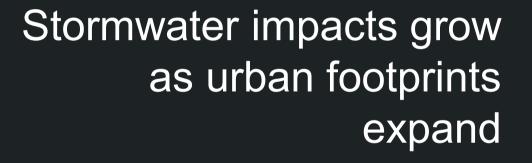
The Digital Transformation of Stormwater Programs

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Outdated Infrastructure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

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

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Organizational Silos

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

Resource Intensive

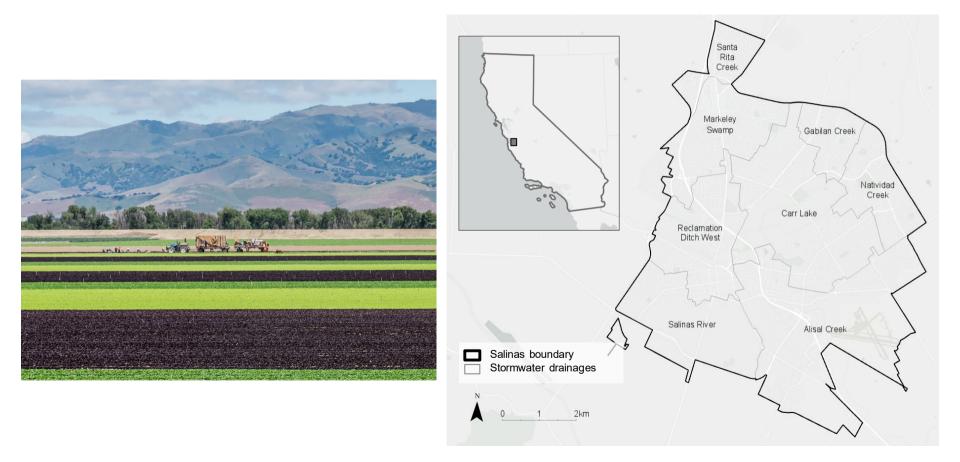
Municipalities require significant resources to compile annual reports.

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



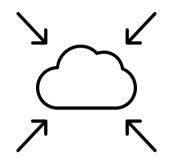
Unimplemented plans – reports sat on the shelf



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

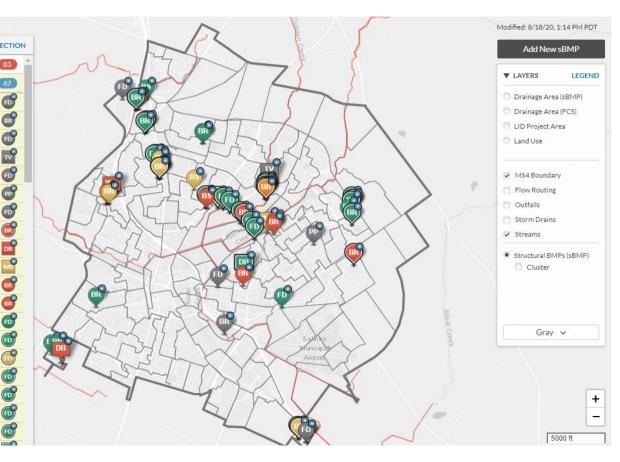


Measure Program Performance

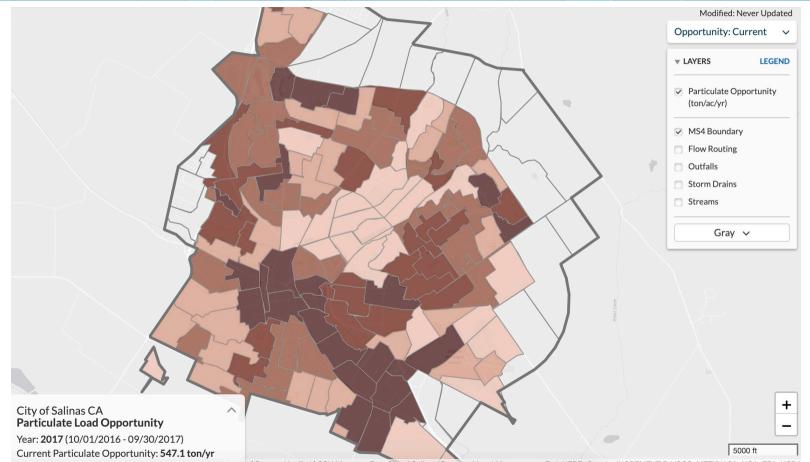
Centralized



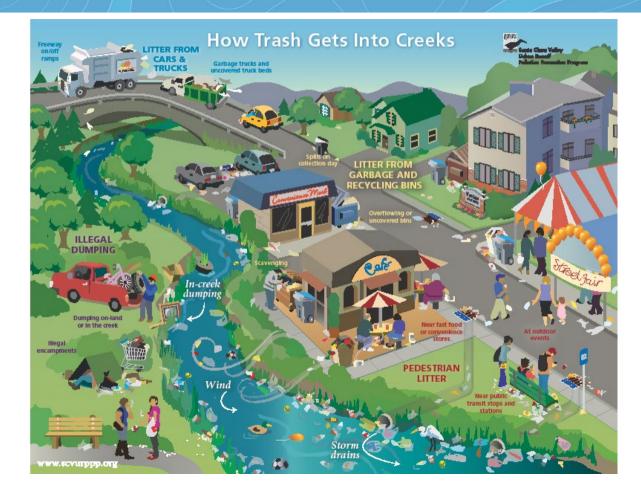
City of Salinas CA			
EXPAND ALL		CLEAR SELECT	
•	Maintenance Due	83	
•	Assessments Due	67	
	PCBMP13-0015-FD	F	
	CPCBMP16-0002-BR1	BR	
	PCBMP13-0024-FD	F	
	PCBMP17-0008-TV	Т	
	PCBMP13-0015-FD1	F	
	PCBMP14-0263-PP	P	
	PCBMP13-0036-FD	F	
	CPCBMP00-0007-BR	BF	
	CPCBMP00-0026-DB	DE	
	CPCBMP00-0003-WB	w	
	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



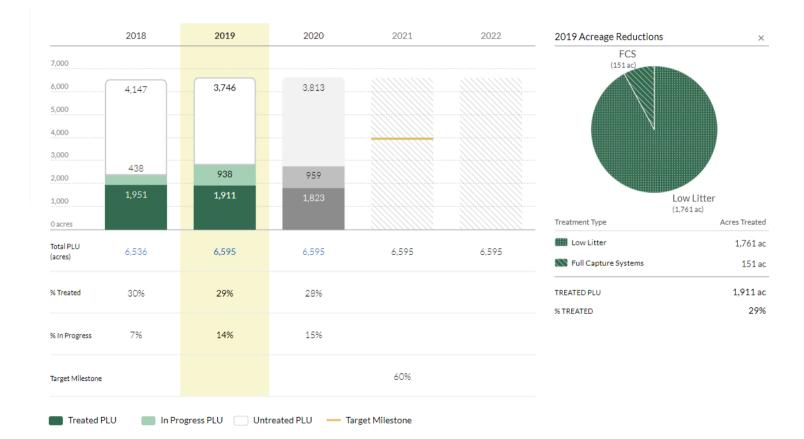
at | Powered by Esri | CSU Monterey Bay, City of Salinas, Bureau of Land Management, Esri, HERE, Garmin, INCREMENT P, USGS, METI/NASA, NGA, EPA, USDA



Automated

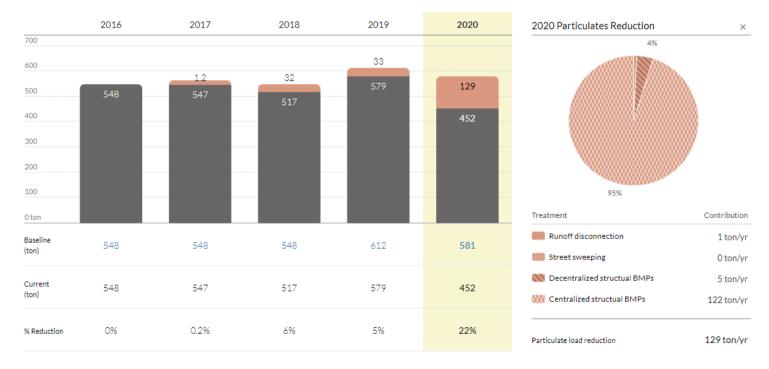


Track Program Progress



Track Program Progress

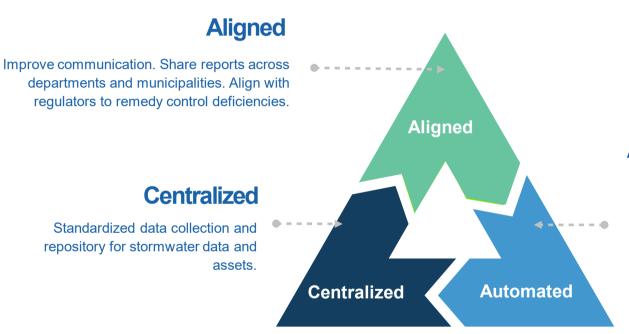
Aligned



🔲 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!

