

LEAVE NO TRACE IN TRINIDAD AND TOBAGO

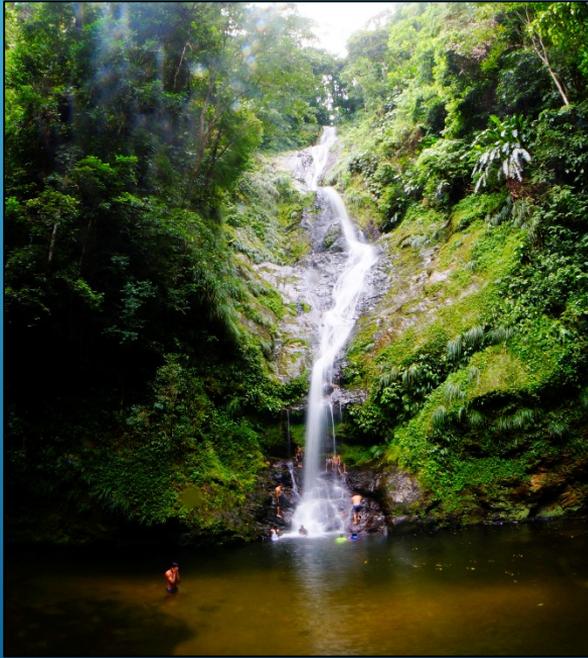
Kevan Lee Lum

CWWA Conference 2016

Topics: Integrated Management, including Environmental Management
Conservation

THE BEAUTY OF TRINIDAD

Many people use the outdoors as a form of recreation: hiking, camping, river "limes", etc.



THE PROBLEM

- ▶ Hikers have several impacts on the environment
- ▶ Trail and campsite widening, campfires, garbage have lasting effects



THE WATER CONNECTION

- ▶ WASA operates several surface water intakes across the entire country
- ▶ Caroni WTP is the largest, providing up to 75 MGD
- ▶ Pools in Caura valley
- ▶ Mermaid Pools on the Matura River
- ▶ Morang Pools in St Joseph Valley



LEAVE NO TRACE

- ▶ Leave No Trace can be considered to be a set of outdoor ethics that promote the conservation of the outdoors
- ▶ The Leave No Trace Center for outdoor ethics is based in the United States
- ▶ There are 7 principles of the Leave No Trace program



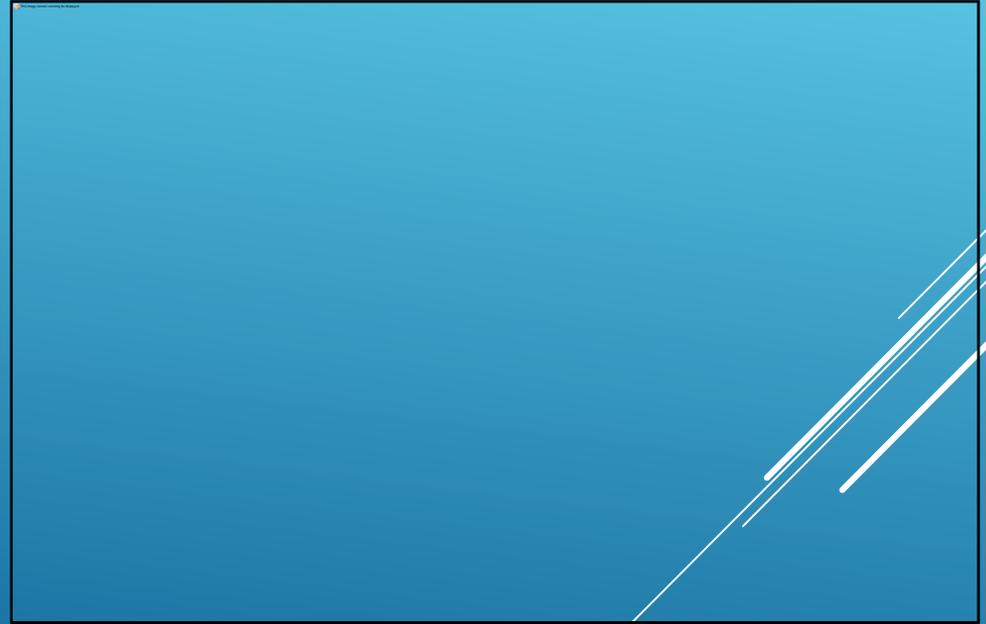
PLAN AHEAD AND PREPARE

- ▶ Pack proper equipment
- ▶ Pack only what you need
- ▶ Avoid times of high use
- ▶ Have maximum group size limits



TRAVEL AND CAMP ON DURABLE SURFACES

- ▶ Trail shortcutting and trail widening remove forest cover
- ▶ Hiking and camping to be restricted to established areas
- ▶ Research suggests that it takes 8 years for sites camped on for 4 nights to recover its vegetation¹



1. Cole, David and Chris Monz. 2003. "Impacts of camping on vegetation: Response and recovery following acute and chronic disturbance". Environmental Management

DISPOSE OF WASTE PROPERLY

- ▶ “Pack it in, pack it out”
- ▶ Everything that is carried in at the start of the hike, must be taken back out and disposed of properly
- ▶ Viruses and other pathogens from human waste can survive weeks or months in water or soils

Banana Peel - a month

Paper - a couple months

Cigarette Butt - 5 years

Disposable Diaper - 2 decades

Hard Plastic Container - 3 decades

Rubber Boot Sole - 7 decades

Tin Can - a century

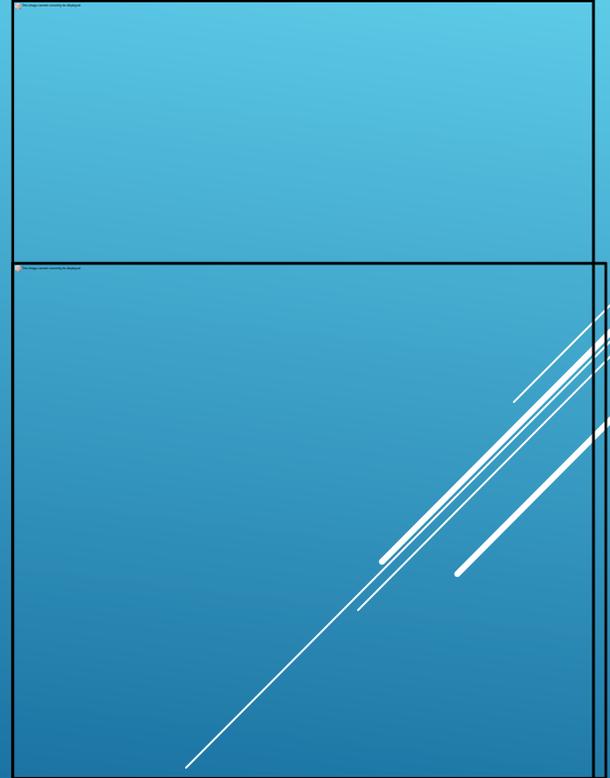
Aluminum Can - 3 centuries

Plastic 6-pack Holder - 5 centuries

Glass Bottles - eons

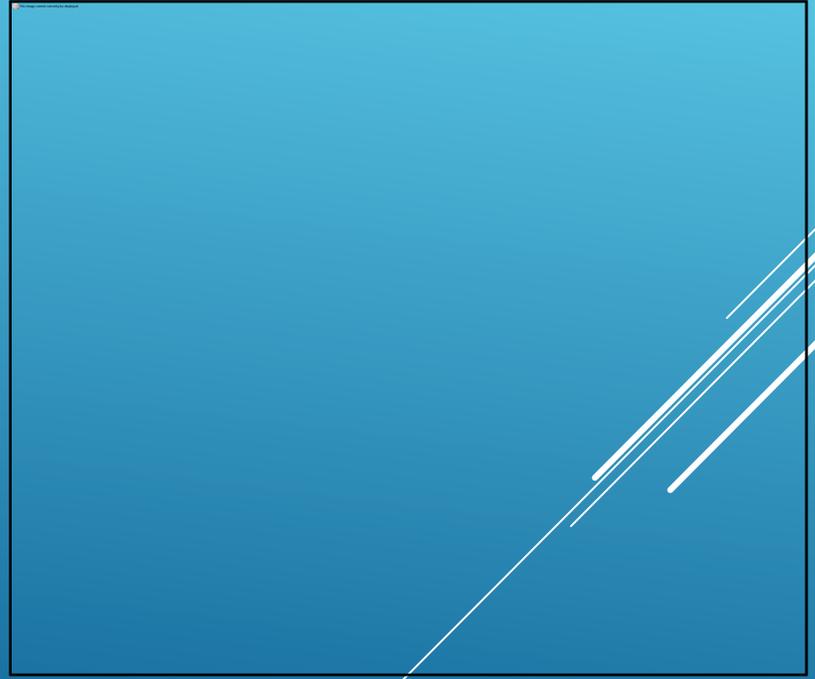
MINIMIZE CAMPFIRE IMPACTS

- ▶ Garbage burned in fires may leave traces of heavy metals in the ash
- ▶ Most items do not fully burn, such as foil or plastic bottles
- ▶ Stoves, established fire rings or pans should be used for cooking
- ▶ Wood and coal should be burned to ash, and the ashes scattered



LEAVE WHAT YOU FIND, RESPECT WILDLIFE & OTHER VISITORS

- ▶ Removal of rocks or plants can lead to loss of habitat
- ▶ For fires, do not break off wood from trees, use wood already on the ground
- ▶ Observe wildlife from a distance and do not feed
- ▶ Respect other hikers by hiking and camping quietly



LEAVE NO TRACE BENEFITS

- ▶ Cleaner and healthier environment!
- ▶ Decrease costs of water treatment
- ▶ Increase potable water quality
- ▶ Implementation and maintenance can create employment
- ▶ Increase Tourism

“Scenic garbage dump”

●●○○○○ Reviewed March 31, 2012

These falls are too accesible so locals come along to picnic and leave their garbage behind. There appears to be no one in authority to check or manage the area. There are many better waterfalls in Trinidad that require a bit of hiking to get to and generally these that hike are seen

“Beautiful and remote once you've waded through Trinidad's ubiquitous garbage”

●●●○○○ Reviewed July 7, 2014

If only the locals loved their islands like we do. Rubbish is everywhere. Here is a gem of an island, paradoxically accessible only some 12

MARACAS WATERFALL

Easily accessible, scenic waterfall. A beautiful sight that is unfortunately spoiled by the garbage left here by the locals.

e aura about it, yet strewn with
d! 30 years ago it was a leper
overnight it became deserted. Empty



INFRASTRUCTURE AND SIGNAGE

- ▶ Signs encourage people to clean up after themselves
- ▶ Signs can be placed at trailheads and in frontcountry areas
- ▶ Garbage bins need to be sturdy and cleared regularly
- ▶ Fireplaces, restrooms, tables and benches can be installed in frontcountry areas



VEHICLE AND FOOT PATROLS

- ▶ Vehicles used to patrol frontcountry areas
- ▶ Foot patrols for backcountry areas
- ▶ Encourages people to cleanup after themselves
- ▶ Can educate people on Leave No Trace



PUBLIC EDUCATION

- ▶ School course at primary and secondary level
- ▶ Hike leaders, tour operators, race organizers to be certified in Leave No Trace
- ▶ Online awareness course
- ▶ Tourism brochures and websites to display Leave No Trace practices



CONCLUSIONS

- ▶ Leave No Trace has the potential to improve water quality if implemented
- ▶ Adopt-A-River
- ▶ International Coastal Cleanup
- ▶ Trail Cleanups



LEAVE NO TRACE

The principles of Leave No Trace:

1. Plan Ahead and Prepare
2. Travel and Camp on Durable Surfaces
3. Dispose of Waste Properly
4. Leave What You Find
5. Minimize Campfire Impacts
6. Respect Wildlife
7. Be Considerate of Other Visitors

