FROG CREEK PARTNERS Presents the:





Get your mind into the gutter™ Because Clean Water is a Good Thing™ Frog Creek Partners, LLC 800 W. Yellowstone Hwy Casper, WY 82601 USA +1 (307) 439-9570 brian@frogcreek.partners www.FrogCreek.Partners

About Frog Creek Partners



Frog Creek Partners is an environmental technology company that specializes in stormwater filtration and pollution measurement services. Our flagship products are the **Gutter Bin**® stormwater filtration system and **Mundus Bag**® water filter. It is the most easily maintained, versatile, and attractive stormwater filter on the market.

- Founded in 2016 by Brian Deurloo a former mining engineer
- Present in five major market types in the USA (and soon to be Canada)
- Winner of the 2016 University of Wyoming Technology Business Center Start-Up Challenge.
- A customer service-oriented team with cost effective solutions

Frog Creek PartnersTeam





Brian Deurloo
President & Founder



Christopher TippiePartner, Chief Financial Officer

Frog Creek Partner team specialties:

- Customer service
- Sales support
- Accounting
- Engineering & Design
- Assemblage
- Quality control & assurance
- Manufacturing oversight

Outsource to specialists:

- Metal cutting & fabricating
- Structural engineering
- Sewing
- Specialty filtration media
- Legal, Tax, & Insurance



7000 sq. ft. (650 sq. m.) Headquarters next to the banks of the North Platte River in Wyoming

What is Stormwater Pollution?



The filth you see on streets flows unfiltered to the river

Most common pollutants:

- Trash
- Microplastics
- Sediment
- Hydrocarbons
- Nutrients (fertilizers)
- Heavy metals
- Tire treads
- Cigarette butts (4,000,000,000,000+ littered/year)







discharge point

Scientist have proven that 1 cigarette butt placed into a liter of water will kill 5 of 10 fish (nicotine kills animals & insects)

Why is Stormwater Pollution a Problem?



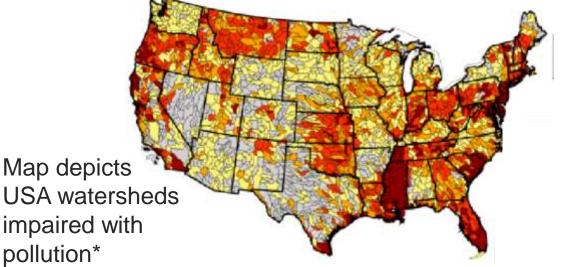


Scientists estimate:

- 28% of USA stream miles are unfit for human recreation
- Ocean plastic may outweigh the fish by 2050
- 29% of the Great Barrier Reef died between 2016 & 2017



Pollution is Earth's cancer



What solutions are out there to solve the problem?



- Stormwater enterprise fund/utility
- More frequent vac truck cleaning
- End of pipe separators
- Street sweeping
- Ocean Cleanup Project
- Storm drain filters









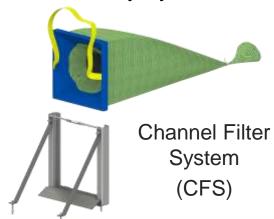
The Gutter Bin® Stormwater Filtration System



The patent pending Gutter Bin stormwater filtration system is a filter that removes toxic pollution from stormwater resulting in cleaner rivers and oceans.

Competitive Advantages:

- High hydraulic capacity
- Adjustable overflow
- Measurable results
- Sponsorship & branding
- Customizable filtration
- Chemistry by MYCELX®





100% trash capture tested & California certified



Gutter Bin Glamour Shots







Zebra edition
At the Denver Zoo



Basketball edition for United States Olympic Committee

Extended Producer Responsibility (EPR) Laws

- Producers of trash and single use plastics responsible for the pick-up and disposal of litter

Public Private Partnership

Donated Gutter Bins = It's a win for the community, the sponsor, and the water!



Wyoming Cowboy edition

Mundus Bag® water filter Models & Capabilities





Mundus Bag® model	Pollutants Removed	Apparent Opening Size (mm)	Reusable (Y/N)
TTC	Total Trash Capture	4.0	Υ
	Trash, Debris, &		
TDS	Sediment	0.25	N
	Sediment, Heavy		
	Metals,		
SHHT	Hydrocarbons, Trash	0.01	Y & N
VTF	Vacuum Truck Friendly	0.6	Υ



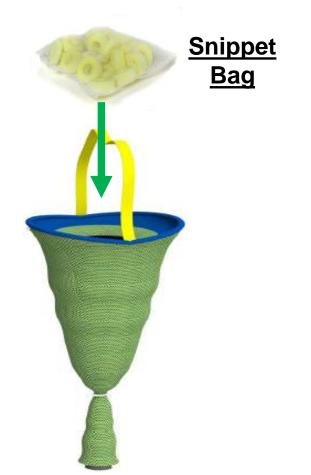
MYCELX Snippet Bag is inserted into any type Mundus Bag to remove hydrocarbons

MYCELX Filter Media





Frog Creek Partners teamed up with MYCELX to make Gutter Bin the best stormwater filter platform in the world



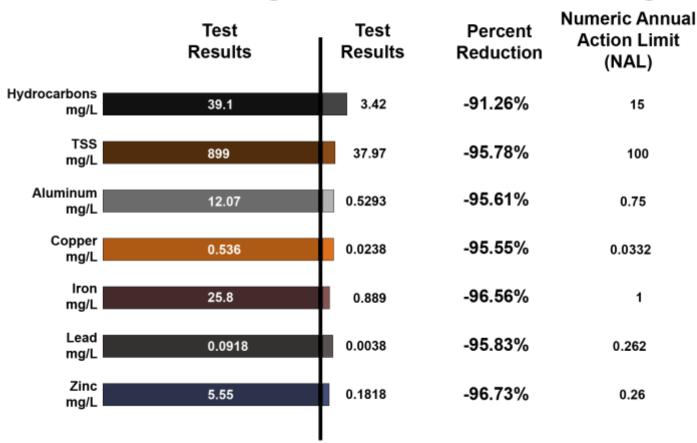
Why is MYCELX the best stormwater filter media?

- permanently removes oils, grease and other hydrocarbons from water
- no water retention = lightweight
- Can remove most zinc and PFAS
- Approved for use in Galapagos Islands
- NON-TOXIC and SAFE TO HANDLE

Actual Water Test Results from Industrial General Permittee at a Marine Terminal



Pre Gutter Bin Average Post Gutter Bin Average



Our customer has the cleanest water of any port facility at POLB and POLA

Note: NAL is highest value allowed for permittee to be considered baseline compliant. Multiple water samples were taken by a qualified third-party water sampler over multiple seasons. Permittee remains at baseline with the help of Frog Creek Partners Gutter Bins equipped with SHHT Mundus Bags.

Gutter Bin Benefits to City

Benefits to city:

- Lower risk of flooding because of clogged pipes
- Comply with water discharge regulations
- Point source filtration requires less real estate than retention/detention ponds
- Public private partnerships donate Gutter Bins to cities
- FOR USE WITH OR WITHOUT A VACUUM TRUCK













Pathway to a Gutter Bin Project in Your City



1. Identify & Measure

- Locate 20 storm drains for <u>microplastic</u> capture (>0.25mm)
- City staff provides dimensions or specifications



- Engineer & manufacture to specification
- Transport, duty, &/or tariff



Two days for two-person team & truck

4. Maintenance

- Clean 1 to 4 times per year depending upon infrastructure and pollutant load
- 2.5 hours service cycle for 20 Bins
- Replace or reuse Mundus Bags (model dependent)





Cost Benefit Analysis Examples



- Denver Zoo Example saves \$40,000 per year by not having to hydro-jet their storm pipes
- Long Beach Terminal saves \$20,000- \$100,000/year in extra regulatory compliance costs by staying at baseline
- Intangible cost benefit
 - Lower drinking water treatment costs
 - Lower health care cost
 - Rivers fishable & swimmable
 - Greater biodiversity in the environment (priceless)



Current Customers &/or Pilot Locations







United States Environmental Protection Agency United States

























Next Steps



- Identify 20 of your filthiest/problem storm drains for a pilot project location
- Refer Frog Creek Partners to municipalities or industrial facilities who seek stormwater filtration solutions
- Call or email for a quote:

Call: 307-797-7720

Email: heya@frogcreek.partners

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Brian Deurloo,

Founder
Frog Creek Partners, LLC
800 W. Yellowstone Hwy
Casper, WY 82601 USA
(307) 439-9570
brian@frogcreek.partners

www.FrogCreek.Partners



*References to data and statistics available upon request

Whether you think you can or you can't, you are probably right - Henry Ford

Think differently - Steve Jobs