proportional to the size of the waves. Having a range of stone sizes is also important – the smaller stones fill the gaps between the larger stones, increasing the stability of the revetment.

In 2014, Tip of the Mitt Watershed Council, in conjunction with the Michigan Natural Shoreline Partnership, completed a 100' demonstration project using this type of bioengineering design at Camp Pet-o-se-ga, just north of the mouth of Berry Creek. The pictures below show the project shortly after completion and again 6 years later. It has weathered the travails of mother nature well, and the shoreline has extended outward another 5 feet compared to where it was initially.

Bioengineering demonstration site at Camp Pet-o-se-ga shortly after installation in 2014 (left) and six years later (right). The blue arrow shows the location of the coir log, now covered with thriving native plants.

There are many resources out there for lakefront property owners interested in natural shoreline protection options like greenbelts and bioengineering. Here are a few of my favorites:

- Michigan Shoreland Stewards: https://www.mishorelandstewards.org/
- Michigan Natural Shoreline Partnership: https://www.mishorelinepartnership.org/
- The Tip of the Mitt Watershed Council website and YouTube channel: https://www.watershedcouncil.org/ https://www.youtube.com/channel/UC1WhWqOCvB6u33pMBIQlTAQ

If you have looked through some of these resources and still have questions, the staff at the Watershed Council is available to help answer them. When staff time allows, we can also do on-site consultations with homeowners. I hope you will join me in working for a more resilient future for the shorelines of Pickerel and Crooked Lakes.

Sincerely,

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