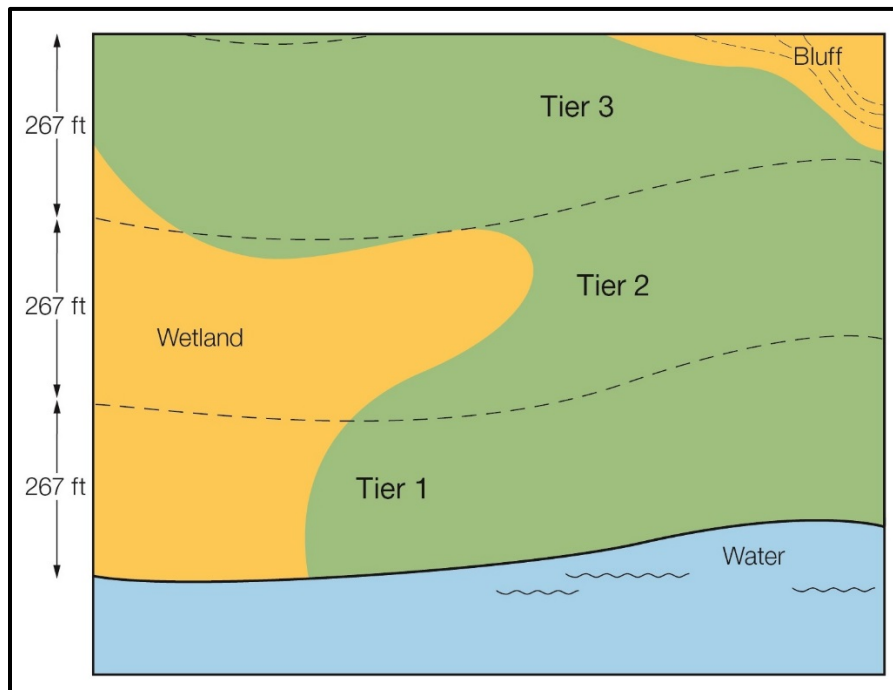


## Residential PUDs – Determining Allowed Density

PUDs in shoreland allow increased density in exchange for the preservation of open space on sensitive lands that are less suitable for development. The allowable density increases can be calculated using the steps identified in the example below for an 18 acre development on a Recreational Development lake.

### Step 1 – Identify density analysis tiers

- Divide the portion of the parcel in shoreland into tiers by drawing one or more lines parallel to the Ordinary High Water Level (OHWL) at interval specified in the zoning ordinance for the relevant lake classification
- Determine total area in each tier. Only land areas above the OHWL may be considered



### Step 2 – Calculate suitable area for development

Calculate the suitable area within each tier by excluding wetlands, bluffs, and land below the OHWL from the total area in each tier. Unsuitable area should be included in the area allocated to the 50% open space requirement.

Tier	Total Area	Unsuitable Area	Suitable Area	Minimum Lot Size for Lake Class (Sewered RD)	Base Density	Bonus Density Factor	Allowable Units per tier with Bonus Density	Adjusted Allowable Units per tier	Proposed Units	Units transferred to next tier
1	201,502	68,804	132,698							
2	319,288	152,046	167,242							
3	295,623	14,144	281,479							
Total	816,413	234,994	581,419				0.0		0	

**Step 3 – Determine base density**

Divide the suitable area within each tier by the minimum single residential lot area for the relevant water body classification (GD, RD, NE) to yield the base density, or number of dwelling units allowed. For Tier 1 use the riparian lot area, for all other tiers, use the non-riparian lot area.

Tier	Total Area	Unsuitable Area	Suitable Area	Minimum Lot Size for Lake Class (Sewered RD)	Base Density	Bonus Density Factor	Allowable Units per tier with Bonus Density	Adjusted Allowable Units per tier	Proposed Units	Units transferred to next tier
1	201,502	68,804	132,698	20,000	6.6349					
2	319,288	152,046	167,242	15,000	11.14946667					
3	295,623	14,144	281,479	15,000	18.76526667					
Total	816,413	234,994	581,419				0.0		0	

**Step 4 – Determine if the site can accommodate base density and any increased density**

- If the site design can accommodate all the required design standards including the 50% open space, then bonus density may be considered by multiplying the base density by the bonus density factor to yield the allowable dwelling units.

Tier	Total Area	Unsuitable Area	Suitable Area	Minimum Lot Size for Lake Class (Sewered RD)	Base Density	Bonus Density Factor	Allowable Units per tier with Bonus Density	Adjusted Allowable Units per tier	Proposed Units	Units transferred to next tier
1	201,502	68,804	132,698	20,000	6.6349	1.5	10.0		7	3.0
2	319,288	152,046	167,242	15,000	11.14946667	2.0	22.3	25.3	18	7.3
3	295,623	14,144	281,479	15,000	18.76526667	3.0	56.3	63.5	44	
Total	816,413	234,994	581,419				88.5		69	

- To take advantage of bonus density, structure setbacks from the OHWL must be at least 50% greater than the minimum setback; or the impact on the waterbody is reduced an equivalent amount through vegetative management, topography, or additional acceptable means and the setback is at least 25% greater than the minimum setback.
- Allowable densities may be transferred from any tier to any other tier further from the waterbody, but must not be transferred to any tier closer to the waterbody
- Develop site plan and coordinate plan review with local government

