Issue: MGMUP Table 16 reflects significant housing development on three exception land areas that were brought into the UGB in 2004 but no urban development has taken place.

In addition, planned zoning for multi-family in transit corridors rescinded after the remand decision.

And NACs did not move forward.

Question: Should we amend the record to revise the housing capacity in the exception lands and the existing UGB?





2003 Revised Buildable Land Analysis: Housing Capacity in Exception Areas

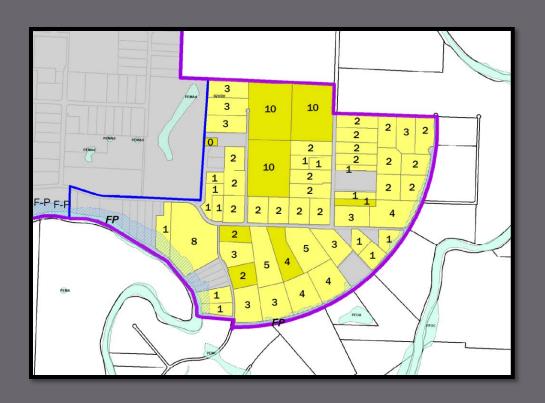
| Exception Area | Assumed Capacity | Planned Zoning | Remaining Capacity |
|-------------------|---------------------|-------------------|-----------------------|
| Riverside South | 552 | R-2 | 552 |
| Fox Ridge Road | 227 | R-1 and R-2 | 227 |
| Redmond Hill Road | 81 | R-1 | 81 |
| Total | 860 | | 860 |



2003 Revised Buildable Land Analysis: Housing Capacity in Exception Areas

Since the 2003 MGMUP submittal, there has been a study conducted by ECONorthwest demonstrating that parcelized rural residential land brought into a UGB does not typically redevelop into urban densities, especially one and two acre parcels.





Riverside Side South Rural Residential Exception Lands

Mostly 1 – 2 Acre Parcels that more than likely will not redevelop into urban densities.

However, MGMUP assumes 552 new housing units in this area.



2003 Revised Buildable Land Analysis:

The 2003 MGMUP proposed that 15.6 acres of vacant land in future transit corridors be rezoned for MFR as an efficiency measure. It reverted to its prior SFR zoning after the remand. This land has developed at lower density SFR.



Planned Neighborhood Activity Centers did not move forward.

The 2003 MGMUP proposed to Neighborhood Activity Center as a mixed-use development with high density residential in two specific expansion areas:

Northwest Neighborhood Activity Center and Grandhaven. Both areas have since developed with lesser housing density.



CITY COUNCIL DIRECTION

Option 1: Amend the record

Pros:

Provides a more realistic capacity forecast.

Cons:

- Likely to be challenged.
- Stepping outside a "safe harbor" approach invites a legal challenge. Affirmed record is the "safe harbor."



CITY COUNCIL DIRECTION

Option 2: Leave the record as is and address this question as part of the URA process.

Pros:

- Avoids legal challenge on this issue.
- These areas may provide an opportunity for park and open space uses.

Cons:

- Plan likely overstates 20-year UGB capacity.
- Retains significant "faux" inventory in the UGB.



STAFF RECOMMENDATION:

Option #2: Leave the record as is and address this question as part of the URA process, but start the URA process immediately.



AFFORDABLE HOUSING

HOUSING NEED?



Issue: The 2001 Residential Land Need Analysis included information about low/mod housing needs but did not forecast how many households nor estimated land needs for that housing. Staff has prepared an estimate for this cohort based on information in the record. We also researched land needs including the impact of site development costs on housing costs.

Question: Should we amend the record to include affordable housing needs and land suitability facts?



RLNA Findings:

- The distribution of household incomes in McMinnville is likely to remain the same over time.
- ~43% of new households will be considered low and moderate income and of that ~30% will be low income.
- More than 60% households headed by persons under age 35 and over age 65 will be low income.



RLNA Findings:

- Most moderate income households (i.e. <80% of median income) will live in rental housing.
- Most low income households (i.e. <50% of median income)
 will live in apartments.
- In response, future housing products are likely to transition toward smaller units and more attached housing.



RLNA Findings:

Given limited redevelopment opportunities in existing neighborhoods, most housing for new residents, including for low and moderate income households, will need to come from new construction on vacant land.



2023 Low/Mod Housing Forecast

Total Housing Mix:

SFR/Detached, including mobile homes: 60%

Attached dwellings, including townhouses: 40%

| Detached SF | Manufactured Home | Townhome/ Row House | Apartments | Total |
|-------------|----------------------|------------------------|------------|-------|
| 2406 | 1201 | 722 | 1685 | 6014 |



2023 Low/Mod Housing Forecast

- Data Source: 2000 US Census Household Income Moderate
 Moderate Income: Earning up to 80% of Median Income
- Low Income: Earning up to 60% of Median

| | Median and above | Moderate Income | Low and Very Low | Total |
|------------------------|------------------|--------------------|---------------------|-------|
| Percentage | 57% | 13% | 30% | |
| Estimated Dewllings | 3419 | 761 | 1834 | 6014 |



Public vs Private Production

The 2003 Buildable Land Analysis found that YCHA and other organizations were likely to build 300 to 400 assisted housing units in McMinnville through 2023.

The balance must be built by the private sector: 83%



Housing Development Cost Analysis: SFR

PSU Center for Real Estate Studies:

- Single Family housing built on land with slopes >10% had $\sim 24\%$ higher site development costs than on land with less slope. This added an estimated \$20 34 thousand dollars per lot and as much as \$100K to the final price.
- Target market decisions aside, land with >10% slope is much more expensive to develop and more difficult to develop for income constrained households.



Housing Development Cost Analysis: MFR

- Multi-family housing built on land with slopes >10% carried ~50% higher site development costs than land with less than 5% slope.
- The research found many fewer market-rate projects on steeper slopes and those found tended to have much higher overall cost for finished products.



Housing Development Cost Analysis: MFR

PSU Center for Real Estate Studies:

- Researchers found only a few examples of affordable housing projects on land with slopes >5%.
- Affordable developers in general said they do not build on sloped sites. "There is an additional cost burden which sloped sites cause for such projects."



Housing Development Cost Analysis

PSU Center for Real Estate Studies:

- Researches found that slope posed similar cost markups for affordable projects to the impact on market-rate projects.
 Slopes added 40-50% higher site development costs.
- The burden that slope adds to affordable projects is compounded by the competitive nature of the financing process. Sites with higher unit costs have a harder time competing for funding than those without that burden.



Question: Should McMinnville add affordable housing need to the record and use it as a criterion for screening land to add to the UGB?

Pros:

- Addresses this need more directly in the plan
- Establishes a fact basis for rating land based on development considerations.

Cons:

 Introduces new information into the record that could be challenged.

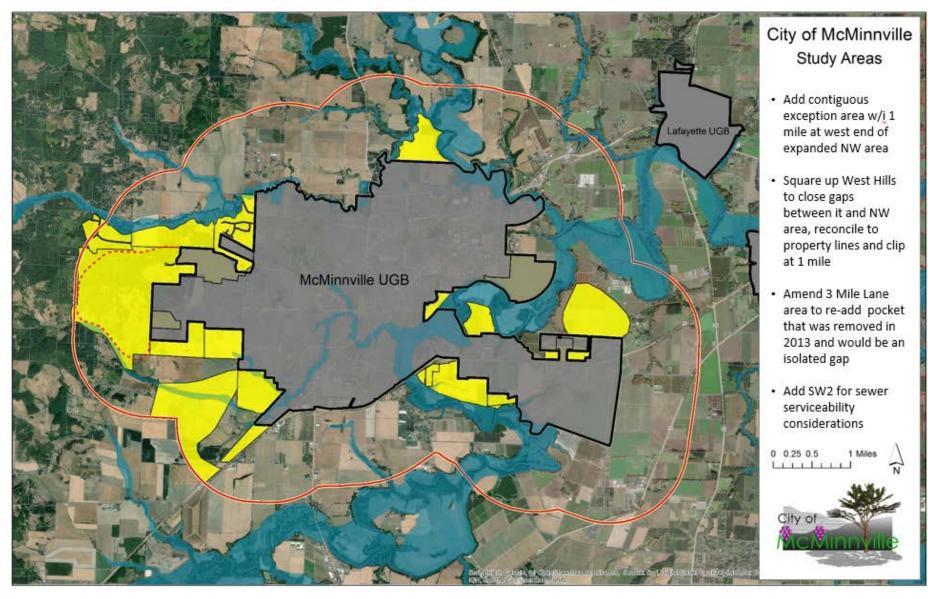


"SERVICEABILITY"

BUILDABLE LAND?



UGB REMAND RESPONSE STUDY AREA MAP



Engineering - Public Facility Service Concepts

- Jacobs Engineering Serviceability preliminary results
- All study areas can be "served" but some are very challenging and not economically practical.
- Service concepts rated based on "first principles" for ease of implementation.
- A 1-5 point system will be used to evaluate areas with areas that have fewer constraints being assigned more points.



Engineering - Public Facility Service Concepts

Study Areas with relatively few serviceability issues:
Gravity sewers, PZ-1 water, accessible from public roads

- Three Mile Lane/SE Areas (water pressure solved)
- Southwest 1, 2, and South West Hills
- Old Sheridan Road
- West of Old Sheridan Road



Engineering - Public Facility Service Concepts

Study Areas with moderate service constraints that require a less than ideal solution for water, sewer, or transportation

- Grandhaven (transportation access east side)
- Riverside South (pump sewage)
- Norton Lane East (pump sewage)
- Northwest 1 (pump sewage in small portion)
- Northwest 2 (pump sewage)
- Redmond Hill Road (water pressure zone 2)

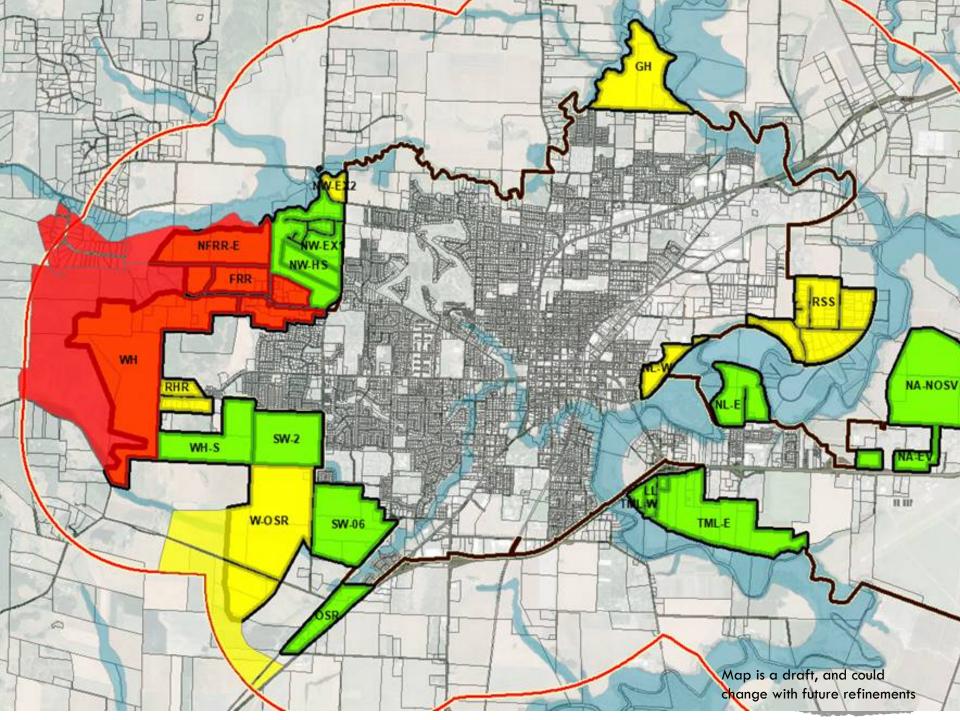


Engineering - Public Facility Service Concepts

Study Areas with significant serviceability constraints that require less than ideal solutions for multiple services:

- West Hills (pump sewage in places, water PZ's 2 5, transportation accessibility, shallow rocky soils, steep slopes hamper road design/construction)
- Fox Ridge Road (water PZ 2-3, transportation accessibility, steep slopes in places)
- North of Fox Ridge (most sewage requires pumping, water PZ 2, transportation accessibility)





Engineering - Public Facility Service Concepts

Next Steps:

- Size infrastructure extensions to "buildable" land
- Assess "downstream" system capacity constraints.
- Evaluate cost for expansion and, where necessary, capacity corrections.
- Rate study areas using 1-5 point system with 5 points indicating easiest to serve and 1 point for areas that are impractical to serve.



"GRANDHAVEN CONSERVATION EASEMENT"

BUILDABLE LAND?

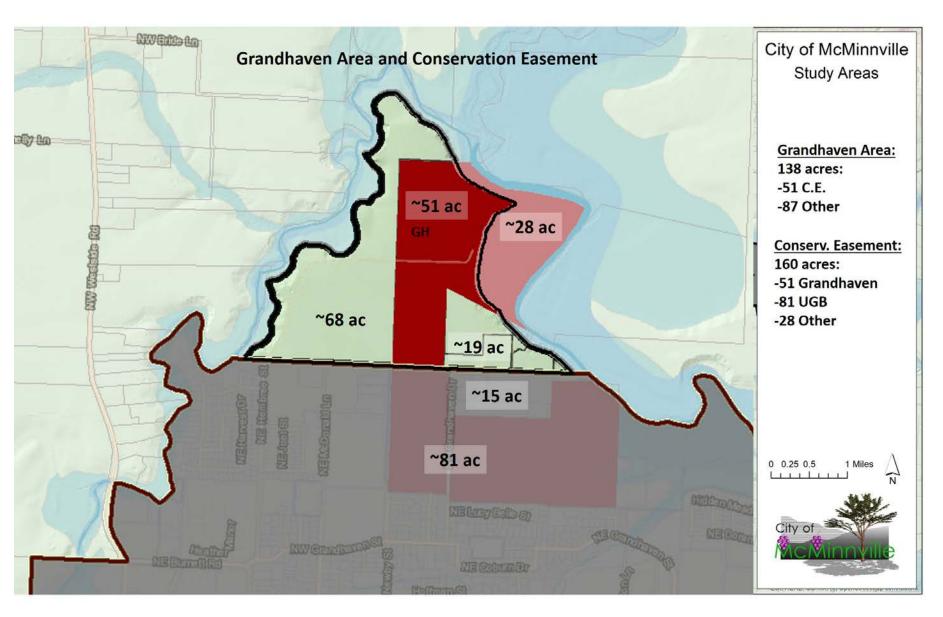


GRANDHAVEN CONSERVATION EASEMENT

Issue: In 2008, a conservation easement was placed on 170 acres of land in the Grandhaven area. Of these, 81 acres are in the existing UGB. That land is designated for residential development on the plan map. The easement in effect removes that land from our buildable inventory. It also removes an additional 15 acres from the buildable land inventory due to lack of access for a total of 96 acres.

Question: Which course of action should we pursue to resolve the loss of residential capacity in the UGB?





Map is a draft, and could change with future refinements

CITY COUNCIL DIRECTION

Option 1: Address in Remand Submission

Pros:

- First opportunity to resolve the issue
- Addresses lost capacity in the plan

Cons:

- Could be challenged if analysis to identify replacement areas in the UGB are considered insufficient.
- Increases the amount of land needed outside the UGB



CITY COUNCIL DIRECTION

Option 2: Address in URA Submission

Pros:

Addresses lost capacity in the plan

Cons:

- Could be challenged if analysis to identify replacement areas in the UGB are considered insufficient.
- Would necessitate a UGB amendment on the heels of the remand submission.
- Delays resolution until the URA process is completed.



CITY COUNCIL DIRECTION

Option 3: Prepare a UGB Swap

Pros:

- Addresses lost capacity in the plan
- Focuses just on this one issue
- Solution predicated on "like for like" swap

Cons:

- Could be challenged if analysis to identify replacement areas in the UGB are considered insufficient.
- Requires separate submission/approval by LCDC
- Timeline to complete is uncertain



STAFF RECOMMENDATION

Option 3: Prepare a UGB Swap, after UGB Remand Response and prior to URA Submittal.

It will keep the process clean and straightforward.



"HAZARD AREAS"

BUILDABLE LAND?



GOAL 7 – AREAS SUBJECT TO NATURAL HAZARDS

Oregon Land Use Goal #7 requires local governments to adopt comprehensive plans inventories, policies and implementing measures to reduce risk to people and property from natural hazards.

Natural hazards for purposes of this goal are: floods, landslides, earthquakes, wildfire, etc.



GOAL 7 – AREAS SUBJECT TO NATURAL HAZARDS

"Balancing growth with hazard mitigation is key to planning resilient communities. Therefore, understanding where development occurs and the vulnerabilities of the region's building stock is integral to developing mitigation efforts that move people and property out of harm's way. Eliminating or limiting development in hazard prone areas can reduce exposure to hazards, and potential losses and damage."

The intent of Goal is to protect people and property from natural hazards.



GOAL 7 – AREAS SUBJECT TO NATURAL HAZARDS

Issue: The McMinnville Comprehensive Plan states, the City of McMinnville shall continue to enforce appropriate development controls on lands with identified building constraints, including, but not limited to, excessive slope, limiting soil characteristics, and natural hazards. The 2003 MGMUP identified and eliminated slopes over 25% and floodplains as building but did not identify any other hazard areas. Recent data shows significant risk in portions of McMinnville and study area for high risk landslides and liquefaction during an earthquake.

Question: Should we identify the high risk hazard areas and identify them as unbuildable or limit development on them?



NEW HAZARD INFORMATION FOR MCMINNVILLE

State Hazard Mitigation Plan — Just Released Draft (Chapter on Yamhill County — HR Landslides and Earthquakes)

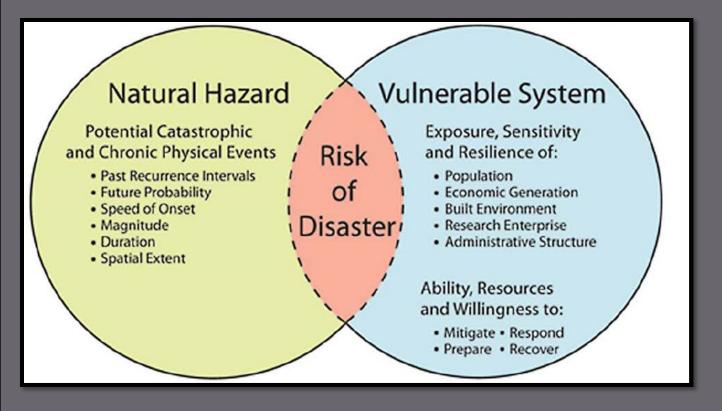
Yamhill County NHMP — Draft Update in Circulation

McMinnville NHMP - Addendum to YC NHMP in Circulation

McMinnville Hazards Study – Just Completed – UGB/URA



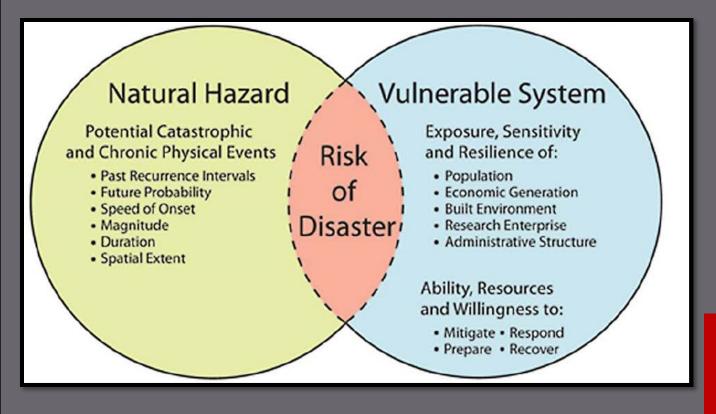
DRAFT 2020 OREGON NHMP - SEPTEMBER 2020



- 1. Identify Hazards
- 2. Identify "Who" and "What " Is Vulnerable
- 3. Assess Risk



DRAFT 2020 OREGON NHMP - SEPTEMBER 2020



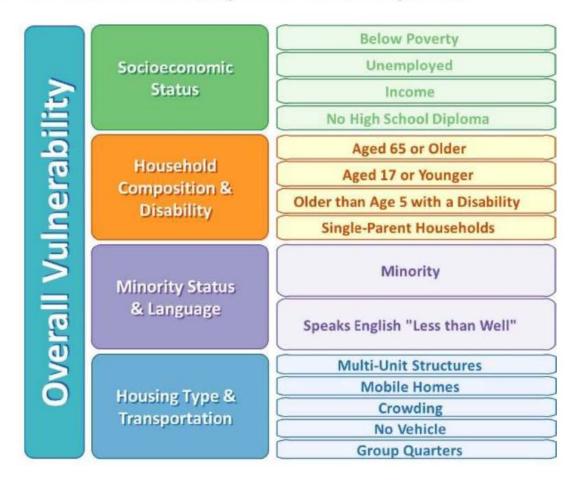
- 1. Identify Hazards
- 2. Identify "Who" and "What " Is Vulnerable
- 3. Assess Risk

SOCIAL
VULNERABILITY
ASSESSEMENT



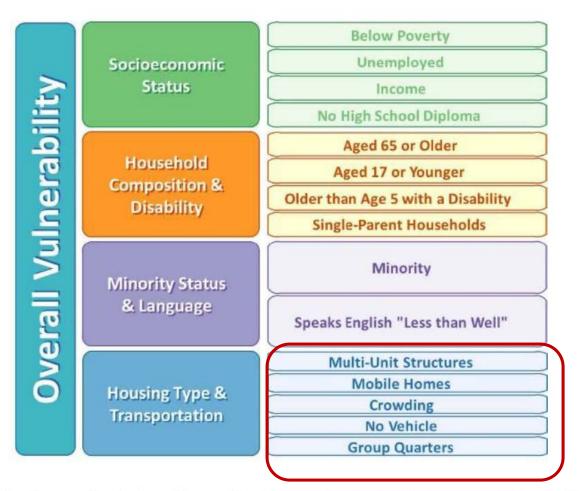
CITY COUNCIL UGB REMAND RESPONSE UPDATE, AUG 19, 2020

Figure 2-19. CDC Social Vulnerability Themes and Components



Source: Centers for Disease Control and Prevention/ Agency for Toxic Substances and Disease Registry/ Geospatial Research, Analysis, and Services Program, 2016

Figure 2-19. CDC Social Vulnerability Themes and Components



MHs are more likely to shift on their foundations and create hazardous conditions for occupants and their neighbors. This is a vulnerability for Yamhill County as it has a higher share of mobile homes.

Source: Centers for Disease Control and Prevention/ Agency for Toxic Substances and Disease Registry/ Geospatial Research, Analysis, and Services Program, 2016

DRAFT 2020 OREGON NHMP — SEPTEMBER 2020

State evaluates 11 Hazards:

Coastal Hazards

Droughts

Earthquakes

Extreme Heat

Floods

Landslides

Tsunamis

Volcanoes

Wildfires

Windstorms

Winter Storms

"Risk is a function of probability and vulnerability"



DRAFT 2020 OREGON NHMP — SEPTEMBER 2020

State evaluates 11 Hazards:

Coastal Hazards

Droughts

Earthquakes

Extreme Heat

Floods

Landslides

Tsunamis

Volcanoes

Wildfires

Windstorms

Winter Storms

We are going to focus on:

Earthquakes

Floods

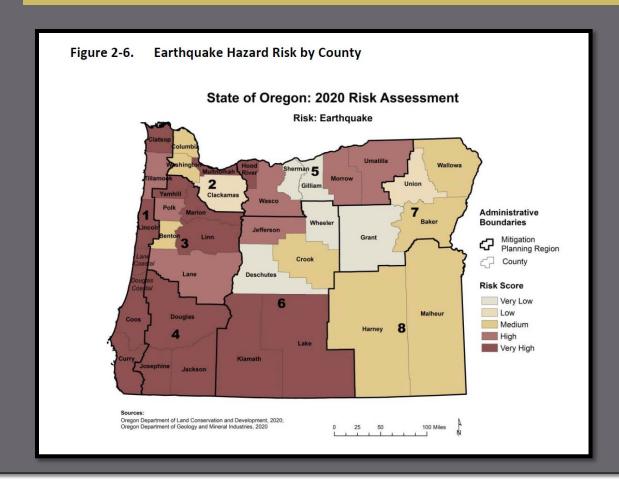
Landslides

All have a High Local Vulnerability Ranking for Yamhill County (Low, Medium High)

And Earthquakes and Landslides have a Very High Risk/Probability Factor for Yamhill County (Very Low, Low, Moderate, High, Very High)



DRAFT 2020 OREGON NHMP – EARTHQUAKES



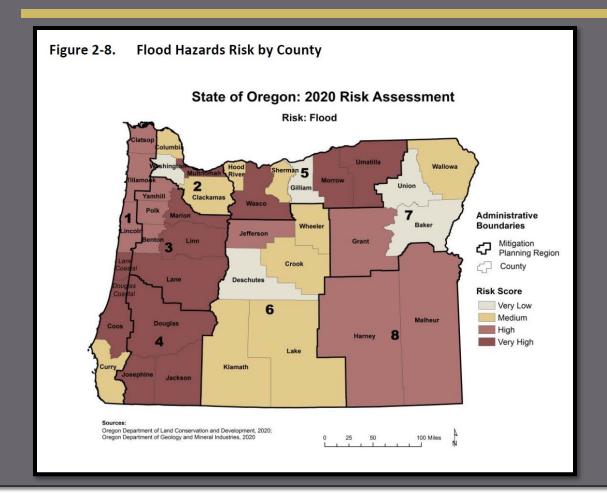
Probability = 4.0

Social
Vulnerability = 4.0

Risk = VH



DRAFT 2020 OREGON NHMP - FLOODS



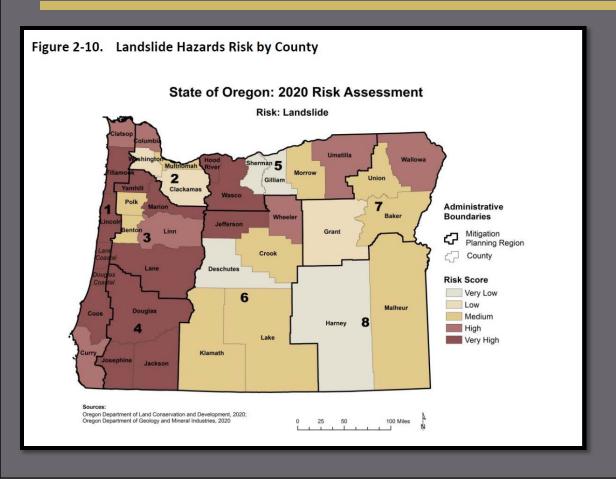
Probability = 4.0

Social
Vulnerability = 4.0

Risk = H



DRAFT 2020 OREGON NHMP – LANDSLIDES



Probability = 5.0

Social
Vulnerability = 4.0

Risk = VH



HAZARDS TO PEOPLE AND PROPERTY - LANDSLIDES

Three main factors influence an area's susceptibility to landslides:

Geometry of the slope
Geologic material
Water

YAMHILL COUNTY =
EXTREMELY LIKELY
PROBABILITY

Figure 2-73. How Data Sets are Combined to Create Final Landslide Susceptibility Zones

| | | Landslide Density Combine: Generalized + Landslide Geologic Map + Inventory | | | Landslides Landslide Inventory |
|---|---|--|-------------------------------------|----------------------------|---------------------------------|
| Graphic display of how dataset are combined to create the final landslide susceptibility zones. | | Low (less than 3%) | Moderate (between 3% and 17%) | High (Greater than 17%) | Existing Landslides |
| Slope Prone to Landsliding Combine: Landslide Inventory + Slope Map | Low (less than 1 STD) | Low | Moderate | High | Very High |
| | Moderate (between the mean and 1 STD) | Moderate | Moderate | High | Very High |
| | High (Equal to or greater than mean) | High | High | High | Very High |

Source: Burns et al. (2016)



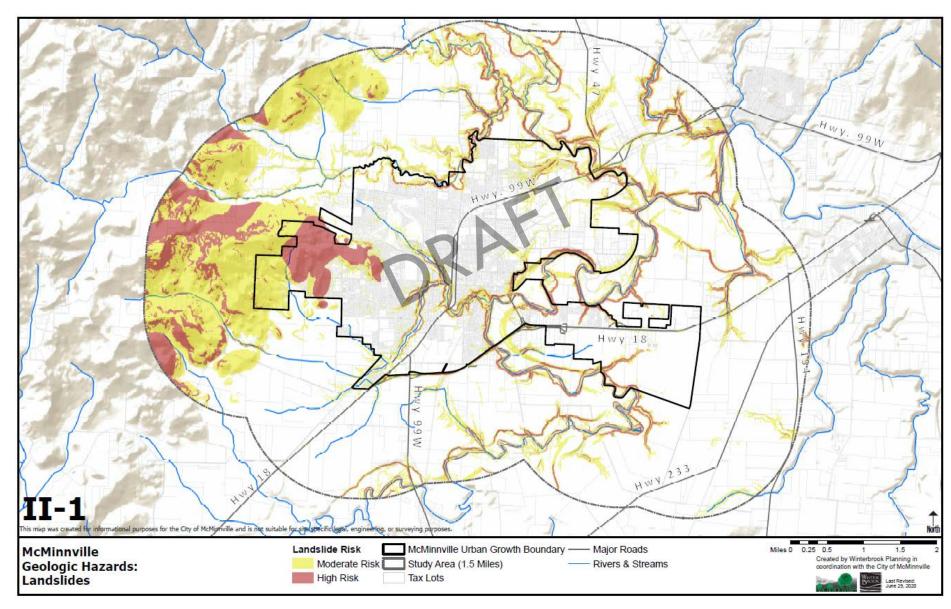
HAZARDS TO PEOPLE AND PROPERTY - LANDSLIDES

Landslides = They are projected to occur more frequently due to climate change weather issues, soil changes with drought and large rain events.

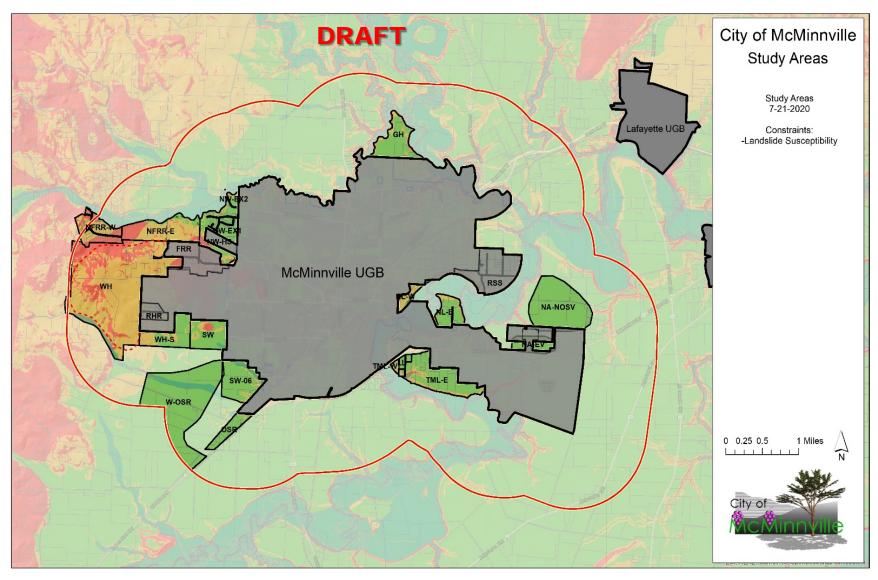
- Damage property and infrastructure
- McMinnville has High Risk Landslide Soils both within the UGB and the Study Area per recent DOGAMI maps.

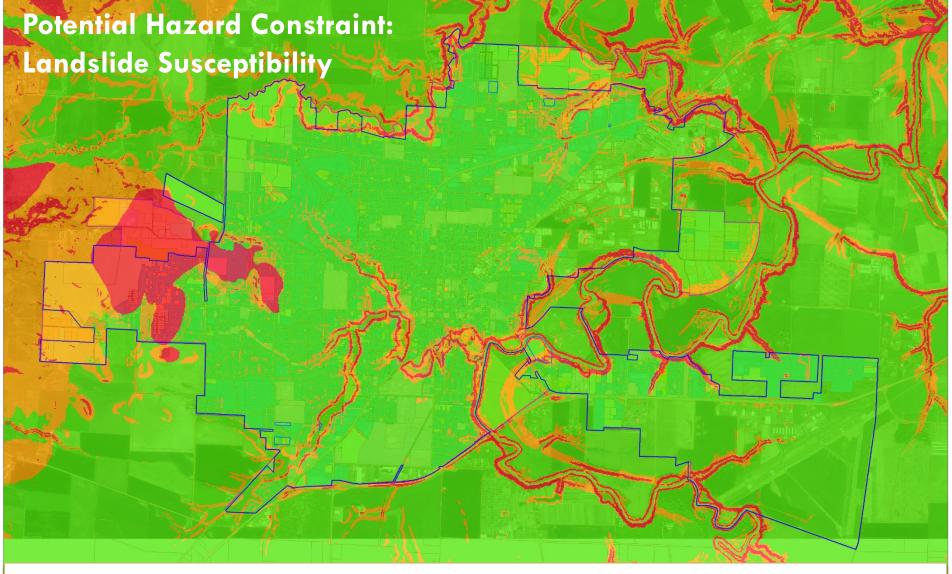


GEOLOGIC - LANDSLIDES



UGB REMAND RESPONSE STUDY AREA- LANDSLIDES



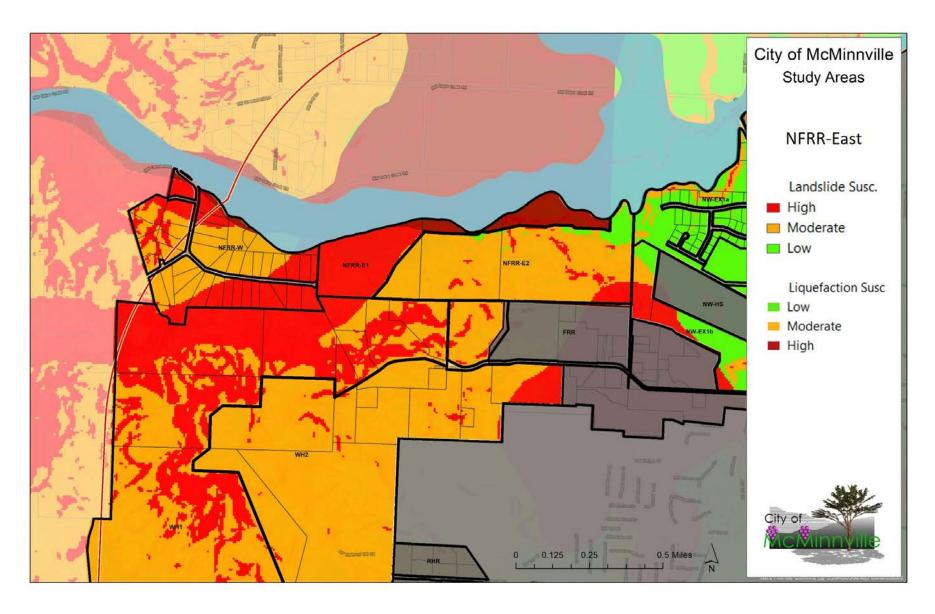


Low Susceptibility: "Landsliding unlikely". Less than 7% (green)

Moderate Susceptibility: "Landsliding possible" 7-17% (orange)

High Susceptibility: "Landsliding likely" >17% (red)

Very High Susceptibility: "Existing landslides" (not present in planning area)



Map is a draft, and could change with future refinements

Issue: City is now aware of high risk landslide soils in the West Hills, including some areas that are already developed and some areas that are within the existing UGB.

Question: How should the City proceed – buildable or not buildable?

Staff Recommendation: Proceed with caution. Low density development with mitigation measures. Adopt Hazard policies in the future.



Option 1: Declare High Risk Unbuildable and Develop Policies and Findings

Pros:

 Minimize risk to people and property in a known high hazard area.

Cons:

- Could be challenged, as it is introducing new data into the record.
- Could result in takings issues for existing land in the UGB.



Option 2: Limit density allocation on High Risk landslides soils as part of the Goal 14 screening criteria.

Pros:

- Minimize risk to people and property in a known high hazard area.
- Minimizes challenges.

Cons:

 Could still be challenged, as it is introducing new data into the record.



STAFF RECOMMENDATION:

Option #2: Proceed with caution. Low density development with mitigation measures. Adopt Hazard policies in the future.

Look for park land opportunities. (Scenic views, lookouts, natural open space parks, etc.)

Look for rural/urban transition and buffer zones.



HAZARDS TO PEOPLE AND PROPERTY - EARTHQUAKES

Four types of earthquakes affect Yamhill County:

Shallow crustal events
Deep intra-plate events
Cascadia Subduction Zone
Renewed volcanic activity



HAZARDS TO PEOPLE AND PROPERTY - EARTHQUAKES

Four types of earthquakes affect Yamhill County:

Shallow crustal events
Deep intra-plate events
Cascadia Subduction Zone
Renewed volcanic activity

McMinnville is especially vulnerable to the Cascadia event due to the liquefaction soils it is built on and that surround the city, which will lead to landslides damaging property.



HAZARDS TO PEOPLE AND PROPERTY - EARTHQUAKES

Four types of earthquakes affect Yamhill County:

Shallow crustal events
Deep intra-plate events
Cascadia Subduction Zone
Renewed volcanic activity

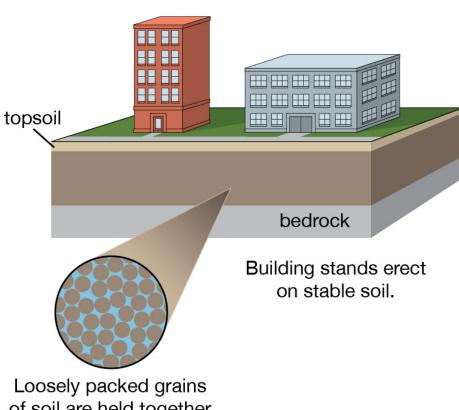
McMinnville is especially vulnerable to the Cascadia event due to the liquefaction soils it is built on and that surround the city, which will lead to landslides damaging property.

Soil liquefaction = ground failure when solid soil behaves temporarily like a vicous liquid. Occurs in water saturated unconsolidated soils. Sandy, silty and gravelly soils.



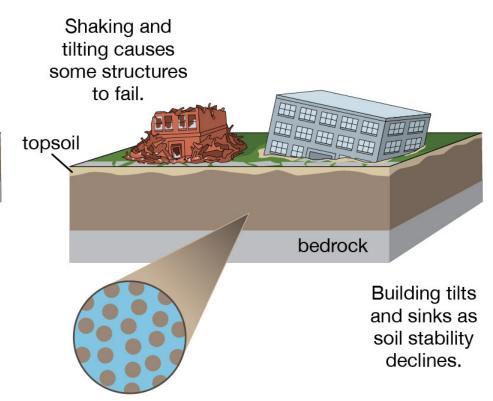
Soil liquefaction

stable soil



Loosely packed grains of soil are held together by friction. Pore spaces are filled with water.

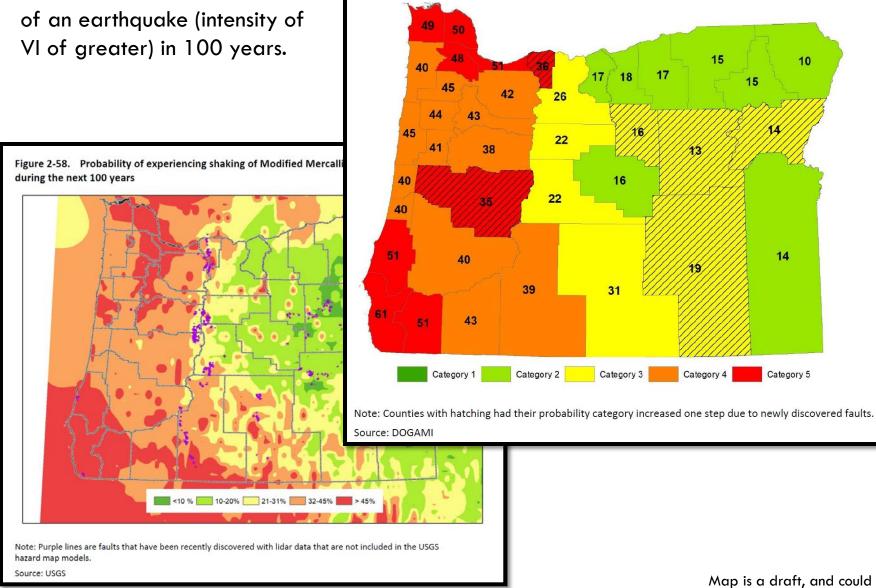
liquefied soil



Shaking destabilizes the soil by increasing the space between grains. With its structure lost, the soil flows like a liquid.

© 2012 Encyclopædia Britannica, Inc.

McMinnville Has a 45% chance



and 2-31)

Map is a draft, and could change with future refinements

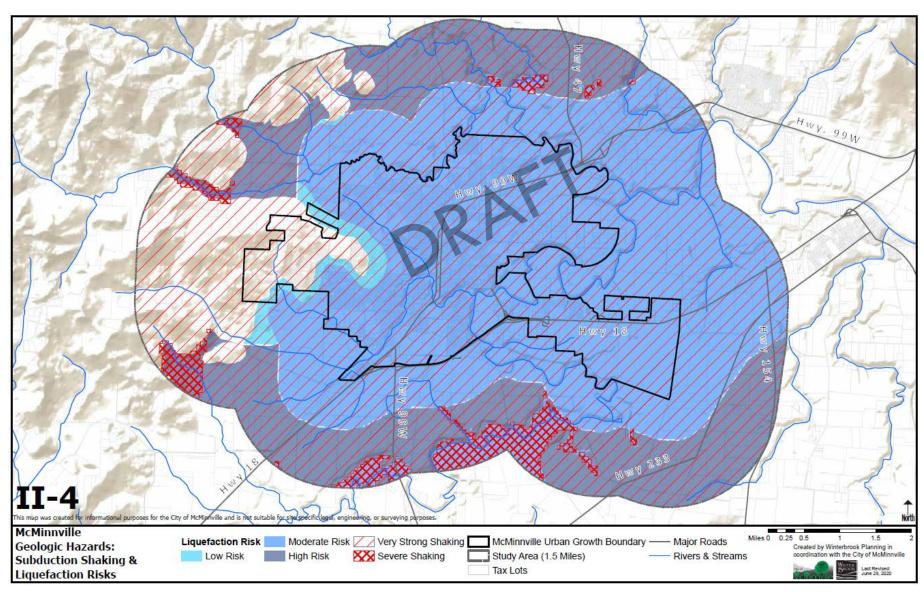
10

14

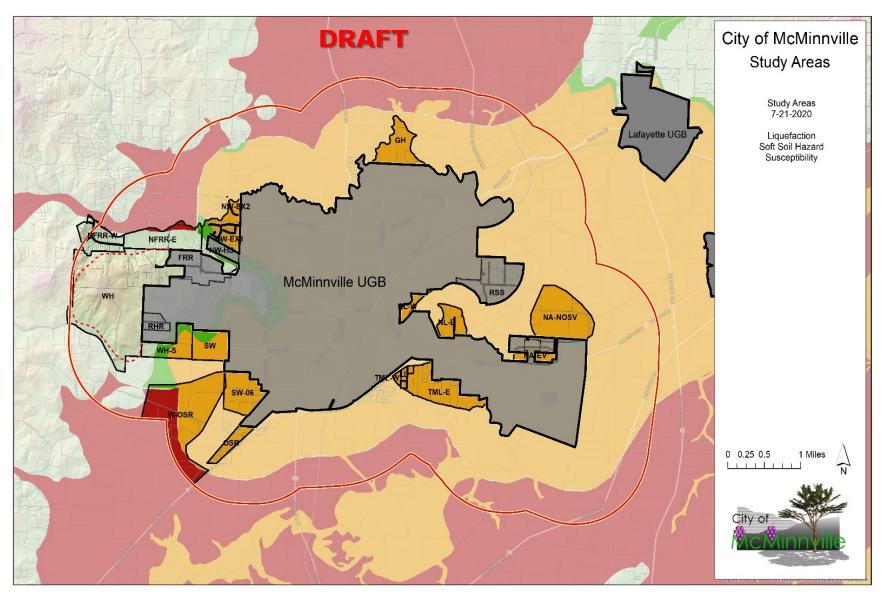
Category 5

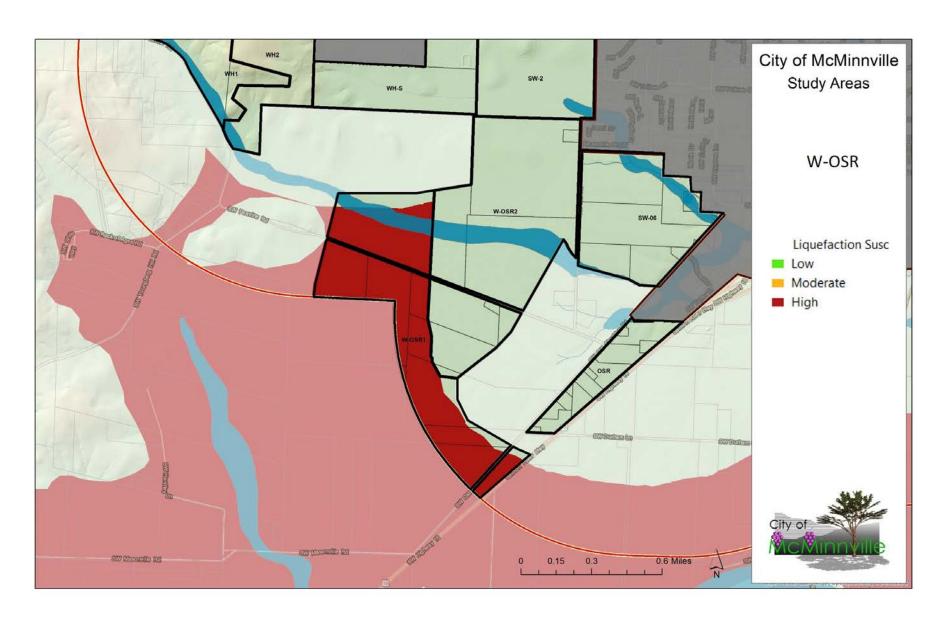
Figure 2-59. 2020 Oregon Earthquake Probability Ranking Based on Mean County Value of the Probability of Damaging Shaking and Presence of Newly Discovered Faults (Figures 2-30

GEOLOGIC – LIQUEFACTION RISK



UGB REMAND RESPONSE STUDY AREA- LIQUEFACTION RISK





Map is a draft, and could change with future refinements

EARTHQUAKES/LIQUEFACTION - CITY COUNCIL DIRECTION

Option 1: Declare High Risk Unbuildable and Develop Policies and Findings

Pros:

 Minimize risk to people and property in a known high hazard area.

Cons:

 Could be challenged, as it is introducing new data into the record.



Option 2: Limit density allocation on High Risk liquefaction soils as part of the Goal 14 screening criteria.

Pros:

- Minimize risk to people and property in a known high hazard area.
- Minimizes challenges.

Cons:

 Could still be challenged, as it is introducing new data into the record.



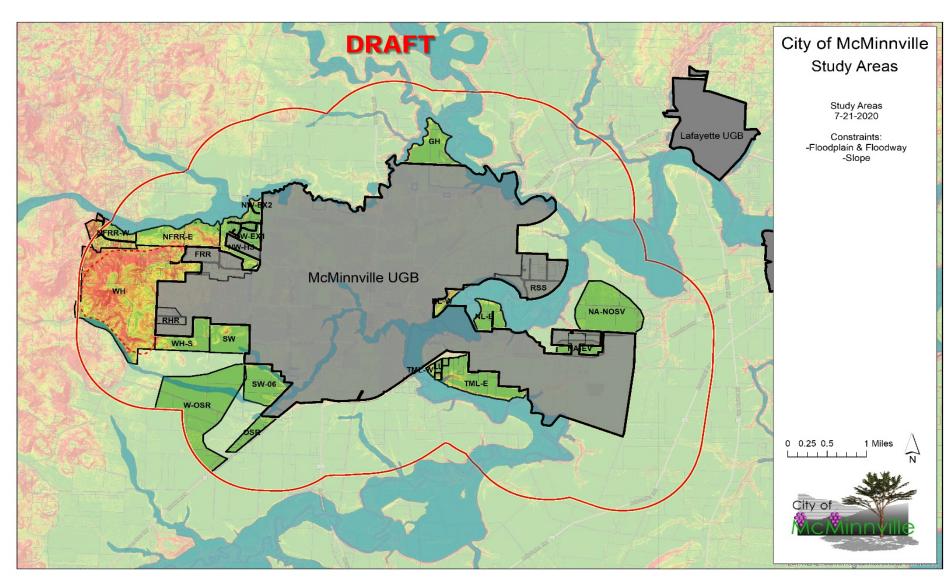
STAFF RECOMMENDATION:

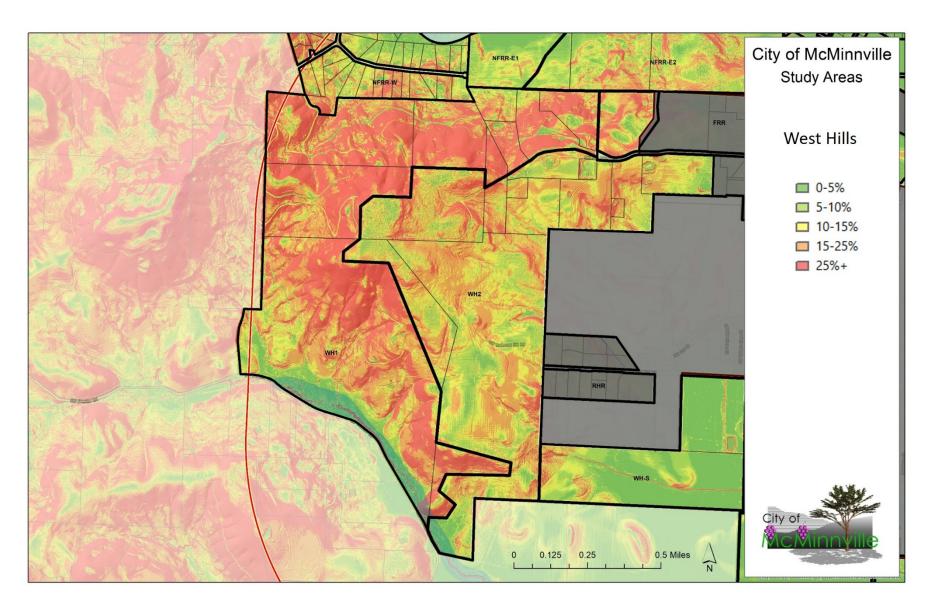
Option #2: Proceed with caution. Low density development with mitigation measures. Adopt Hazard policies in the future.

Look for park land opportunities, or rural/urban transition and buffer zones.



UGB REMAND RESPONSE STUDY AREA – STEEP SLOPES





Map is a draft, and could change with future refinements

STEEP SLOPES — CITY COUNCIL DIRECTION

Option 1: Remove from buildable lands inventory per allowance in state law.

Pros:

- Minimize risk to people and property in a known high hazard area.
- Minimizes challenges.

Cons:

Less land in the study area for the locational analysis.



STEEP SLOPES - CITY COUNCIL DIRECTION

Option 2: Keep it in to retain acreage in the study area.

Pros:

Larger study area.

Cons:

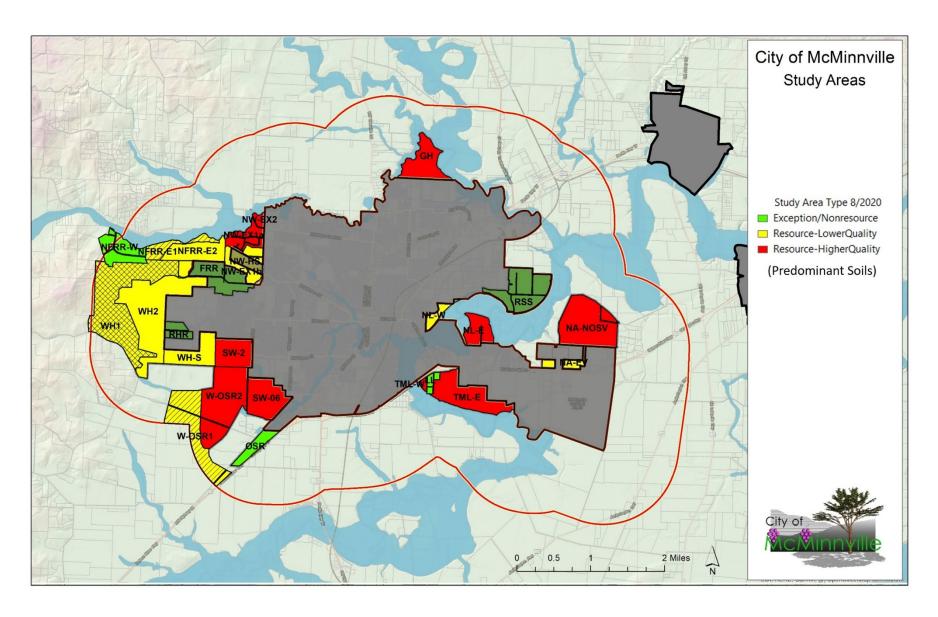
- Significant hazards to property and people.
- Decision to remove protected by state law.



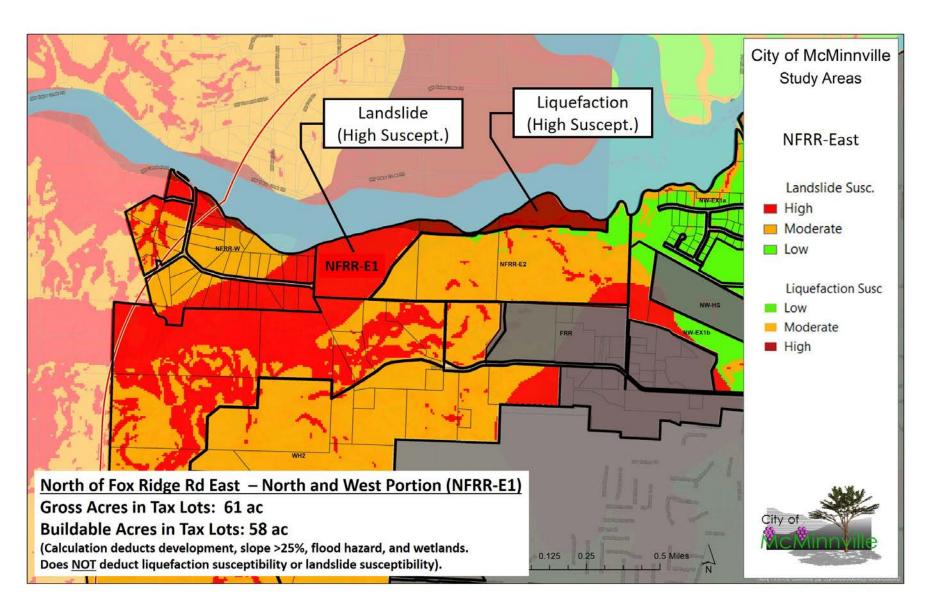
STAFF RECOMMENDATION:

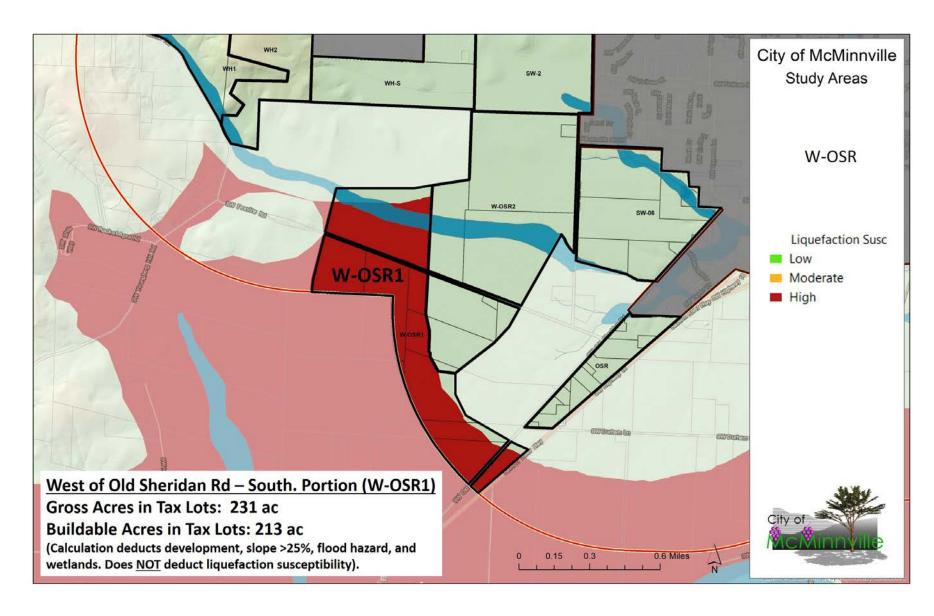
Option 1: Remove from buildable lands inventory per allowance in state law.



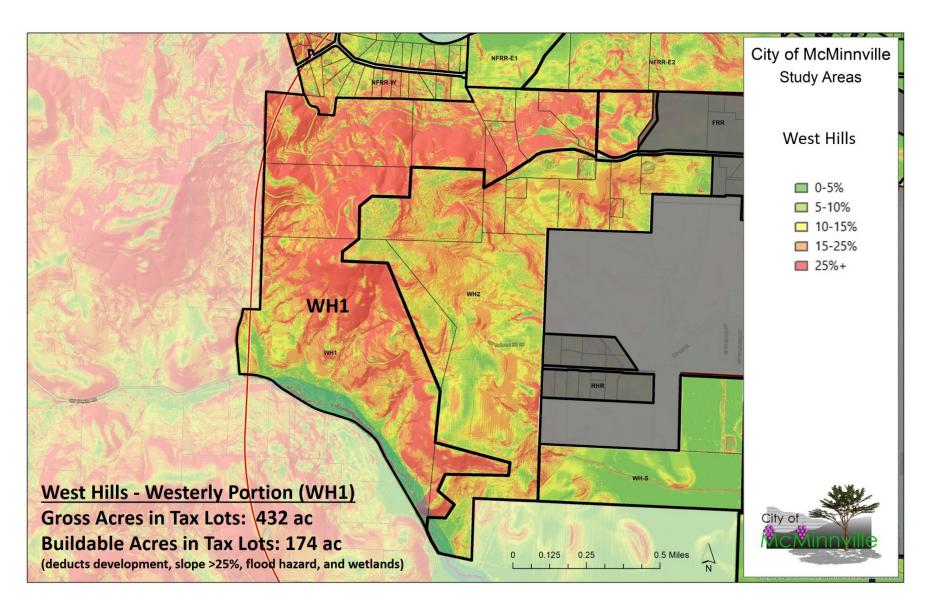


Map is a draft, and could change with future refinements



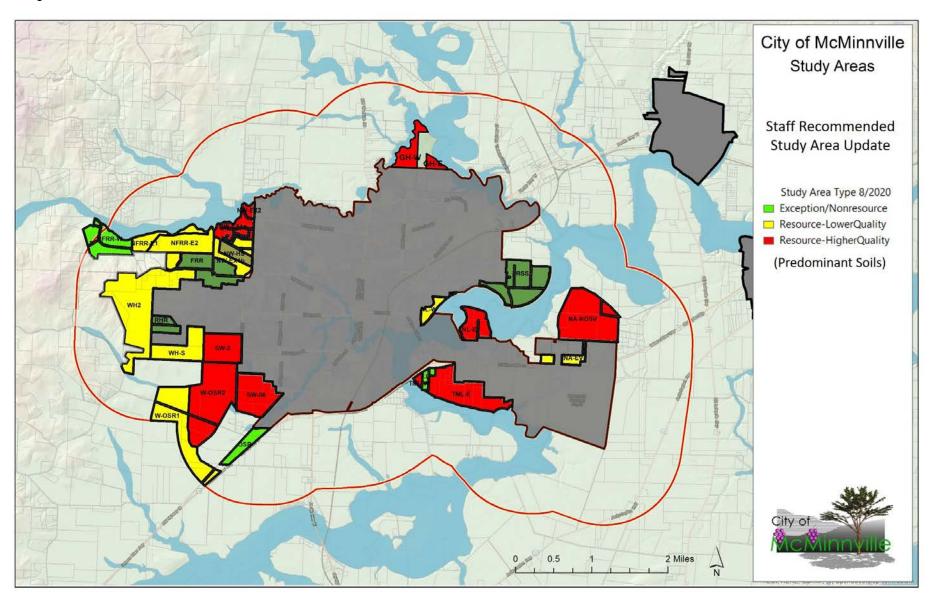


Map is a draft, and could change with future refinements



Map is a draft, and could change with future refinements

Map is a draft, and could change with future refinements



Removed 174 acres in WH1 due to steep slopes and serviceability beyond the steep slopes, and 70 acres in GH due to Chegwyn Farms Conservation Easement.

NEXT STEPS

- September Application of ORS 197.298 to Buildable Land Map
- September Application of Goal 14 Screening Criteria
- Early October Draft UGB Map
- Late October Draft Documents
- November Joint CC/BOCC Meeting
- December Joint CC/BOCC Public Hearing and Adoption



GROWTH PLANNING - MCMINNVILLE, Moving Forward Mindfully



CITY COUNCIL UGB REMAND RESPONSE UPDATE, AUG 19, 2020





From MINDFULLY