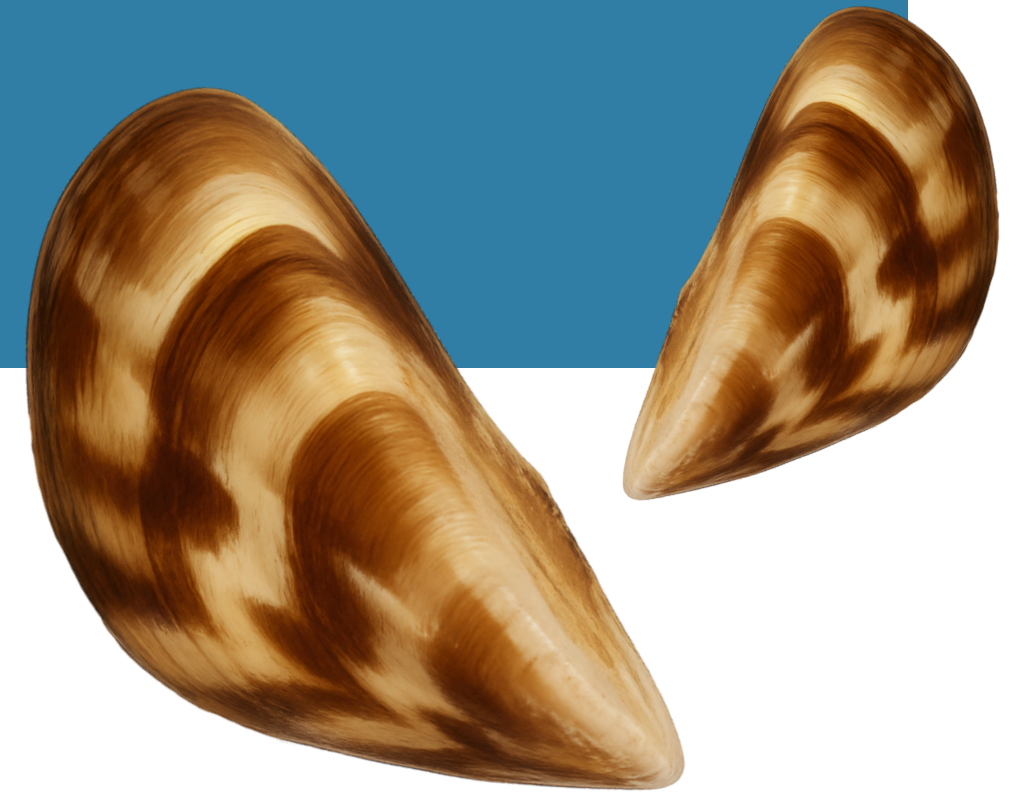


SHORESWEeper

L11

Salome Jibladze, Albin Darby, Isabella Rodriguez-Perez
Bennett Hammett, Vaishnavi Subramanian



Dead Zebra Mussels wash up on shores

PROBLEM SPACE

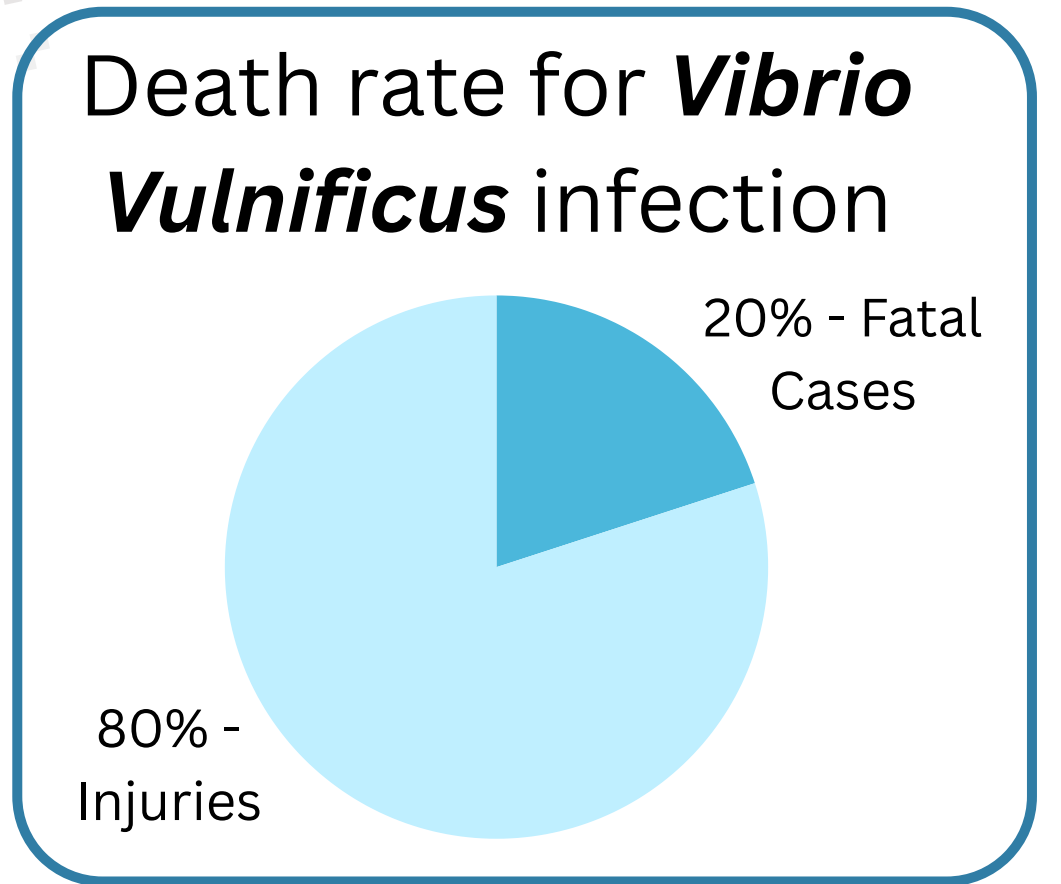
- Sharp zebra mussels wash up onto shores, causing severe foot injuries from lacerations and gashes
- Current solutions are **LABOR INTENSIVE** and **DO NOT ADDRESS SHELL DISPOSAL**



Manual Removal



BeachTech 5000



- Harms recreational beach users, businesses along the shore, and tourism profits

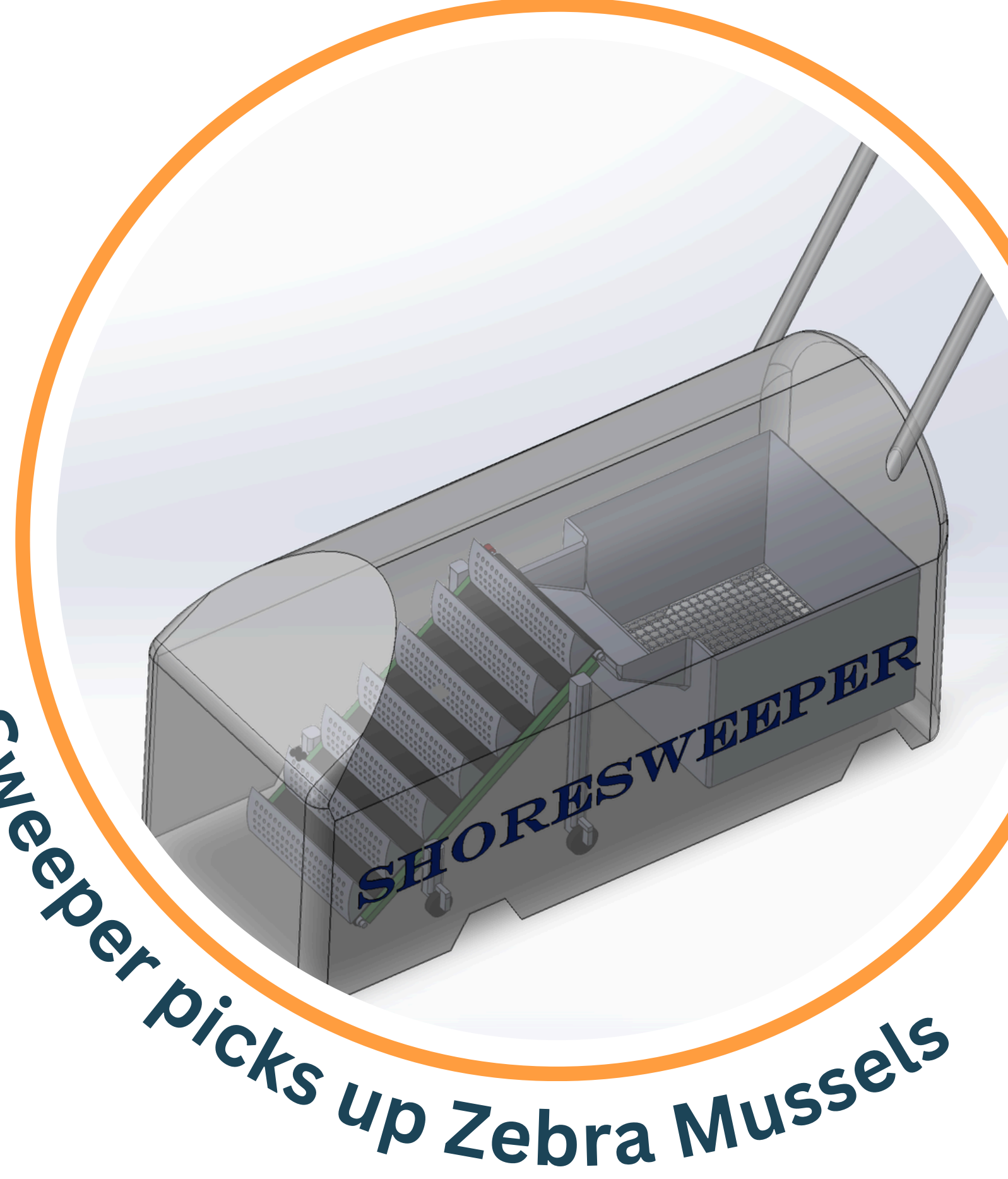
SOLUTION

- Mussels are collected via automated conveyor belt
- Shells land in a container with an oscillating sieve
- Continuously removes dirt particles & excess carcasses

“An ounce of prevention is worth a pound of cure.”

- Doug Jensen, Minnesota Dept. of Natural Resources

Remove up to **150,000** shells in one run



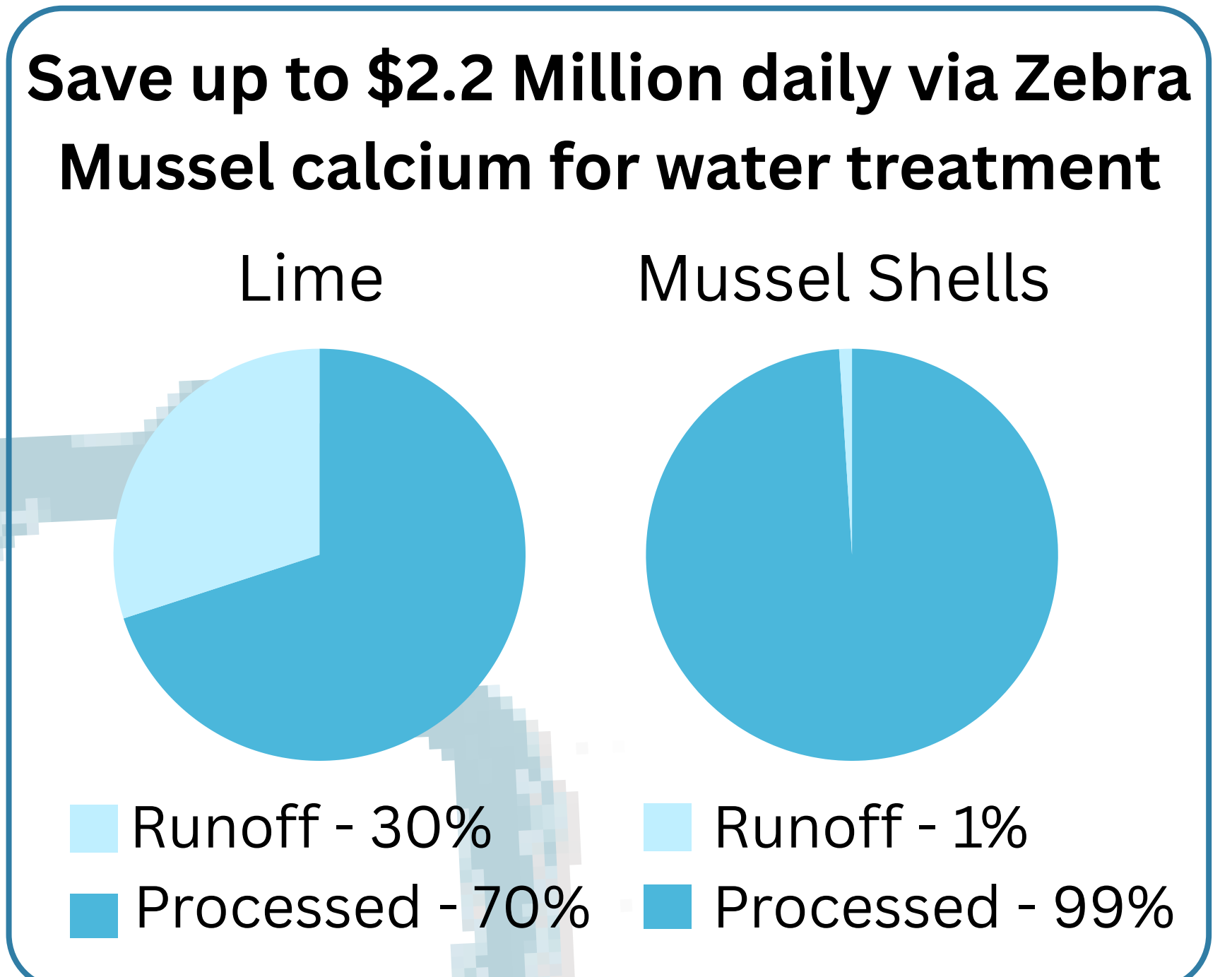
Shoresweeper picks up Zebra Mussels



Shells are boiled to remove excess meat



Fertilizer



Water Purification



Fashion

NEXT STEPS

- Incorporate 3D printed components into a prototype → test at the Tennessee River