

# CASE STUDY

Mayim<sup>™</sup> Puget Sound Resdience





## **The Client:**

The customer resides on Bainbridge Island in Washington State and sits directly on Puget Sound. The island is surrounded by water on all sides and the customer's residential property sits directly on the shoreline. With a previous King Tide having already caused significant damage to the customer's property, this client needed to be prepared for future significant flooding, both from upcoming King Tides and from storm related surges.

## **Goals:**

Our goal for this property, which faces consistent and significant flood threats, was to provide a solution that could provide complete perimeter protection surrounding the entire residential structure. With these types of rising tide flood threats having the ability to occur suddenly, ease of deployment was at the top of our minds. Additionally, due to the residential nature of this property, storage needs for the flood barriers needed to be minimal. Accomplishing our goal would require a durable solution that was both easy to store and to deploy, while also providing enough protection height to withstand the imminent flood threats.

# The Challenge:

The homeowner purchased and completely renovated her multimillion dollar home on the island prior to the official day of moving in. Immediately following her moving in, there was a King Tide on December 27, 2022 that brought significant flooding and a lot of costly damage. Following the King Tide, the homeowner began renovations yet again, to remediate against water damage. However, another King Tide was expected to impact the home on January 22nd, 2022. These fairly common flood threats, whose levels have been increasing in the areas, created an immediate need for flood protection solutions.

#### Solution:

Garrison Flood Control's solution was to provide our top-selling product, the Mayim<sup>™</sup> Modular Flood Barrier. This homeowner purchased the Mayim<sup>™</sup> MB2 units with a protection height of 30in high. We were able to provide enough Mayim<sup>™</sup> MB2 pieces to completely surround the entire property. Our Mayim<sup>™</sup> MB2 curved pieces as well as our End Gable pieces allowed for the accounting of curves and for conforming to the specific topography of the property to ensure seamless perimeter protection.

#### Summary:

Deep in the Pacific Northwest of Washington, Bainbridge Island is right on Puget Sound. There are many expensive homes and beautiful scenery, however flood risks have been increasing due to rising sea levels and more extreme King Tides. A homeowner who had recently purchased a multi-million dollar property on the island spent significant time renovating their home before officially moving in. However, following their move-in, the property was hit with a King Tide in late December of 2022 causing significant flood damage.

A "King Tide" is an especially high tide that occurs when the gravitational forces of the sun, moon, and Earth align. In this case, the King Tide corresponded with a low pressure system in the area, meaning there was less atmospheric resistance to rising sea levels. This type of alignment results in a larger than average tidal range, meaning that high tides are higher than usual, and low tides are

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lower than usual. King Tides can create serious flooding issues because they often coincide with storms or other weather events, leading to a sudden increase in sea levels that can cause flooding in low-lying areas such as coastal cities, rivers, and estuaries. This flooding can be exacerbated by factors such as sea-level rise, storm surge, low pressure systems, and waves, leading to property damage, and infrastructure destruction.

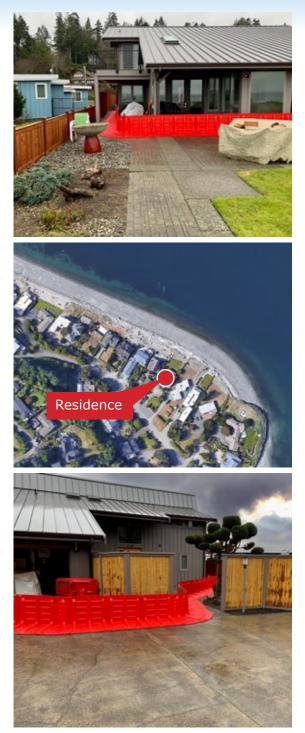
Following the initial flood damage, the homeowner began more renovations to repair lost floors and sheetrock throughout the property. With the possibility of another King Tide coming in late January and the house exposed to the another round of flooding, Garrison was approached to help find a solution. Because Garrison maintains inventory on its products, it was able to react quickly to the customer's needs.. The goal was clear; to keep the entire property perimeter protected while renovations occurred and to have an easy to store flood protection system that could be deployed by the homeowner in the future.

Garrison concluded that the Mayim<sup>™</sup> Modular Flood Barrier would be the optimal solution for this homeowner's needs. Using numerous Mayim<sup>™</sup> MB2 pieces, Curved Pieces and End Gable Pieces, we were able to provide a complete system of perimeter flood protection. Mayim<sup>™</sup> MB2 pieces provide protection up to 30 inches high. Mayim<sup>™</sup> Barriers can be combined to create any desired protection length. Sections install quickly using our proprietary insert and lock connection system. Our Curved Pieces and End Gables allow for the turning of corners and accounting for the sealing of ends along or against a property.

The Mayim<sup>™</sup> Flood Barrier system provided a durable and economical solution that was extremely easy to deploy compared to sandbags or other flood control solutions. With the ability to provide full perimeter protection, this homeowner now has a solution that will not protect their home against future flood threats.

## **Takeaways:**

- Mayim<sup>™</sup> Flood Barriers are available in MB1 and MB2 pieces
- MB1 has a 20 inch protection height, MB2 has a 30 inch protection height
- King Tides have the ability to bring frequent and severe flood damage especially to waterfront properties
- Mayim<sup>™</sup> Flood Barrier pieces are much more streamlined and compact than older flood mitigation solutions, which allows for easier storage
- Mayim<sup>™</sup> Inward and Outward Curve pieces provide the ability to achieve a true fit in connecting multiple pieces around a specific property perimeter
- End Gable pieces are designed to abutt a fixed wall and create a durable seal against potential leakage





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