



# Lake Tahoe Regional Stormwater Monitoring Program



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# Regional Stormwater Monitoring Program



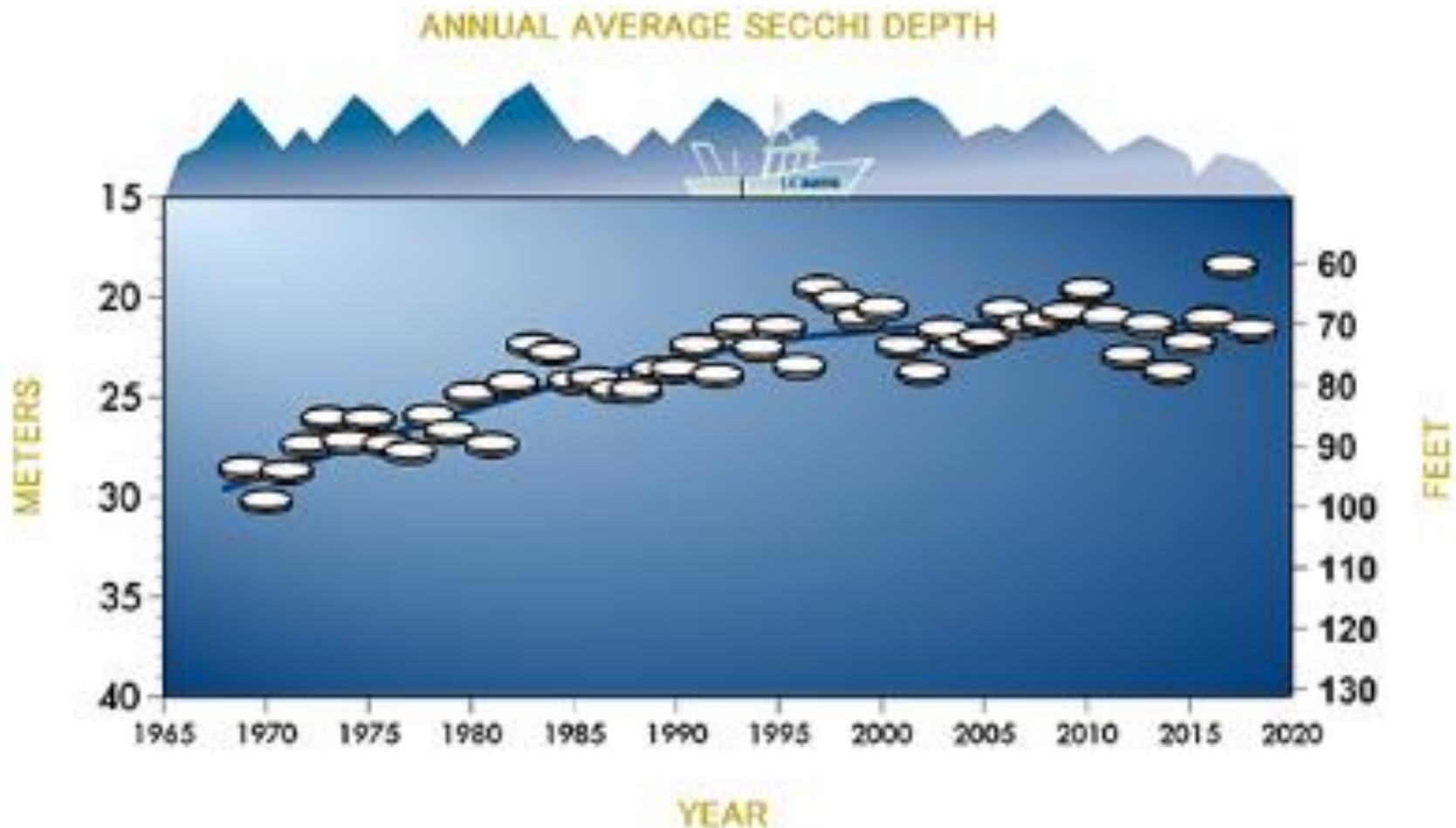
## Outstanding National Resource Water



# Regional Stormwater Monitoring Program



## Clarity measurements at Lake Tahoe





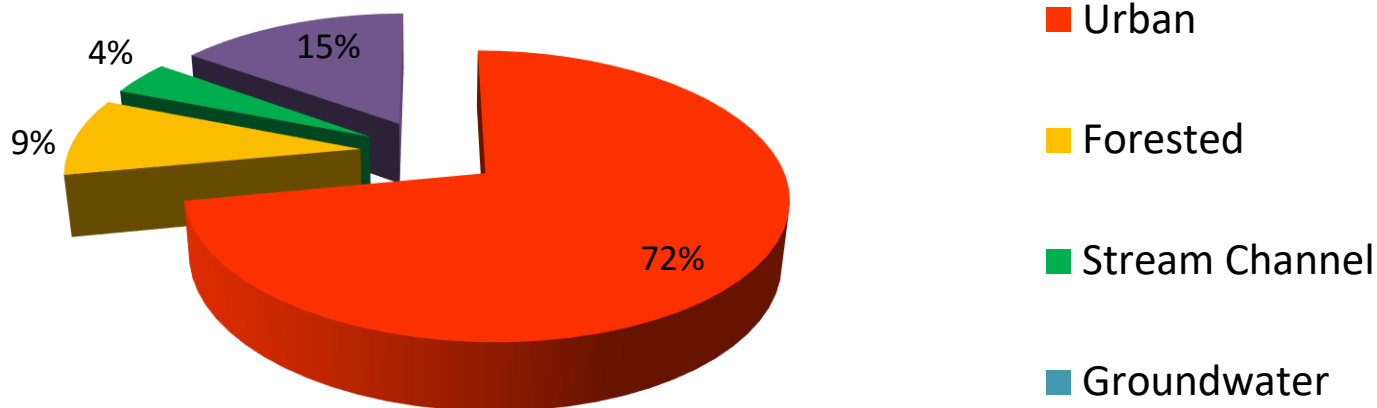
# Regional Stormwater Monitoring Program



## Source of clarity loss

### Fine Sediment Particles (FSP)

% Contribution per  
Pollutant Source Category



The TMDL is a 65-year plan to restore clarity to 100 feet!

# Regional Stormwater Monitoring Program



FSP delivery to  
the lake via  
stormwater  
runoff





# Regional Stormwater Monitoring Program



## Lake Tahoe



## Regulatory Agencies

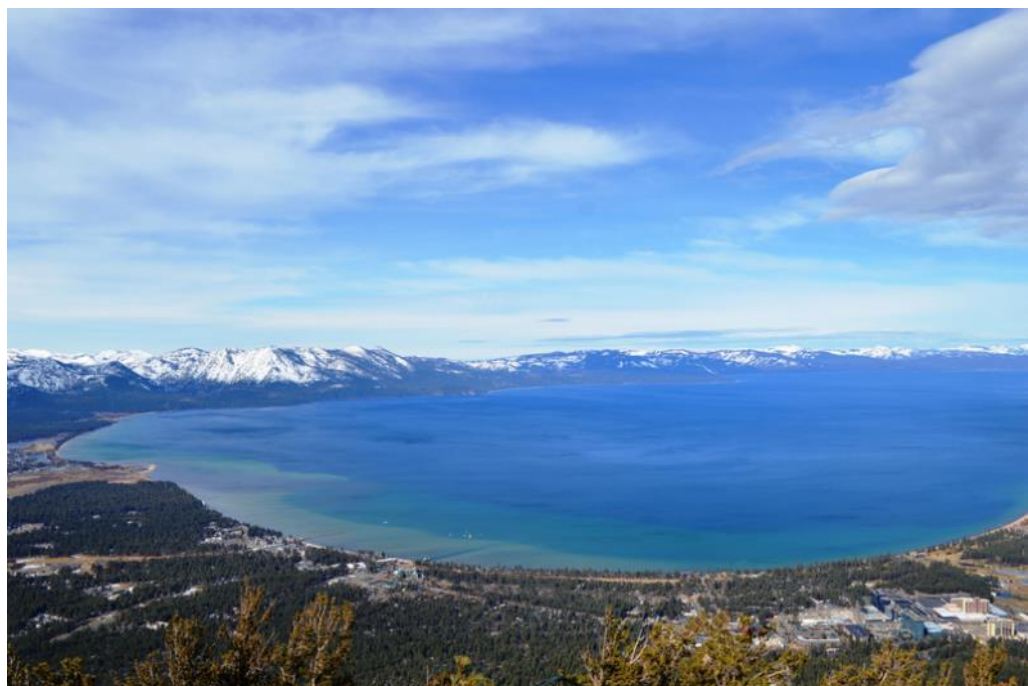
- Lahontan Regional Water Quality Control Board
- Nevada Division of Environmental Protection

# Regional Stormwater Monitoring Program



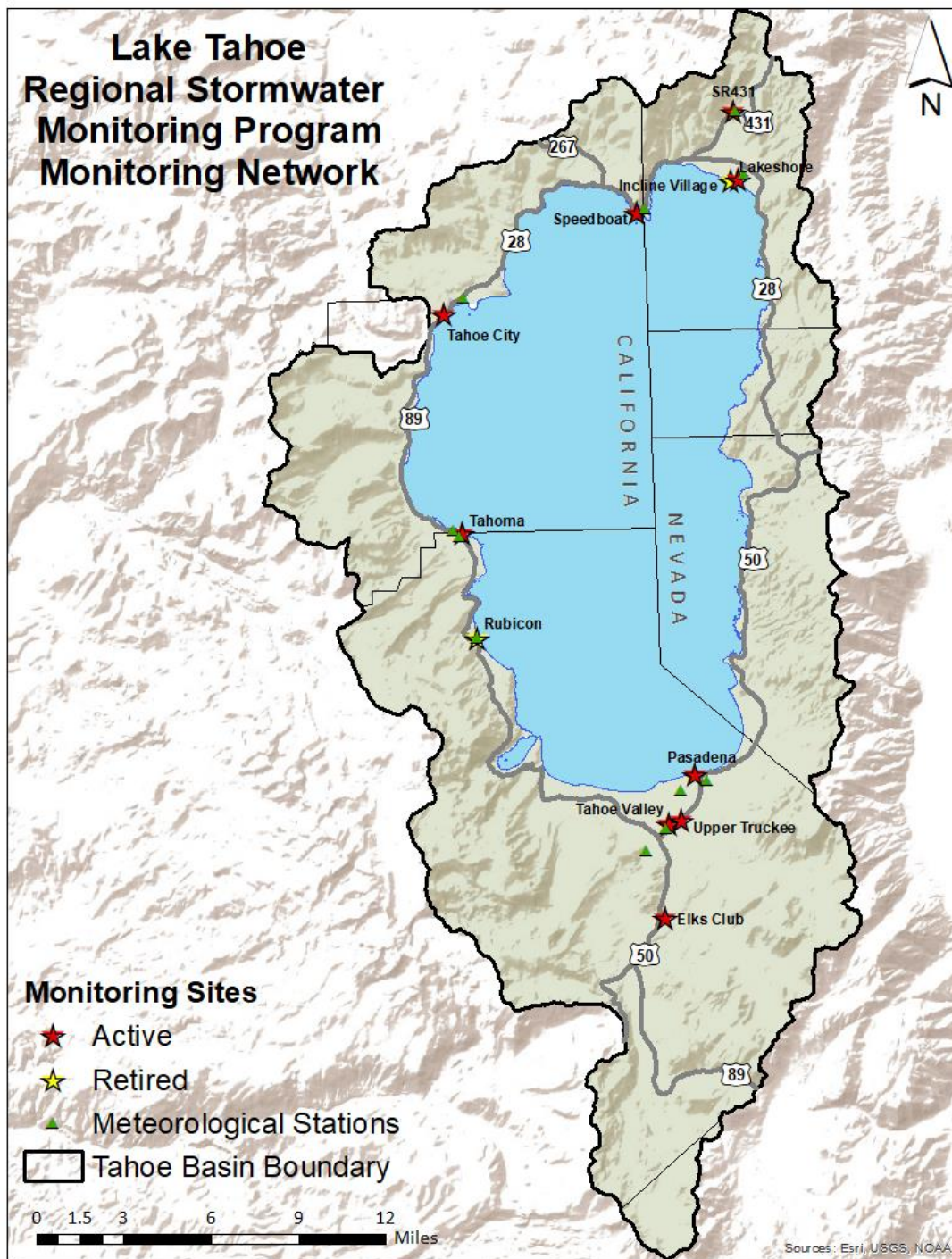
## RSWMP

- All stormwater from 7 jurisdictions runs into the lake.
- All 7 permits require stormwater monitoring.
- Collaboration results in efficiency
  - Reduced costs
  - Consistent data collection and analysis methods
  - Comparable data sets





# Lake Tahoe Regional Stormwater Monitoring Program Monitoring Network



## Stormwater Monitoring Locations

- 11 active monitoring locations
- 7 active meteorological stations



# Regional Stormwater Monitoring Program



## Data Collected

- Continuous flow
- Continuous turbidity
- Water quality samples during storm events
  - Total Nitrogen
  - Total Phosphorus
  - Total Suspended Sediment (TSS)
  - Particle Size Distribution (for FSP)
- Continuous precipitation
- Continuous temperature



# Regional Stormwater Monitoring Program



## Web Apps Handy tools for the field

Weather Log South Shore

Date \*  
Wednesday, December 18, 2019

Weather \*  
rain

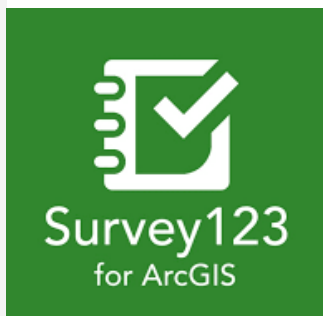
Storm Type  
What type of storm is it?  
no storm

North shore or south shore? \*  
North Shore

Location \*  
Where are you?  
Office

Staff name \*  
Andrea Buxton

Comments



LoggerLink  
by Campbell  
Scientific

Current	
TDock.Public	
[Timestamp] 12/18/19, 12:50:16 PM	
Record Number	38852
site_name	Tdock >
batt_volt	11.8105 >
flow_cfs	0 >
stage_ft	0 >
ISCO_CurrentBottle	0 >
ISCO_Tu	1.46 NTU >
Bypass_Lvl_ft	-0.00362861 feet >
EventSampeMasterOnOff	False >
EventSampleFlowInterval	2,000 cfs >
EventSampleMaxTimeInterval	360 >
flag_manualBottleCollect	False >



# Regional Stormwater Monitoring Program



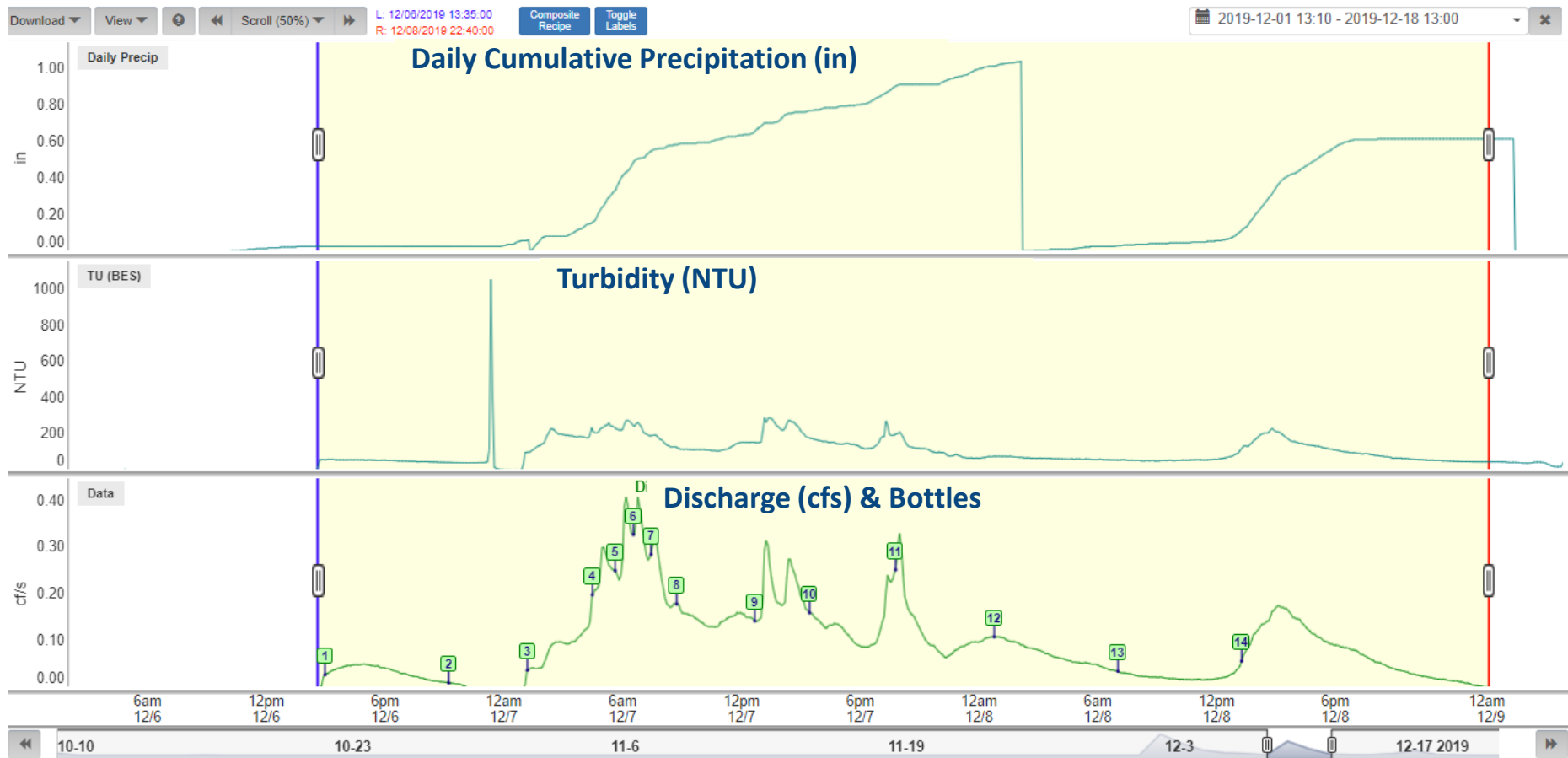
## Acuity Website for raw data and data tools

Tahoe DMS

Home Map Graphs Data Tools ▾ Settings ▾ Logout andrea

Tahoe City

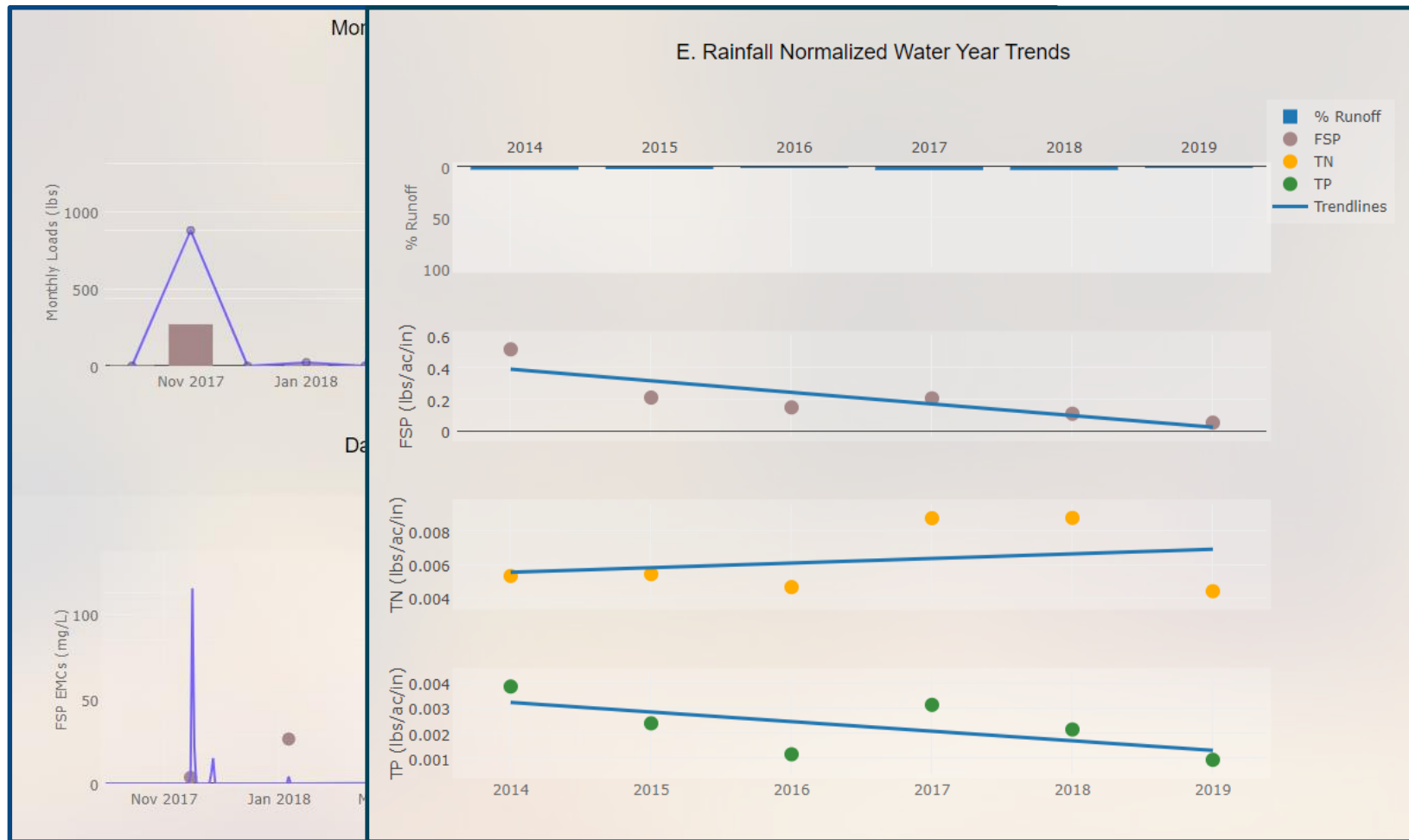
Timezone: PST



# Regional Stormwater Monitoring Program



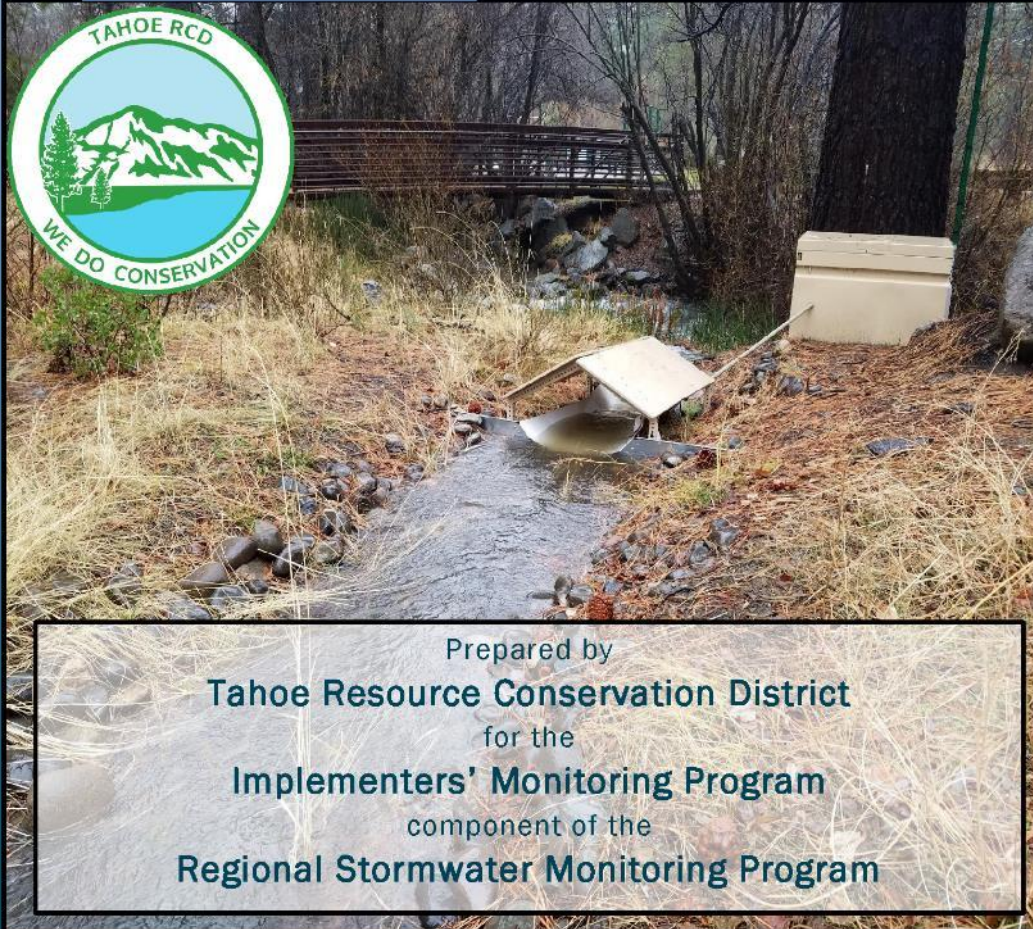
## DMS Status and trends reporting





# Annual Stormwater Monitoring Report

## Water Year 2019



Submitted to the  
Lahontan Regional Water Quality Control Board and the  
Nevada Division of Environmental Protection  
**March 15, 2020**



## Annual Stormwater Monitoring Report

Submitted to:

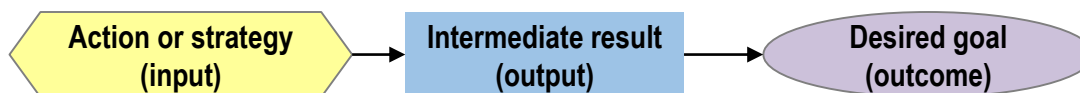
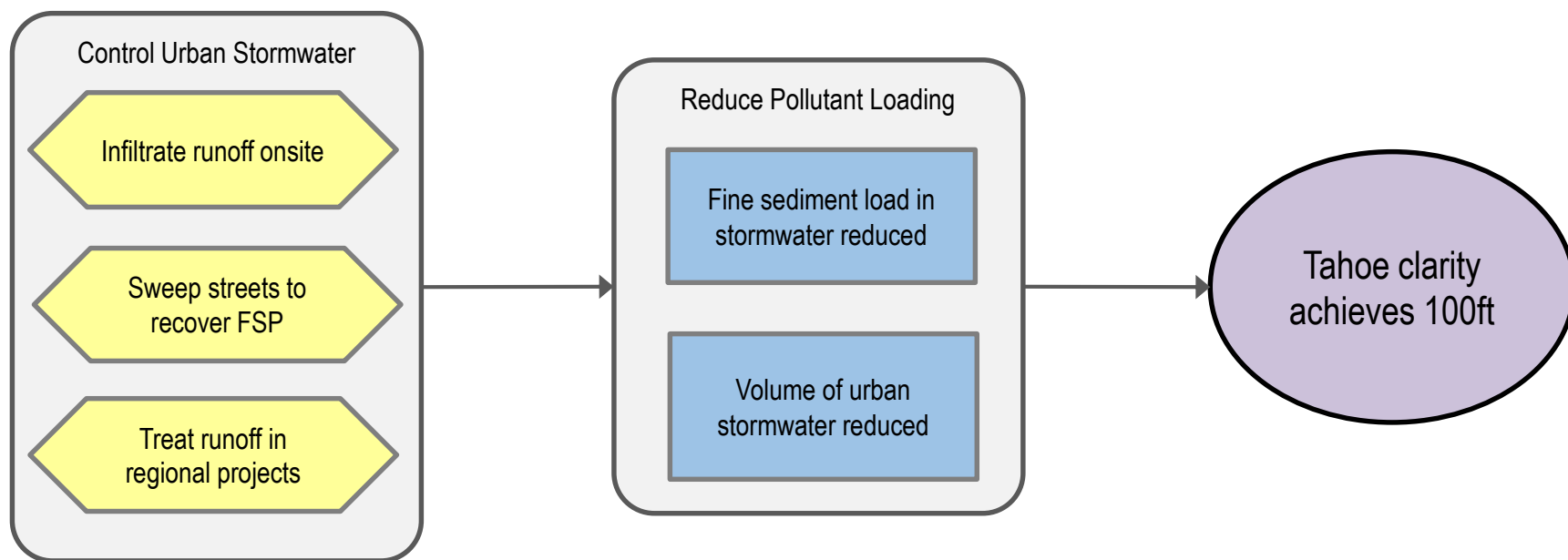
- Lahontan Regional Water Quality Control Board (CA)
- Nevada Division of Environmental Protection (NV)

[tahoercd.org](http://tahoercd.org)

# Regional Stormwater Monitoring Program



## Stormwater Program Results Chain

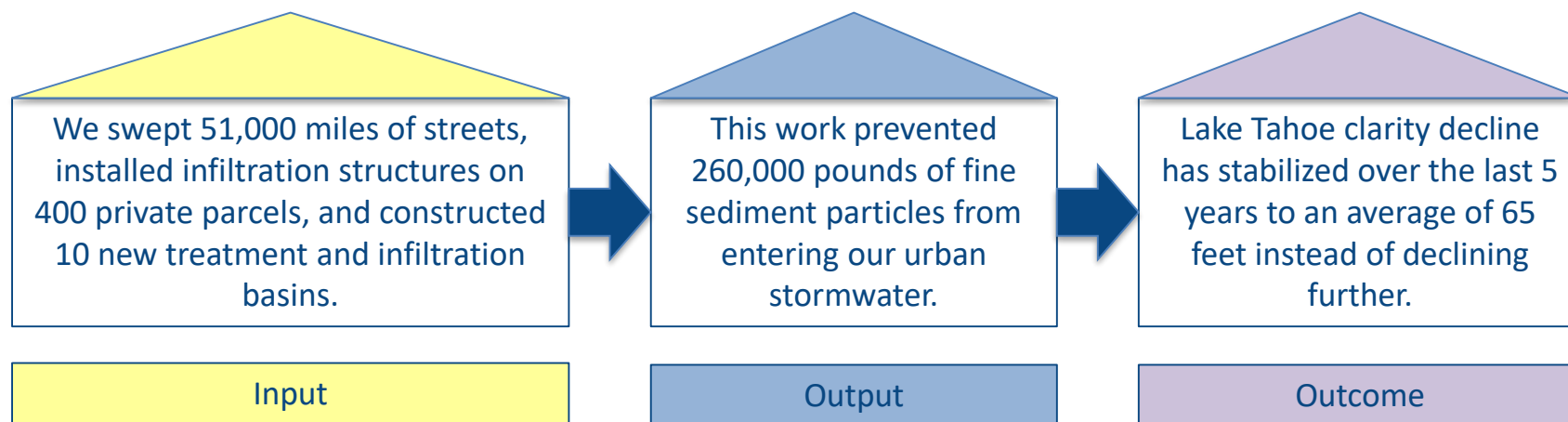




# Regional Stormwater Monitoring Program



## High Level Program Summary



# Regional Stormwater Monitoring Program



## Outreach and Education

- Pipekeepers Club
- Annual Tahoe Summit
- Earth Day
- K-12 Education
- UCD Science Expo







# Q & A



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