

Technology:

Engineered Wetlands



North American Wetland Engineering

The Applications

Single homes to small towns

Industrial wastewater

Nitrification and denitrification

Agricultural Waste

Landfill Leachate

Airport Deicing

Food Processing

Pulp and Paper

Groundwater remediation



The Technology

Engineered wetlands greatly advance the treatment capacity of wetland treatment systems. Unlike earlier generations of passive constructed wetlands, engineered wetlands boost treatment performance by aeration or pumping. Previously, applications requiring nitrification of wastewater could not use treatment wetlands. Now, engineered wetlands provide reliable and cost effective nitrification performance. The large size of passive wetland treatment system often prevents their use. Engineered wetlands systems can cut the treatment area in half, opening up many more sites to wetland treatment. Treatment time is faster in engineered wetlands than passive systems, which also reduces the treatment area.

North American Wetland Engineering, LLC is at the forefront of engineered wetland systems. Its engineers have authored eleven United States patents on these advanced wetland designs and have designed more than 200 wetland treatment systems. Also, by coupling wetland systems with innovative engineered lagoon designs NAWE has increased the reach of both wetland and lagoon technology.

Detailed knowledge of wetland microbiology, plants, hydrology, and ecology, coupled with experience in operations, construction observation, soils, aeration, and hydraulics provides us with a technical foundation in wetland design that is unmatched. With this strong foundation, NAWE confidently applies well accepted engineering principles to provide unique wetland-based solutions.



NAWE staff have experience in the design of many types wetland systems:

- Forced Bed Aeration™ horizontal and vertical flow wetlands
- Tidal flow (flood and drain) wetlands
- Surface flow wetlands
- Recirculating wetland designs
- Cold weather wetlands
- Nitrifying wetlands
- Nitrogen removal wetlands
- Passive subsurface flow wetlands
- Reed beds for sludge composting

NAWE is the top engineered wetland design firm in the United States. Our commitment to innovation and quality design will make your project a success.

 30% Post Consumer

Ecological engineering providing
practical, innovative solutions.

North American Wetland Engineering

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