Project Site Plan

Innovative Components:

- New Media Technology for nutrient removal in ***marine waters***
- Modular Roll-off Deployment to meet long-term or short-term treatment objectives in a small footprint

Projected Removals:

- TP – 67% removal*
  (2.7 lb/yr P removed)
- TN - 25% removal*
  (18.6 lb/yr N removed)

*20-year Lifetime removal efficiency

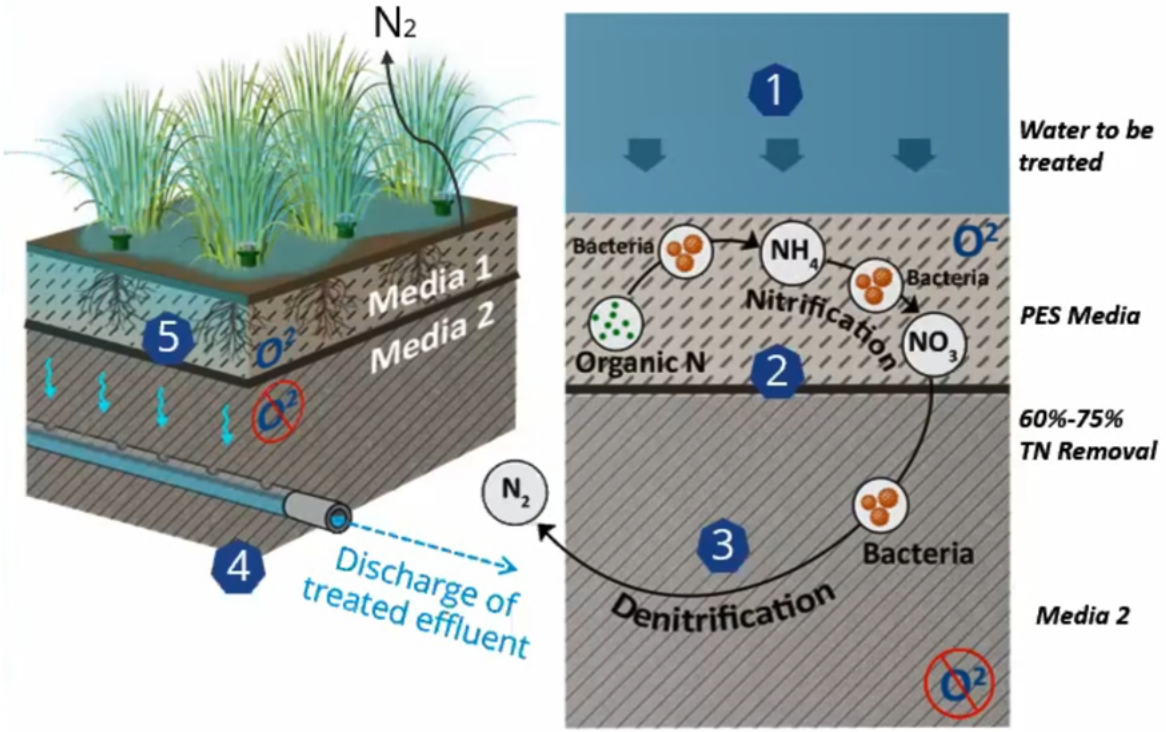
SWIG Pilot Project in Key Colony Beach
Layout

SWIG

Sustainable
Water Infrastructure
Group, LLC

PES + Nitrogen System- Overview

PES + N



1. Water is distributed onto and passes vertically through two layers of patented media (think "Brita" filter)
2. The first media layer is aerobic and transforms organic nitrogen and ammonia into nitrate. This layer can be modified to include a phosphorus removal (PES) option.
3. The second media layer is anoxic and transforms nitrate into harmless nitrogen gas which is released to the atmosphere
4. Treated effluent is collected via underdrain pipe(s) and discharged into receiving waters
5. Robust plant growth with deep roots maintains media porosity and creates dense wildlife habitat
6. No media replacement required for ONE. Combined PES + N systems require replacement of first media layer