



## DUNE REGENERATION

Sand dune regeneration involves either repairing damaged dunes or creating new ones. The process usually involves planting more vegetation to bind the sand together, protecting the dunes behind fencing so beachgoers don't trample them, and placing "sand traps" in the dune area to catch and retain wind-blown sand.

Where existing dunes have started to erode, the causes behind the erosion must first be diagnosed before anything can be done to protect them. For example, dunes that are being undercut by wave action will require a different regeneration plan than dunes that are being eroded by human activity. Once the cause of the problem has been identified, a regeneration plan is created and put into practice.

### TYPICAL APPROACHES ARE AS FOLLOWS:

#### Too Much Human Activity

People typically love to walk on sand dunes and might not stay on designated boardwalks or paths when they visit the beach. Additional fencing, marked and designated paths, and signage can help to mitigate this in sensitive areas that have been degraded. Once the barriers have been placed, dunes can be replanted with grasses, the roots of which will help bind the sand together.

#### Wind Erosion

Wind breaks are positioned upwind of the dunes and at stages throughout the dunes to act like groins on a beach. The wind break blocks the wind and allows sand to build up on the sheltered side of the barriers. The wind breaks may look like traditional fences, or be bundles of sticks or vegetation designed to trap sand particles as they are blown past. Additional vegetation is then planted on the deposited sand to stabilize it and prevent further erosion.

#### Wave Erosion

This can be a more difficult problem to solve because it's very difficult to protect soft dunes from coastal processes, especially when lake levels are high. Barriers fixed in the sand tend to be undercut and destroyed quickly by the waves, and unprotected plantings are just washed away. Porous matting may be placed over the part of the dune suffering from erosion, made either from plastics or natural materials.

## COMMUNITY INPUT

*What we heard..*  
Residents view the dunes as a unique feature of the Bridgman coastal shoreline

## TEMPERATURE CHECK



How do you feel about this idea?

### POSITIVES + OPPORTUNITIES

### NEGATIVES + CONCERNS

### REGULATORY CONSIDERATIONS

### POSSIBLE LOCATIONS

**Please place a sticker under the response you'd like to leave.**

**I'm open to considering this idea**

**I'm unsure if this is right for Bridgman**