

From: Sharon MacGougan, President, Garden City Conservation Society
To: Public Hearing, July 18, 2022
Re: Zoning Bylaw 8500, Amendment Bylaw 10336. RZ 21-928623.

The Garden City Conservation Society objects to the proposed cutting of 110 cottonwood and birch trees at Shelter Island Marina. Here are some reasons:

1. This will be a grievous ecological loss. Tree replacement makes it sound like it's a simple matter to replace one tree for a couple more. But what this really means, in this case, is to destroy well-established rich biodiversity and replace it with a sapling that will take decades to grow to any equivalent ecological benefit, if it does at all. Where wildlife is concerned, not all trees are created equal.
2. Cottonwood trees and birch trees are valuable for wildlife. Cottonwood trees are "... one of the most important wildlife trees in the western US and Canada", according to Jim Bottoroff, retired Forest Steward Wildlife Biologist, Washington Department of Natural Resources. A wide variety of animals feed on young cottonwood twigs, bark, cambium (the growing part of the trunk) and leaves. This includes insects, predatory birds and mammals. Cottonwoods provide food for birds during snow events because they have large uncovered terminal buds that grow and last through the winter.
3. When cottonwoods age, their usefulness for wildlife increases. Predatory birds use larger, older cottonwoods for roosting, hunting perches and nesting. Then when cottonwoods start to die woodpeckers get busy creating cavities in them for nests. These cavities are in turn used by over 40 animal species. Smaller openings are even used by some bat species. Richmond is a certified bat-friendly city, so we are, as a community, compelled to ensure they have homes.
4. Nest boxes are a human solution to a lack of nesting cavities, but as local birder Melissa Hafting shares in [her CBC First Person series piece of June 26, 2022](#), climate change, with its heatwaves, kills baby birds in their nests. She has built swallow boxes in collaboration with the City of Richmond, and they've been placed in city parks. It's a great initiative, but a much better and safer solution would be to ensure that enough trees exist that can provide cavity nests. If birds cannot find a place to nest, the species dies out. How many birds are able to exist in the Shelter Island Marina 110 cottonwood and birch trees? A very large number!

5. Richmond is situated on the Fraser Estuary, home and resting and feeding place for birds since it was formed, built over the millennia by layer upon layer of sphagnum moss. The place where we live has such an important significance for wildlife, especially birds, that international designations are being given to us. Richmond is considered a Key Biodiversity Area and is soon to be an International Biodiversity Area. We have a responsibility to the wildlife and birds that also call Richmond home. They should be factored into our deliberations. Their needs should be seen to have some importance. We can't only rely on good and caring people building bird boxes to solve the problem of where birds can live. We can do better than that. We could protect what biodiverse habitat we have left with ingenuity and a different way of thinking.
6. Climate Change and Loss of Biodiversity are two of the biggest problems on the planet and they both drive extinction of species. This is happening in every community; it is happening in Richmond. The proposed destruction of a biodiverse forest fragment at Shady Island is just one more example of HOW it happens. What ecologically rich forest fragment will be next? The riparian area at the front of the development? The one down the block? How can the development plans be adjusted to help our natural world by leaving this biodiverse forest fragment standing? Saving it would mean a lot more than destroying it does. Destroying habitat is "business as usual." Saving it instead would be a magnificent action.
7. We live on a flood plain. There are time-tested Nature Solutions to flooding, such as increasing biodiversity. If you've seen a photo of native plant next to non-native that shows the roots, you'll know the difference. Native plants tend to have very long roots. They go deep into the ground and anchor there and soak up water. Same with trees and especially trees in natural areas that weren't planted into compacted soil. That's what the cottonwood and birch trees at Shady Island Marina have: they have long roots. Those long roots help in times of flooding. I have a photo of two backyards in Richmond taken during the flooding in November 2021. Only a low chain link fence separates the two yards. One backyard is biodiverse with trees and bushes and native plants. The other backyard has compressed soil, short grass and no other vegetation. I bet you can guess which yard was completely flooded and which one was not.

8. Three billion birds have been lost in North America since the 1970's, and the number one reason is habitat loss. The Garden City Conservation Society thinks this is unacceptable. It's the main reason we're planting the first Miyawaki forest in Western Canada, along with RSS. Personally, I've had a backyard forest for 40 years, in a happy collaboration with the City of Richmond, that is home or stopover for hundreds of birds. I know other people in this room also welcome birds into your backyards or your lives in some way.

Please find another way to develop that does not include destruction of biodiverse habitat at Shelter Island Marina. Thank you.