



We are a not-for-profit organisation intent on reducing pollution from urban surfaces, including microplastics and plastic litter



Zero Pollution Ambassadors

Act | Educate | Advocate



**STORMWATER  
SHEPHERDS**

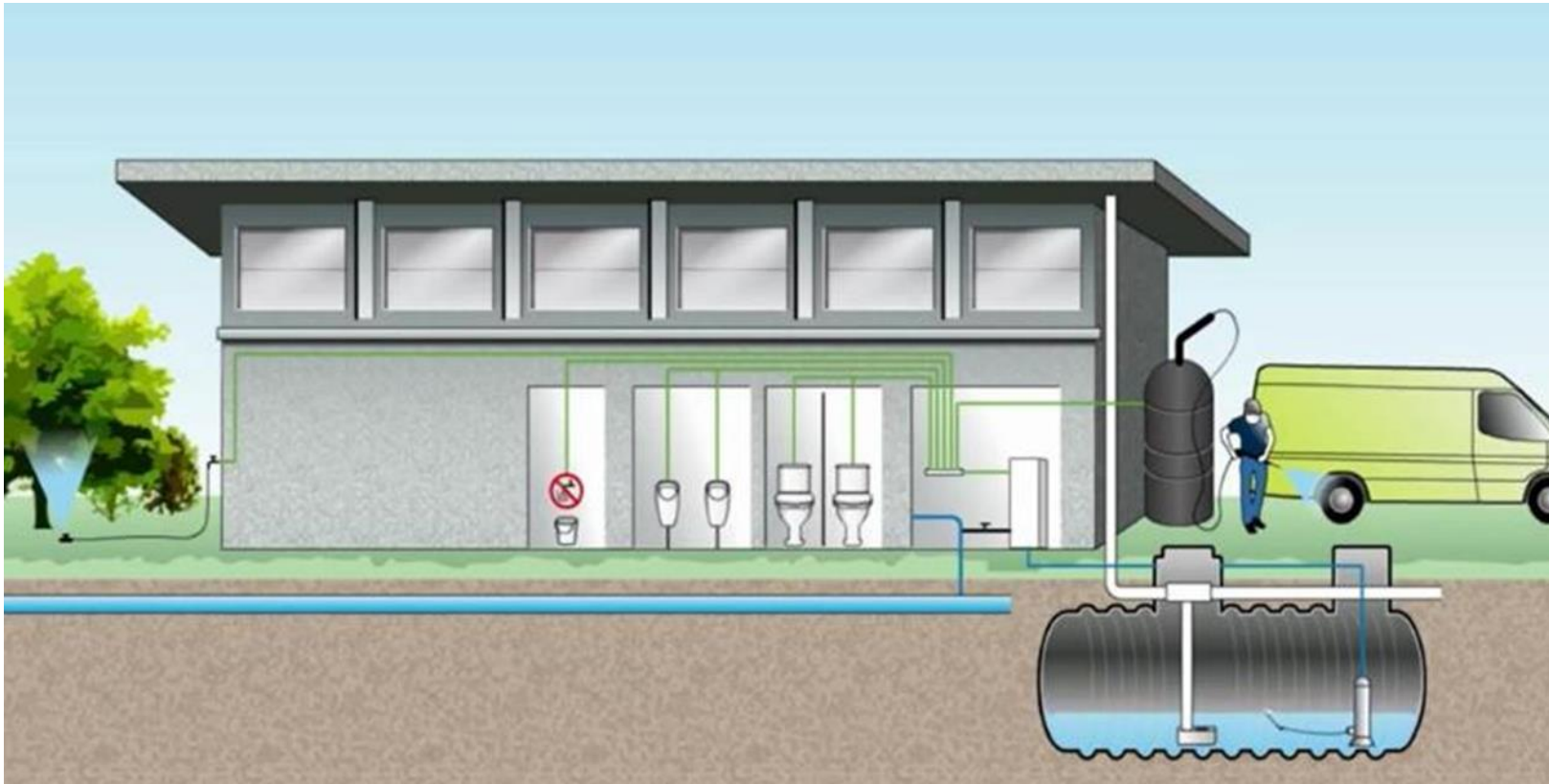
## Managing stormwater on your site

- There are a number of things you should consider for stormwater management on your site;
  - Capture rainwater for re-use
  - Slow the **flow rate** of water off the site in heavy rain events
  - Reduce the **volume** of water discharging from your site and affecting downstream communities
  - Irrigate your green spaces to create healthy habitats for wildlife and places for people



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## Capture rainwater for reuse



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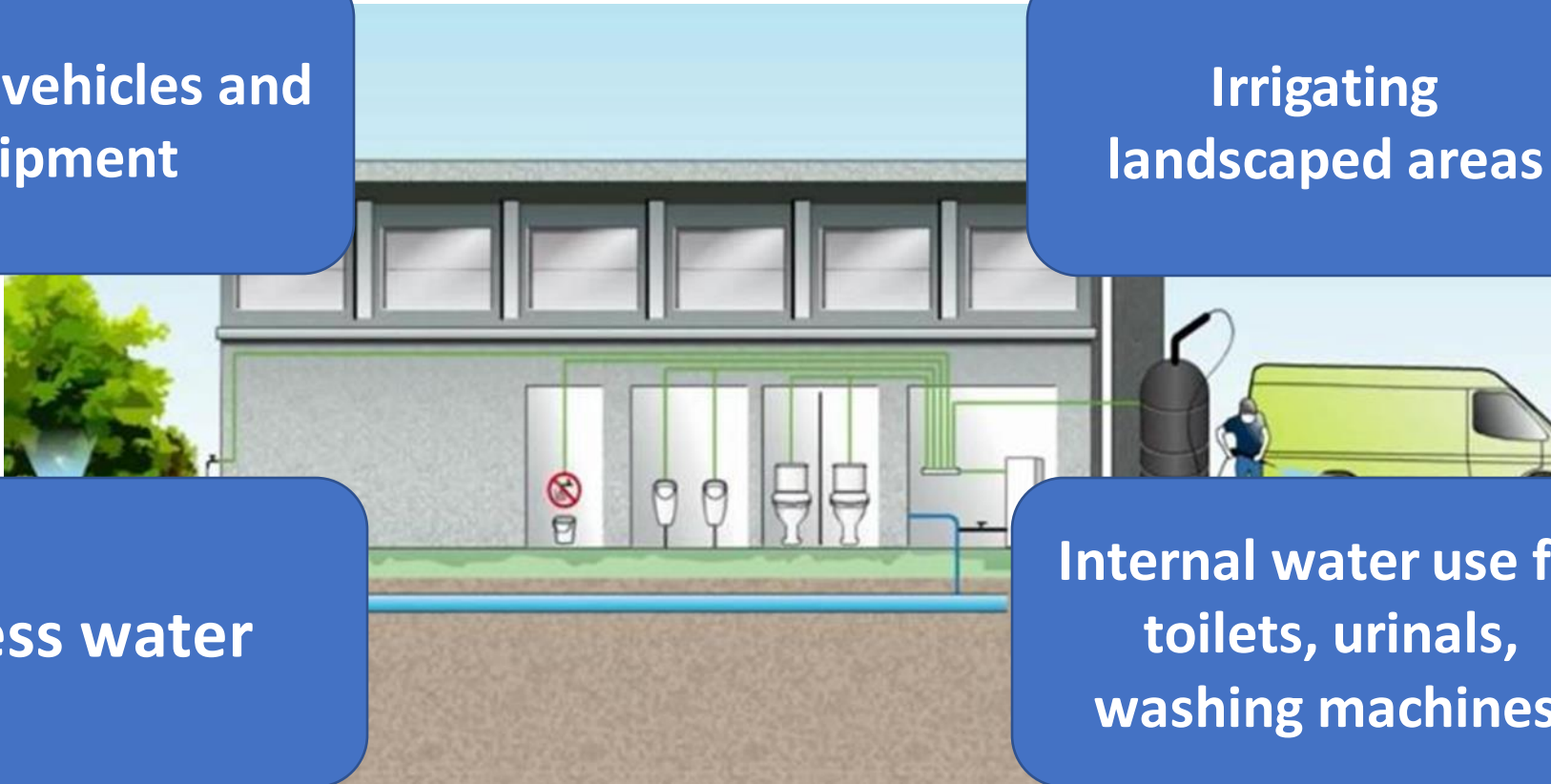
## Capture rainwater for reuse

Washing vehicles and  
equipment

Irrigating  
landscaped areas

Process water

Internal water use for  
toilets, urinals,  
washing machines.







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# Slow the flow rate of water off the site in heavy rain events



Next time it rains, take a broly and take a walk around your site.

- Where does the water flow?
- Where does it gather or pool?
- Where does it leave your site?
- Is it causing an issue anywhere by blocking paths or parking?



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Slow the flow  
rate of water  
off the site in  
heavy rain  
events

**Bioretention Zones**



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## STORMWATER SHEPHERDS

If you can infiltrate rainwater to ground on your site, this is an excellent way to reduce the flow rate off your site. But be careful to use this for low & medium pollution risk surfaces only, and where the soil can cope with it. You can't infiltrate grossly polluted water with oils, chemical and road runoff in it without pre-treatment.



Permeable surfaces  
are great for over-  
flow parking areas.



This example from America is from a residential development but it shows how effective bioretention zones can be at capturing water in heavy rain.







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## Modular Bioremediation Systems

‘Plug and Play’  
bioremediation systems  
are coming onto the UK  
market now. They are  
particularly useful for  
retrofit installations, but  
they are good for new  
build too, where they can  
be integrated into  
drainage systems easily.



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Green roofs on bike shelters, walkways, bin stores and parking areas can also deliver biodiverse habitats above functional spaces.



Photo: <https://www.grassroofcompany.co.uk/>



Reduce the volume  
of water  
discharging from  
your site and  
affecting  
downstream  
communities

If you have the space for  
a pond, they can capture  
water and create a  
beautiful habitat





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But if you don't have space for a pond, you can consider subsurface storage and attenuation....

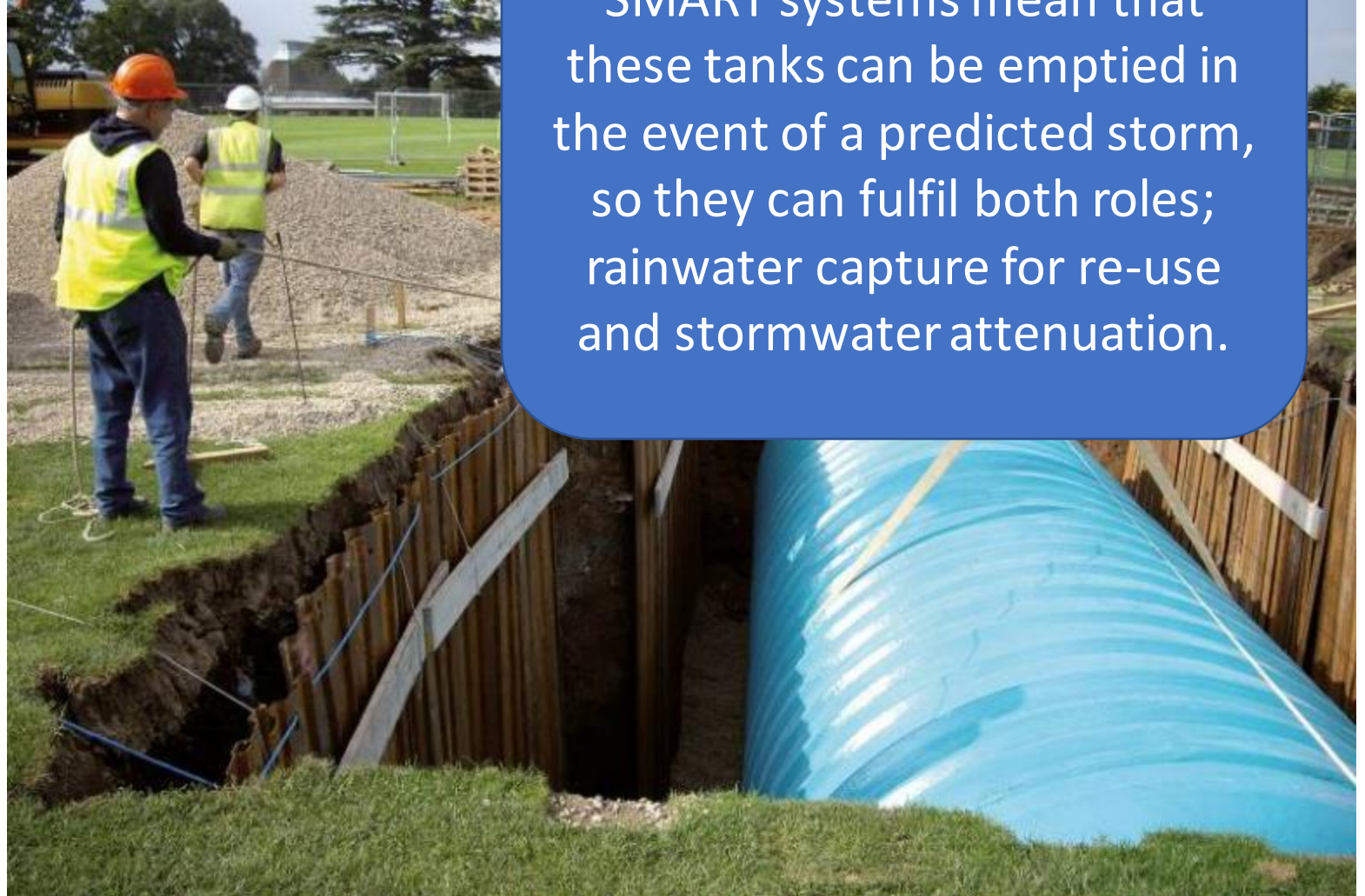






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Subsurface tanks can provide storage and attenuation where there is no room for a pond/wetland or where such features are not wanted. The tanks can be huge and they can capture water for re-use



SMART systems mean that these tanks can be emptied in the event of a predicted storm, so they can fulfil both roles; rainwater capture for re-use and stormwater attenuation.



Irrigate your  
green spaces to  
create healthy  
habitats for  
wildlife and places  
for people




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- Thank you for listening
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