

#### Hartney Comments:

Below are my observations and recommendations for the seven pine trees along the water. They are numbered in the attached picture. The other pictures are numbered based on this map. (ex, 2.1, 2.2, 2.3, are all tree 2)

1. Perfect. Healthy, great trunk taper towards top, branches all the way down, trunk solid and straight, not top heavy.
2. Removal recommended. Rot along side of trunk. Rot in multiple buttress roots, and extending underneath tree.
3. Removal recommended. Heaving and cracked roots on water side. Sap dripping all along trunk. Canopy sparse, beyond recovery.
4. Great. Majority of weight is on water side.
5. Fine. Nothing to note.
6. Monitor. (more below). Tree looks healthy, but root and butt rot mushrooms (most likely Pine Dyer's Mushroom) found under base in multiple spots, on lake side where soil is washed out. Roots still feel solid.
7. Removal recommended. Trunk irregular, overall lean is toward house. Path of fall is directly over bedroom. Closest and largest pine to the house. Top-heavy.

Notes: The wind direction in this location comes from the lake, towards the house. It makes the trees vulnerable to summer storms and hurricanes, as opposed to nor'easters. The trees are on a dry hill, with somewhat loose soil. They are more likely than the average pine to uproot during a storm.

Trees 2 and 3 should be removed due to obvious rot and injury.

Tree 6: We determined that failure of tree 6 would cause minimal structural damage, and its level of risk was acceptable.

Tree 7 is the most likely to hit the house (specifically the bedroom) and cause injury or major damage in the event of failure. Of the 3 largest pines, it is the closest to the house, and the distance of fall would mean increased damage and increase likelihood of injury. I believe that removing this tree would do the most for increasing safety for the homeowners.

Remediation: Planting small shrubs and trees, sourced from the Native Plant Trust. The homeowners understand the importance of preventing erosion on the hillside, and their garden shows that they are able to plant and care for shrubs long enough to ensure plants' survival.

I recommend small shrubs and trees that will spread, to minimize disturbance and maximize effectiveness per plant. If a good number of plants are installed, I recommend choosing ones with smaller root balls, to minimize disturbance of the hillside. I personally like Clethra and Cephalanthus, but people at The Native Plant Trust may have better recommendations for plant choice.

I do not recommend shade tree installation (like oaks or maples), unless a tree is chosen for good root and canopy structure, planted properly, watered regularly, and protected from damage until maturity.

Tree ID by Numbers



Tree #2









Tree #3





Tree #6







Tree #7

