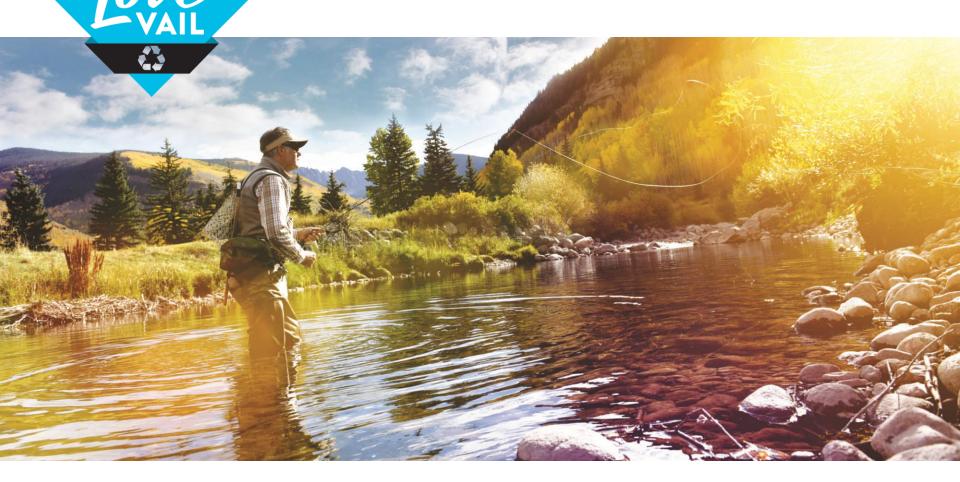
## Stormwater Education Update



#### **Pete Wadden**

Watershed Education Coordinator pwadden@vailgov.com

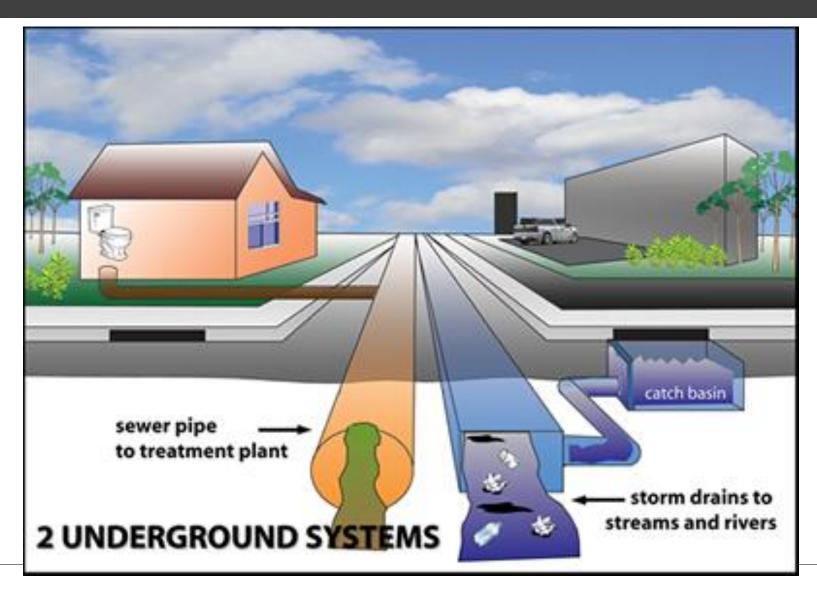


## How did we get here?

- Plants have been replaced by pavement and roofs
  - The natural state of the watershed offered much more filtration and percolation
- Hardscapes direct runoff into storm drains or directly into the creek



### What is the problem?



If it has an open grate, it doesn't get filtered (storm sewers and sanitary sewers are different).



## Changing Understandings of Stormwater Management



People are beginning to recognize that slowing runoff by filtering it through soil and roots helps keep pollution out of waterways.

Historically, stormwater has been moved into pipes, culverts and ditches as quickly as possible. (Began with Frederick Law Olmsted)





# Stormwater Inventory



About 2,000 stormwater inlets, outfalls and manholes were catalogued and inspected by SGM in 2015.



# Keeping sewage out of our creek



We test several stormwater outfalls for E. coli on regular basis.

 Results over holidays looked good.

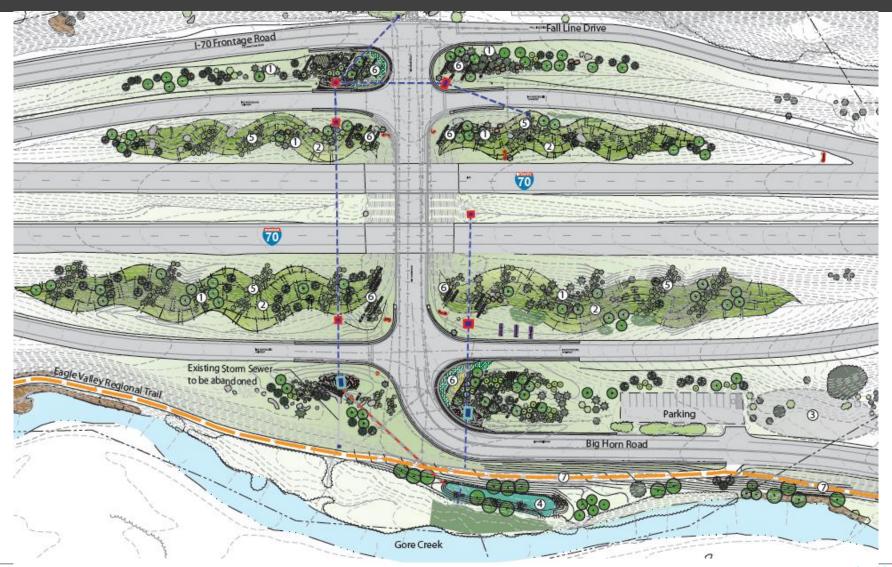
# NPS Grant for Public Work Project



- Snow dump filtration was improved in 2016
- NPS plan to begin in 2017



# East Vail Interchange



#### Contact filters and stormwater vaults

Currently, there are 27 water quality vaults installed in Vail

- 13 sand/oil separators
- 14 Hydrodynamic separators
- No contact filters, but some may be installed in 2017









#### In 2016 people dumped:

Cement



Lovevail.org

#### In 2016 people dumped:

- Cement
- Cooking grease





#### In 2016 people dumped:

- Cement
- Cooking grease
- Paint





#### In 2016 people dumped:

- Cement
- Cooking grease
- Paint
- Window Cleaner





#### In 2016 people dumped:

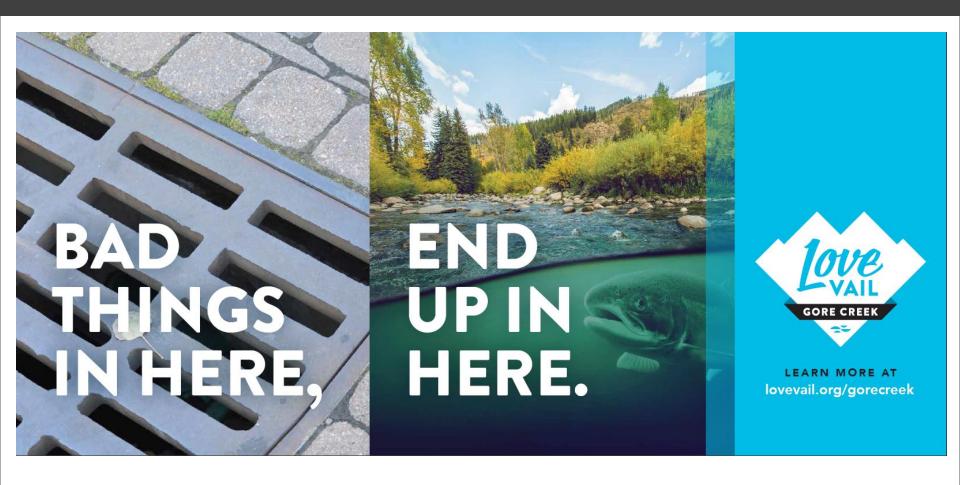
- Cement
- Cooking grease
- Paint
- Window Cleaner
- 120 hot dogs

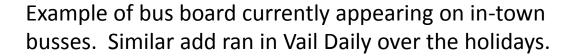
Down storm drains in Vail





### What is our message?







# What is our message?

Possible art installation in summer of 2017









# What is our message?

Possible art installation in summer of 2017



Heavy-duty
decals can be
applied to
pavers,
pavement or
storm drains
themselves and
removed at end
of summer
season.

Derek DeYoung



### Polluting is a "real" crime

Bad actors need to know they are being watched and there are consequences.

- Education for code enforcement and PD coming this winter.
- Community members report questionable activities
- We had our first stream-related ticket written in October for drywall dust from a drop-cloth shaken into Gore Creek.







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