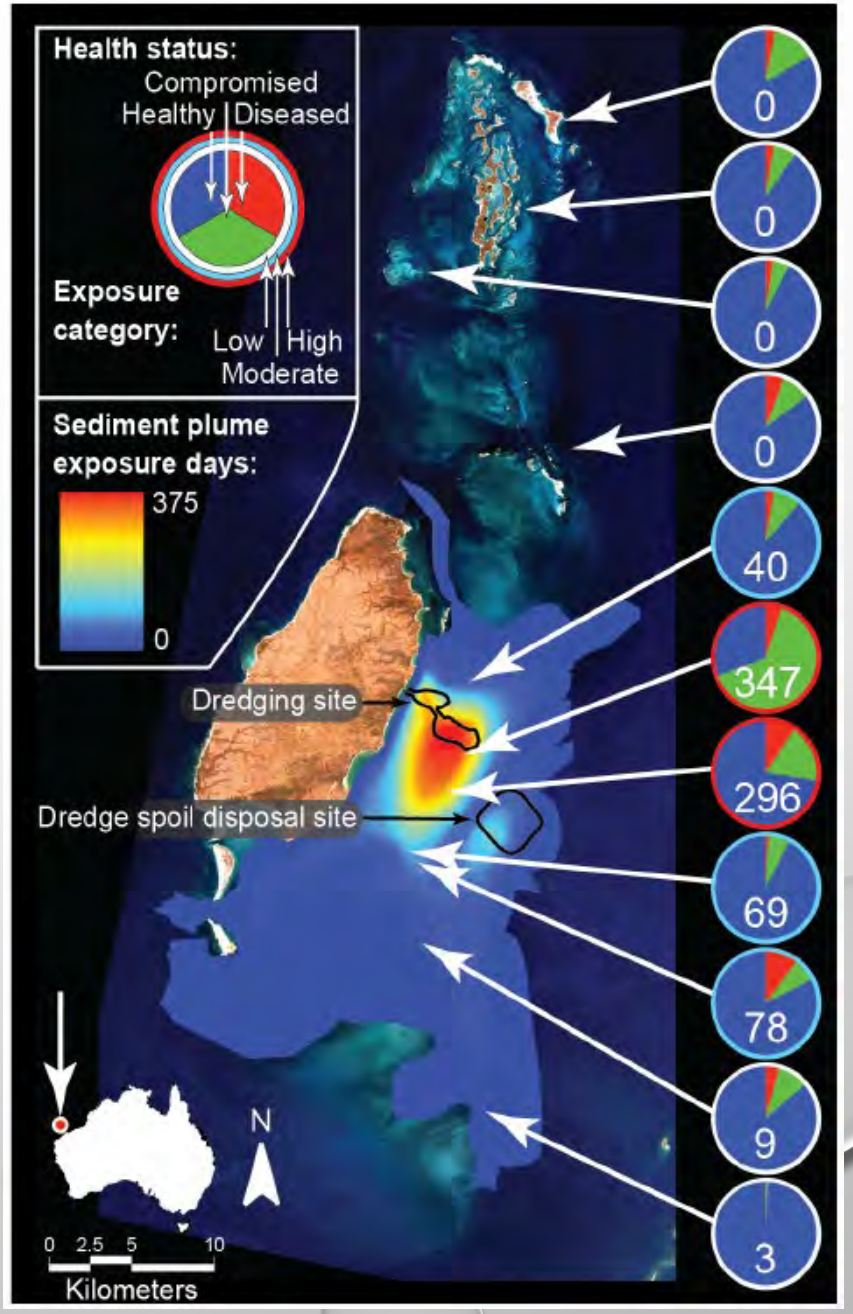
AIR BUBBLE SUCTION PIPE

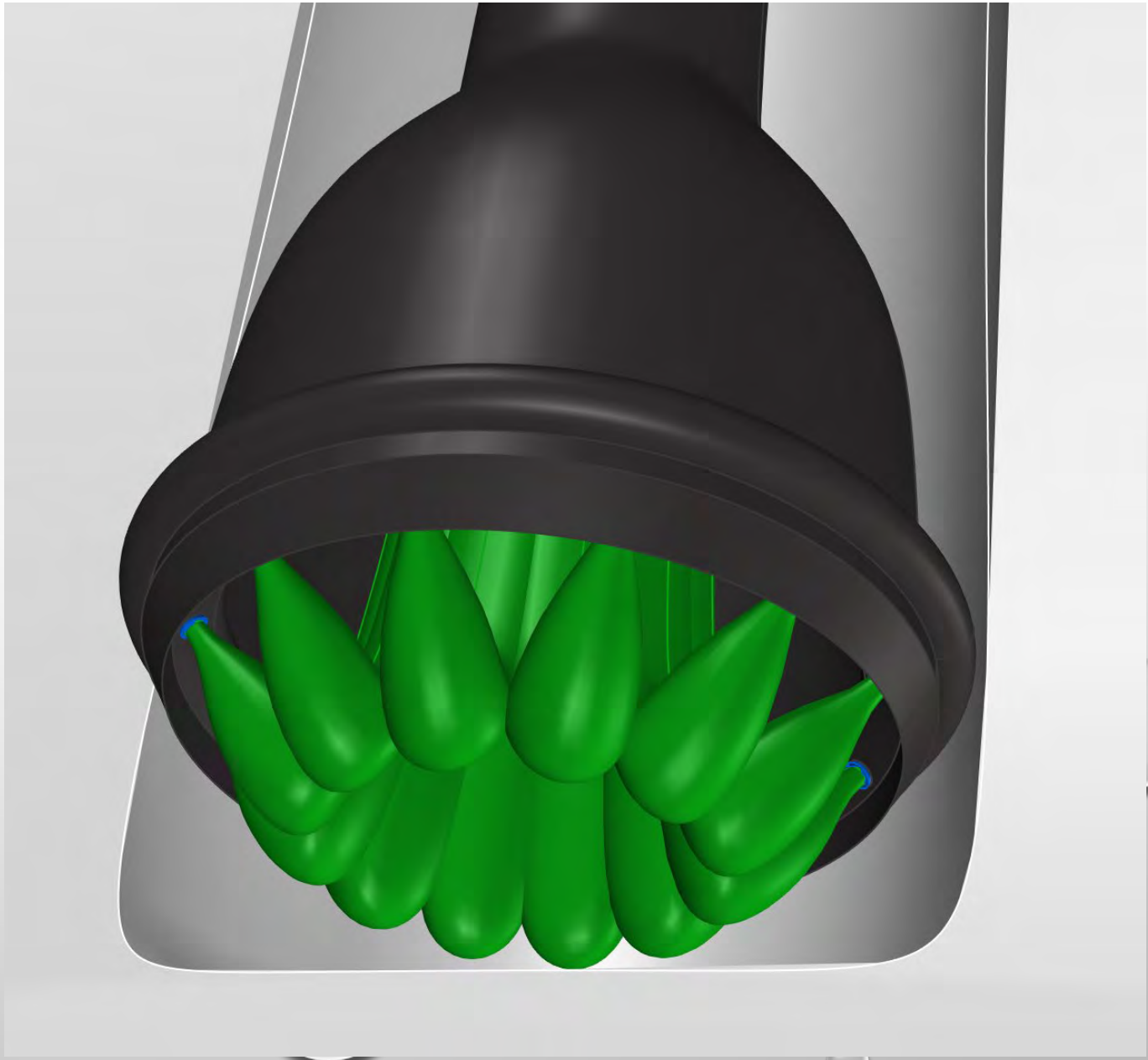
WITH WATER RECIRCULATION

Dredging sediment should be avoided especially in sensitive regions such as marine parks, coral reefs and beaches.



The air bubble system displaces a volume of uptake water with air. This reduces the entrapped water volume.

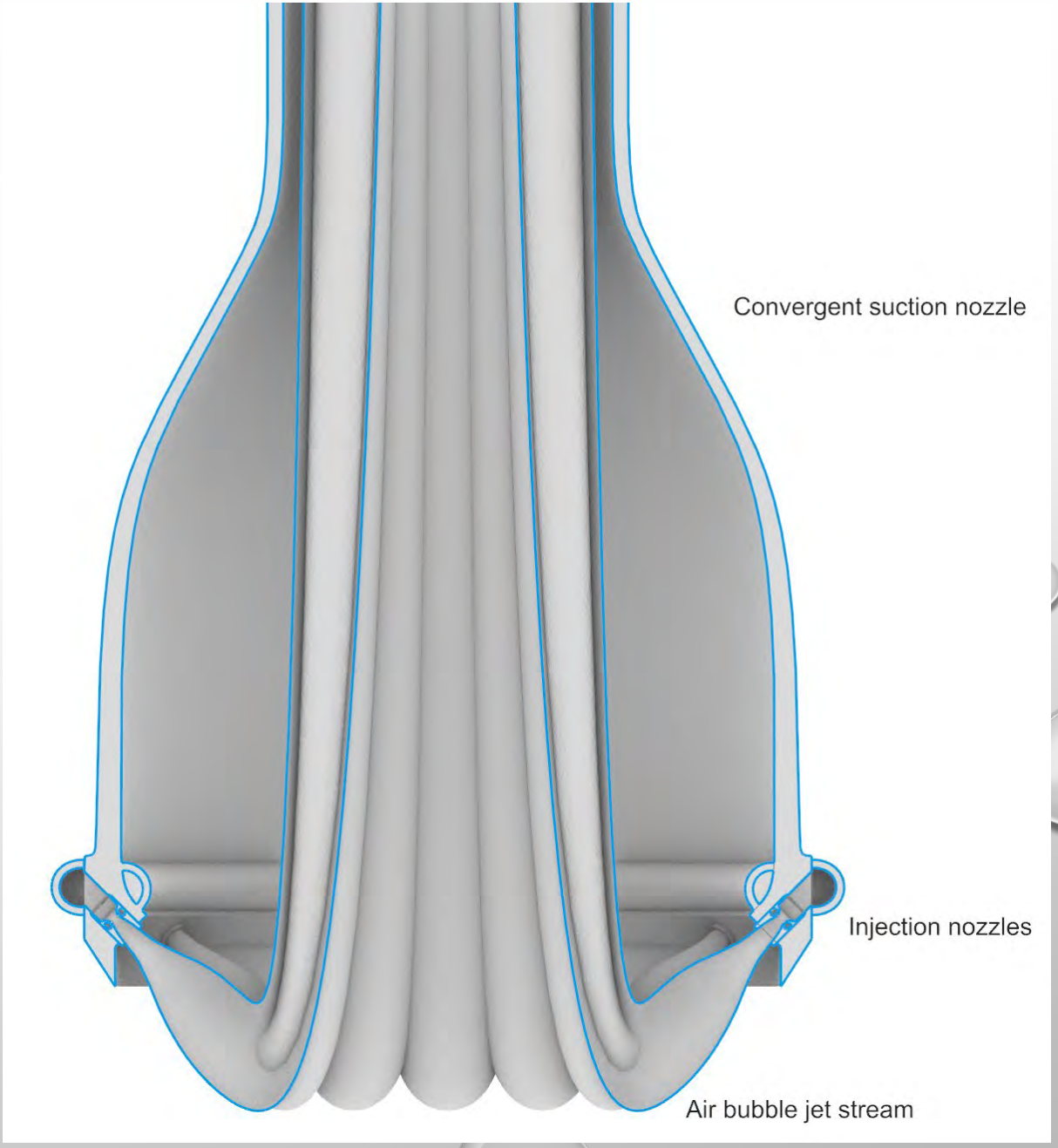
That same water containing the entrained particulates can be recycled.



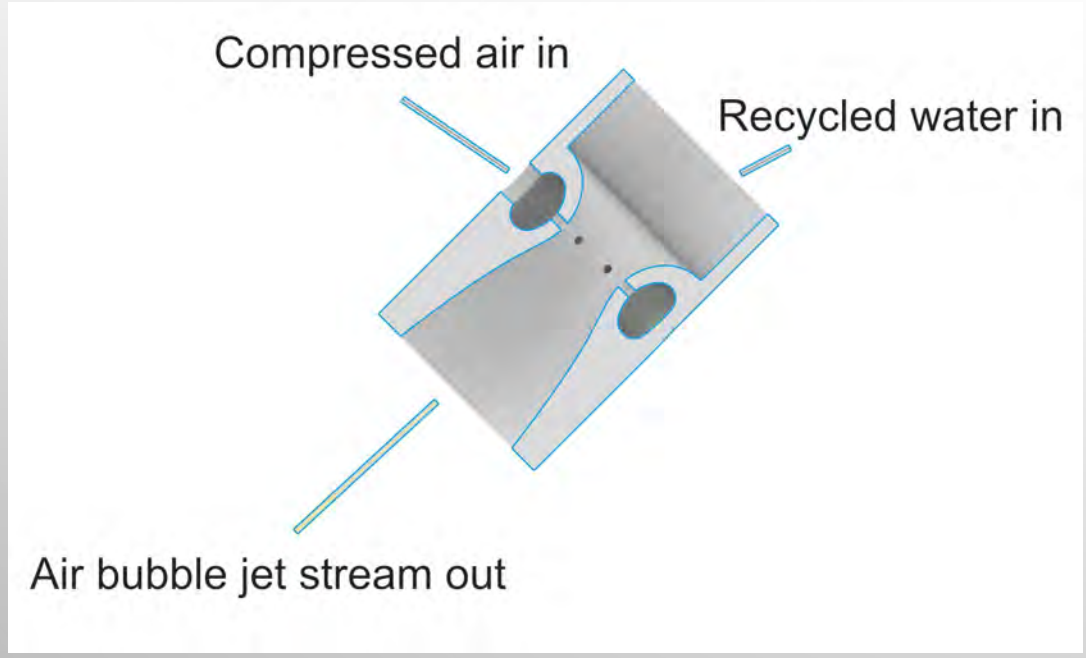
The recycled water is injected through an air injection nozzle into the base of the suction pipe.

The “cloudy” water flows upwards into the suction pipe.

Sediment is agitated and liberated into the vertical flow stream.



Advantages



- The lifting rate is a function of the depth and the air volume. Its efficiency increases with depth.
- There is no suction pump to wear out.
- Updraft water is recycled to eliminate waste plumes.
- Harder clays and hardpack sands can be cut with the addition of a high-pressure water jet.