GEPS®

GROUNDWATER ENERGY PASSIVE SYSTEM

SOLVING ENGINEERS' BIGGEST CHALLENGES

- **Need to maximize infiltration?** GEPS increases water infiltration rates up to 10x.
- **Need groundwater recharge?** GEPS directs stormwater into deeper soil layers, replenishing groundwater.
- **Need to prevent standing water?** GEPS reduces hydrostatic pressure and eliminates surface pooling.
- **Need a maintenance-free solution?** GEPS operates with passive energy, requiring no power or upkeep.
- **Need to stabilize soil?** GEPS enhances soil structure, reducing erosion and supporting long-term stability.

REVOLUTIONIZE YOUR STORMWATER MANAGEMENT WITH GEPS

GEPS is the ideal solution for engineers and land developers seeking an innovative, cost-effective, and sustainable approach to stormwater management. Unlike traditional systems that rely on mechanical pumps or expansive retention areas, GEPS enhances natural soil infiltration using a passive energy system. By directing water deep into the ground through a network of strategically placed impeller-shaped units, GEPS prevents surface pooling, reduces hydrostatic pressure, and recharges groundwater, improving soil stability while mitigating flood risks. This advanced system operates without external energy or maintenance, making it a long-lasting, environmentally friendly alternative that seamlessly integrates into any project.

10x
FASTER INFILTRATION RATE
Increases infiltration rate up to 10 times compared to native soil conditions.

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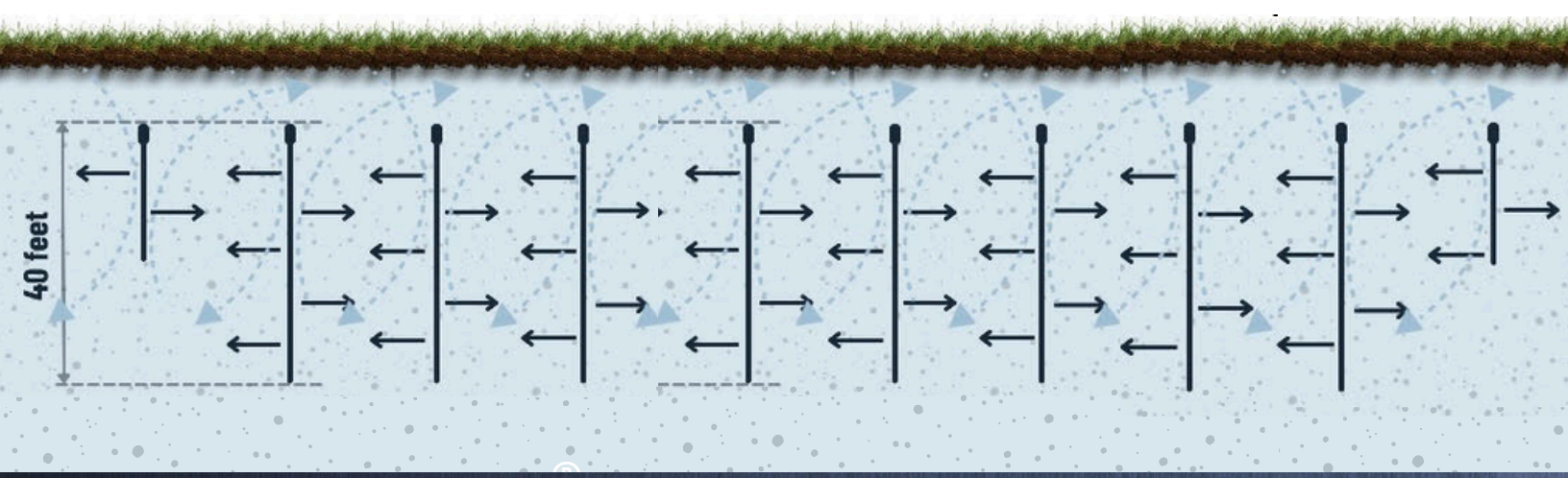
MAINTENANCE
Operates entirely on passive energy, harnessing natural forces.

50%
REDUCTION IN IRIGATION
Upward moisture release properties reduces irrigation needs up to 50%.

100%
INVISIBLE
Installed underground and will perform without any change to the landscape.

For land developers, GEPS offers a game-changing way to maximize land use without expanding surface detention areas or compromising site aesthetics. Its ability to increase infiltration rates up to ten times faster than native soil conditions allows for efficient stormwater control in both urban and rural environments. Whether addressing low-lying flood-prone areas or enhancing the performance of existing green infrastructure, GEPS provides a scalable, non-intrusive solution that improves project sustainability and long-term resilience.



HOW DOES GEPS WORK?

When placed into drilled holes, the GEPS units form a network beneath the topsoil, where soil expansion and contraction activate the system, creating a passive pumping action that moves water efficiently. Each unit punctures soil layers, breaking hydrostatic pressure and enabling water to disperse more easily, which reduces water buildup between layers and promotes faster infiltration. Once surface water enters the GEPS system, it is naturally distributed through soil capillary action, allowing water to reach even deeper soil levels. This process not only prepares the soil for future rain events but also provides an energy-free, low-impact method to manage and utilize stormwater effectively.

APPLICATIONS FOR GEPS

ENHANCING GREEN INFRASTRUCTURE

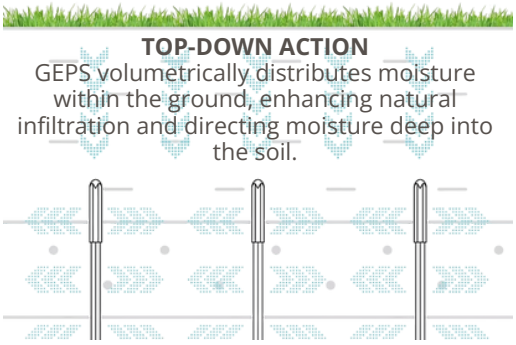
Imagine getting more from your Green Infrastructure without expanding the surface area. With GEPS, you can increase your existing infiltration rate by up to 10 times while storing more water in the in-situ soils below your stormwater control measure getting more for your investment.

IMPROVING STORMWATER PONDS

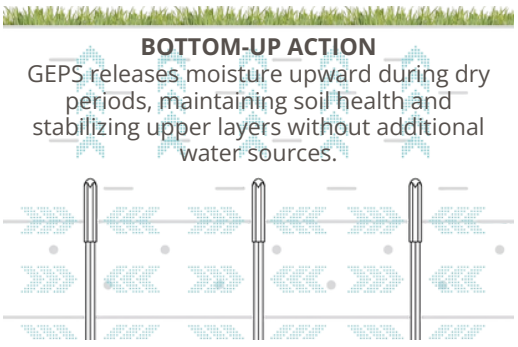
Whether looking to get more out of a surface detention pond or maximize an underground detention systems volume, GEPS unique way of pulling water into the strata of underlying soils quadruples the volume for a half the price by volume of traditional stormwater detention systems..

ELIMINATING PONDING WATER

If you have nuisance water that simply wont drain, GEPS offers a non-intrusive method to solve ponding water issues. Whether it's a stormwater control measure that's lost its ability to infiltrate or a low spot that's settled, GEPS can restore and improve long term infiltration rates.



TOP-DOWN ACTION
GEPS volumetrically distributes moisture within the ground, enhancing natural infiltration and directing moisture deep into the soil.



BOTTOM-UP ACTION
GEPS releases moisture upward during dry periods, maintaining soil health and stabilizing upper layers without additional water sources.

CONVERGENT WATER TECHNOLOGIES

Convergent has decades of experience in developing and delivering problem solving stormwater innovations. Convergent believes that adopting new ideas quickly, and integrating the process of innovation into stormwater regulation, product development and distribution is the only answer to our looming water crisis.

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