



**Department of  
Environmental  
Conservation**

# **Water**

**Filtering, moving, using, regulating, cleaning**

# Resources: NYSDEC

## General Water Info

- <http://www.dec.ny.gov/chemical/290.html>

## Water Quality Concerns

- <http://www.dec.ny.gov/chemical/69240.html>

## Permitting & Regulations

- <http://www.dec.ny.gov/chemical/93615.html>
- <http://www.dec.ny.gov/permits/6054.html>

## Managing Water

- <http://www.dec.ny.gov/chemical/92064.html>



# Resources: Flooding

- <https://www.cdc.gov/healthywater/emergency/extreme-weather/floods-standingwater.html>
- <https://www.epa.gov/natural-disasters/flooding>
- [https://www.osha.gov/OshDoc/data\\_Hurricane\\_Facts/Bulletin2.pdf](https://www.osha.gov/OshDoc/data_Hurricane_Facts/Bulletin2.pdf)
- <https://www.scientificamerican.com/article/flooding-from-hurricane-harvey-causes-a-host-of-public-health-concerns/>
- <http://www.cnn.com/2017/08/27/health/health-consequences-flood-waters/index.html>



# Resources: Hurricanes

- <http://blog.puriteam.com/water-and-health/dangers/hurricanes-and-their-impact-on-water-quality/>
- <http://www.npr.org/2017/08/30/547219385/flooded-texas-chemical-plants-raise-concerns-about-toxic-emissions>
- <http://www.newspress.com/story/weather/hurricane/2017/09/07/hurricane-irma-poses-threat-houses-well-water/643391001/>



# Resources: Wildland Fires

- [https://training.nwcg.gov/classes/s130/508%20Files/071231\\_s130\\_m8\\_508.pdf](https://training.nwcg.gov/classes/s130/508%20Files/071231_s130_m8_508.pdf)
- [https://www.fs.usda.gov/Internet/FSE\\_DOCUMENTS/stelprd3819991.pdf](https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/stelprd3819991.pdf)
- <http://wildfiretoday.com/documents/WaterVsFire.pdf>
- <https://www.nps.gov/fire/wildland-fire/learning-center/fire-in-depth/engines.cfm>
- YouTube: <https://www.youtube.com/watch?v=KKT-KH3QMx0>



# Using when water is limited: ISS

**→ AQUAPAD**

**WHAT**  
AQUAPAD IS A WATER QUALITY CONTROL DEVICE DEVELOPED BY FRENCH SPACE AGENCY CNES.

**WHY**  
CURRENT WATER QUALITY TESTING METHODS ON THE SPACE STATION REQUIRE A LOT OF VALUABLE CREW TIME AND GENERATE WASTE.

**HOW**

- 1: THE ASTRONAUT DROPS WATER SAMPLE INTO AQUAPAD HOLDER
- 2: SAMPLE IS INCUBATED AT AMBIENT TEMPERATURE FOR 44 HOURS. RED SPOTS FORM WHERE THE FABRIC REACTS TO BACTERIA
- 3: THE ASTRONAUT TAKES A PHOTO OF THE SAMPLE USING THE EVERYYEAR APP ON A TABLET TO DETERMINE IF IT IS SAFE TO DRINK

**BENEFITS**

**IN SPACE:**  
SAVES CREW TIME AND CONSUMABLES

**ON EARTH:**  
CAN HELP ASSESS WATER QUALITY AFTER NATURAL DISASTERS

**OBJECTIVE**  
AQUAPAD PROPOSES A CHEAP, USER-FRIENDLY AND EASY-TO-INTERPRET METHOD TO DETECT BACTERIA IN WATER.

esa

NASA Space Agency

<http://blogs.esa.int/VITAmmission/2017/08/30/testing-the-space-station-water/>

# Thank You

## Betsy Ukeritis

Inter-regional Environmental Educator  
NYSDEC

**Email:** [betsy.ukeritis@dec.ny.gov](mailto:betsy.ukeritis@dec.ny.gov)

## Connect with us:

Facebook: [www.facebook.com/NYSDEC](http://www.facebook.com/NYSDEC)

Twitter: [twitter.com/NYSDEC](https://twitter.com/NYSDEC)

Flickr: [www.flickr.com/photos/nysdec](http://www.flickr.com/photos/nysdec)



Department of  
Environmental  
Conservation