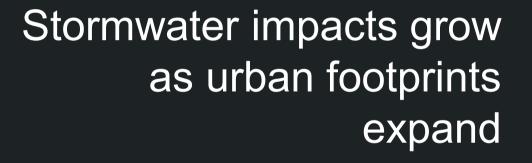
# The Digital Transformation of Stormwater Programs

How To Be Ready for Changes Ahead

**25DNATURE** 

Michelle Tanner Senior Scientist + Customer Success



#### **Outdated Infrastructure**

Illegal Dumping

**Increased Flooding** 

## Stormwater Information Management is Broken

\$

High Cost Compliance requirements, reporting and pollution mitigation costs continue to grow..

品

Organizational Silos

Data, teams and workflows are siloed, ultimately hindering effectiveness.

#### **Resource Intensive**

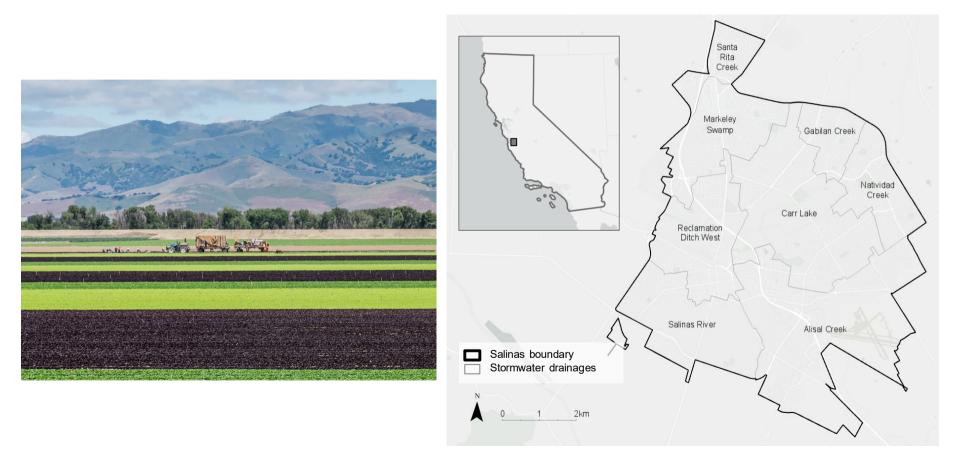
Municipalities require significant resources to compile annual reports.

Compliance uncertainty with misalignment between expectation and effort.

Program effectiveness?

Is my stormwater program curbing pollution?

Ineffective implementation of the **Clean Water Act** has led to the continued degradation of US waterways



#### 2014 EPA audit found program ineffective



Permit responsibilities scattered among multiple departments



Limited use of technology



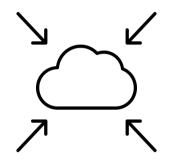
Unimplemented plans – reports sat on the shelf



2,000+ pages and 1,000+ staff hours

"Our annual report is where data goes to die"

Salinas Stormwater Manager



Centralize Program Data



Mobile Inspection

Forms



Geographic Context

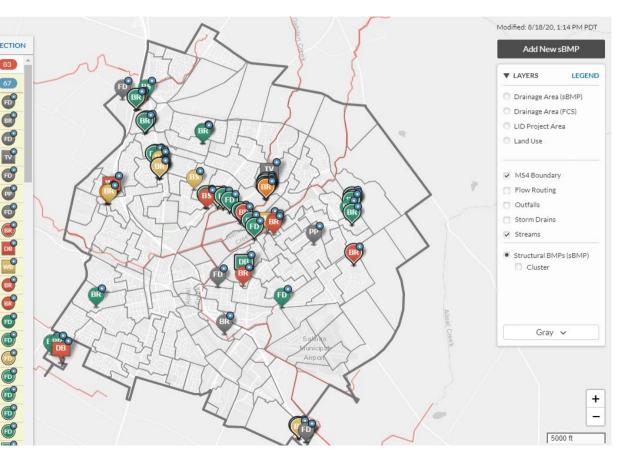


Measure Program Performance

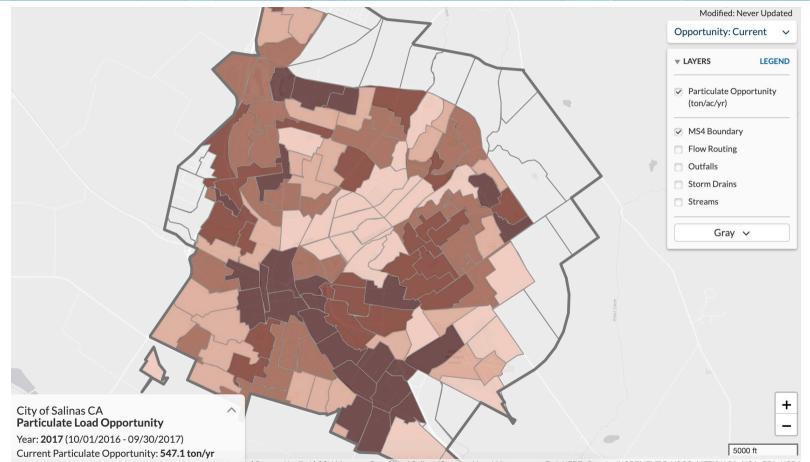
#### Centralized



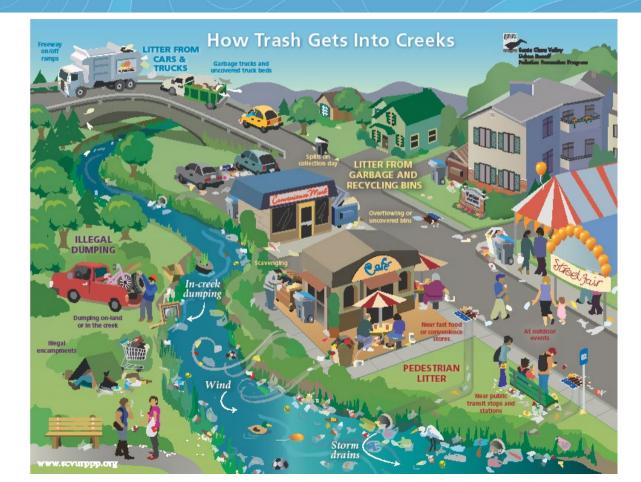
City of Salinas CA			
EXPAND ALL		CLEAR SELECT	
•	Maintenance Due	83	
•	Assessments Due	67	
	PCBMP13-0015-FD	F	
	CPCBMP16-0002-BR1	BR	
	PCBMP13-0024-FD	F	
	PCBMP17-0008-TV	Т	
	PCBMP13-0015-FD1	F	
	PCBMP14-0263-PP	P	
	PCBMP13-0036-FD	F	
	CPCBMP00-0007-BR	BF	
	CPCBMP00-0026-DB	DE	
	CPCBMP00-0003-WB	w	
	CPCBMP13-0003-BR1	BF	
	CPCBMP13-0003-BR2	BF	
	CPCBMP14-0001-FD	F	
	CPCBMP00-0005-FD1	F	
	CPCBMP00-0005-FD6	C	
	CPCBMP00-0005-FD5	F	
	CPCBMP00-0005-FD4	F	
	CPCBMP00-0005-FD2	F	
	CPCBMP00-0005-FD3	F	



#### Automated



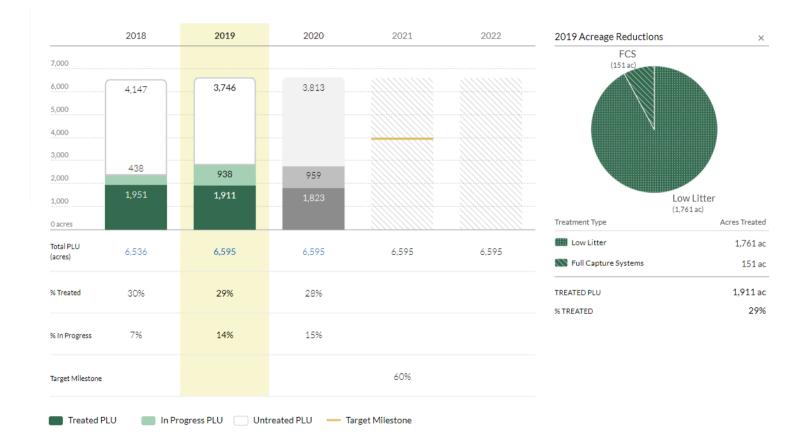
at | Powered by Esri | CSU Monterey Bay, City of Salinas, Bureau of Land Management, Esri, HERE, Garmin, INCREMENT P, USGS, METI/NASA, NGA, EPA, USDA



#### Automated

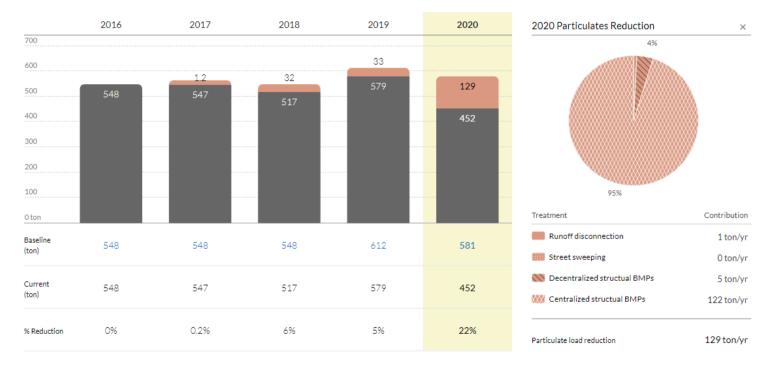


## Track Program Progress



## Track Program Progress

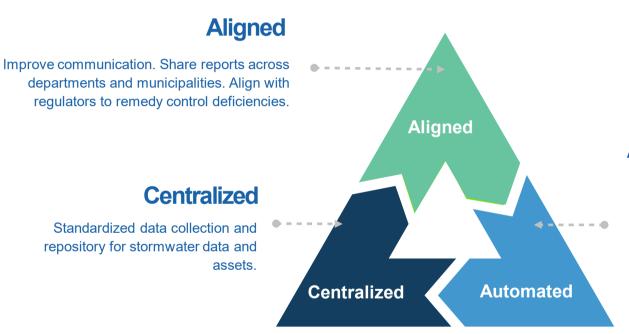
Aligned



🔲 Current 🛛 🔲 🖡

Reduction

## Digital Transformation



#### **Automated**

Leveraging existing GIS data.

Mobile and rapid assessment modules simplify field inspections and reporting.

Generate annual compliance reports with the push of a button.

## Stormwater as a solution



- **1. Examine solution trade-offs.**
- **2.** Be open-minded to change.
- 3. Operationalize institutional knowledge.
- 4. Going digital minimizes risk.



## **Thank You!**

