



World Environment Day June 5, 2020

**“COVID & the Environment:
For better or for worse”**

Water in a time of COVID-19

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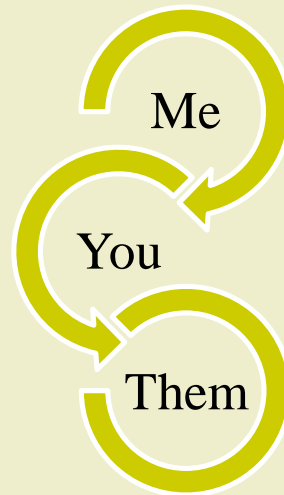


Water Resources Authority

- Ever mindful of the needs for
 - water provisioning,
 - maintaining water quality
 - wastewater disposal.

WASH

- ❑ Good clean water & WASH are essential to protecting human health.
- ❑ 1st line of defence – wash hands / wear a mask



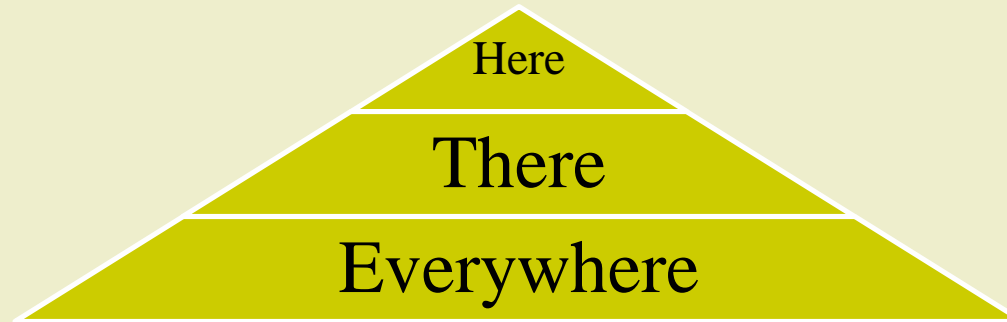


Water vs COVID-19

- ❑ Can the virus be transmitted via a water supply?
- ❑ Is there sufficient water available for the recommended frequent washing of hands?
- ❑ How should wastewater from sanitization and from treatment of patients be handled?

Water vs COVID-19

- Can the virus be transmitted via a water supply?
 - Water-borne viruses do exist – it is/xxx
 - Contaminated water is a significant cause for morbidity \$\$ v. \$\$

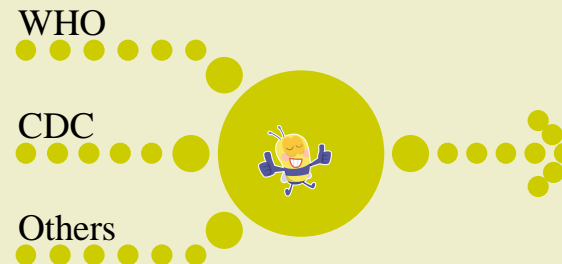


- WHO → COVID19 not detected in drinking water supplies; risk <




Water vs COVID-19

- ❑ Water is treated
- ❑ Filtration + Disinfection (Cl_2) → potability
 - Inactivation of other Human Corona Viruses
→ COVID-19

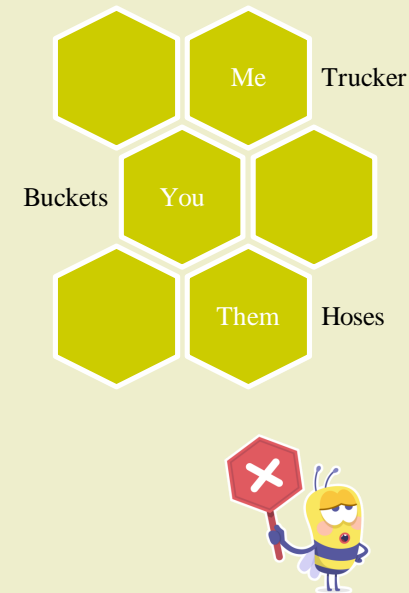


Water vs COVID-19

- ❑ Piped in-house Water 
 - vs. yard pipe; trucked water.
- ❑ June 2 Soon?
 - Arthur; Bertha
 - Shortage in a time of plenty – bad/bad
- ❑ Water quality vs water-handling quality

Water vs COVID-19

- Multiple persons operating
 - yard taps,
 - trucking hoses,
 - water buckets,
 - drums and the like,
 - may possibly create a point of contamination.



Water vs COVID-19

- ❑ Wash down commonly used and/or shared facilities such as pipe taps and buckets with bleach.
- ❑ This correlates with the general advice to sterilize suspect areas in homes and kitchens with chlorine based compounds such as bleach.
- ❑ !!!! Hand irritant



Water vs COVID-19

- Jamaican fastidiousness to cleanliness will prevail.
- Wash, wash, wash → [CV19]
- Reserve a bit more water within the domestic allocation of water use for hand-washing.
 - stored at home in regularly cleaned and covered containers;
 - covers are essential.





Water vs COVID-19

□ When in doubt,
boil your water!

Wastewater vs COVID-19

□ The WHO

- no evidence that the COVID-19 virus has been transmitted via sewerage systems, with or without wastewater treatment.
- PPE – Sanitation Workers
- Final disposal → Environment



Wastewater vs COVID-19

- ❑ Sanitation exercises ; treatment care

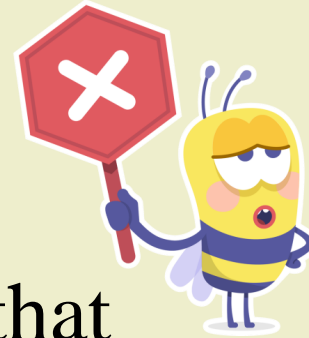


- ❑ nitrile gloves, N95 masks and other PPE.

- ❑ WRA recommend disinfection of water being used for wash down in suitable quantity to neutralize the COVID-19 virus.

Wastewater vs COVID-19

- ❑ Of concern to the WRA is the disposal of grey water from the sanitation exercise(s).
 - Disposed in drains that are connected to
 - ❑ a septic system,
 - ❑ a sewage system or
 - ❑ an absorption pit.
- ❑ Dose grey water with disinfectant, so that onward contamination of groundwater does not occur.



Wastewater vs COVID-19

- ❑ Grey water from such facilities should never be disposed of on open ground!







6 Rs


- ❑ Reclaim
- ❑ Reuse
- ❑ Reduce
- ❑ Reserve
- ❑ Redirect
- ❑ Restrict

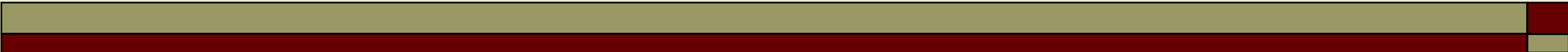
6 Rs

□ Reuse Wastewater !

Reclaim water component  Reuse water component
Reduce demand for fresh water. 

□ Reduce Freshwater Demand!

Reserve fresh water for future use 
Restricted Freshwater can be Redirected to alternative/competing demands

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- Let us wash, wash.... Wash all our troubles away.

THE END!