



Why & How We Inventory Stormwater Infrastructure

Why We Inventory Stormwater Infrastructure

Asset Management

- Lower long term costs for infrastructure preservation
- Improve performance and service to customers
- Improve credibility and accountability for decisions

GASB34 (Depreciation v. Modified Approach)

CIP Planning

Proactive Maintenance

Methodology & History

Field crews: seasonal internships (4 in 09)

& periodic maintenance crews

Utilization of Asbuilt drawings

General approach by year:

- 2008 – fill in gaps (complete map)
- 2009 – gps / field verify all areas
- 2010 – finish gps & perform QC (random point sampling & street level scan, accuracy statistics)

Stormwater Inventory & Geodatabase

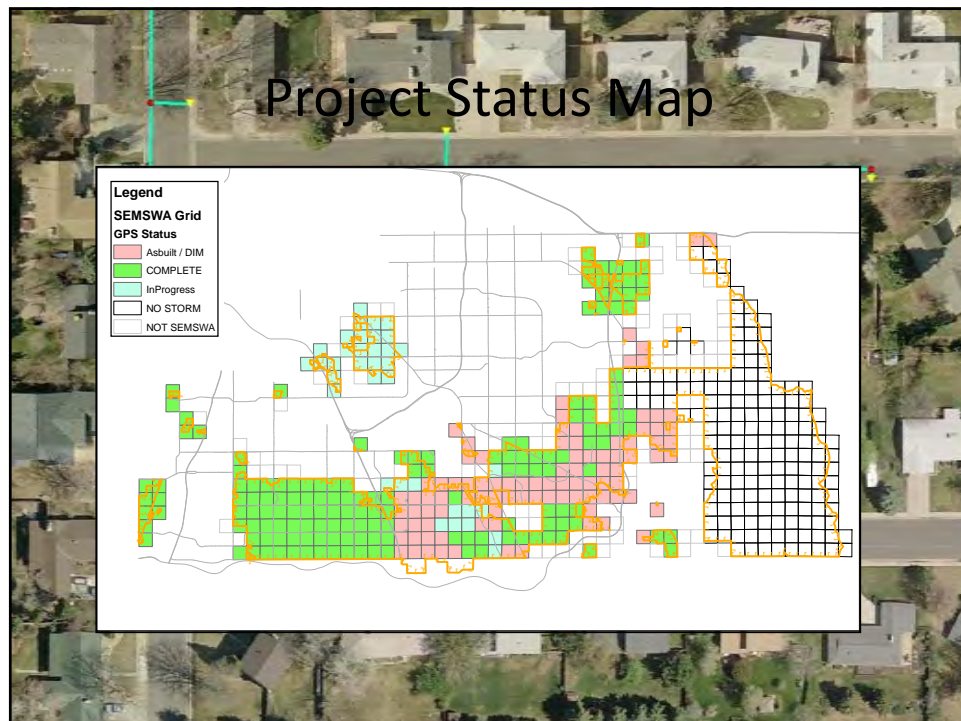
Geodatabase

Layers

Tables

- SEMSWAGIS.gdb
 - Boundaries
 - Environment
 - LandCover
 - Projects
 - StormUtilities
 - Bridges_Point
 - Channels
 - ControlStructures_Area
 - ControlStructures_Point
 - Culverts_Line
 - Culverts_Point
 - Fittings
 - Headwalls_Line
 - Headwalls_Point
 - Inlets
 - Manholes
 - MarkerPoints
 - Outfalls
 - Overpass
 - Pipe_FL
 - PipeOut
 - Pipes
 - Point_gen
 - Ponds_Out
 - Ponds_Area
 - Ponds_Point
 - StormAnomalies

TYPE	CONDITION	COMMENTS	SOURCE	ASBUILT	INVERT DEPTH	INLET LENGTH	COMBO TYPE	TYPE DESCRIP
TYPE 0			Surveyed with Handheld GPS		12.5	0		
TYPE 0			Surveyed with Handheld GPS		7	0		
TYPE 0		unknown inv	Surveyed with Handheld GPS		0	0		
TYPE 13			Surveyed with Handheld GPS		2.5	0		
TYPE 0			Surveyed with Handheld GPS		4.5	0		
TYPE 0			Surveyed with Handheld GPS		5	0		
TYPE 0			Surveyed with Handheld GPS		2.5	0		
TYPE 0			Surveyed with Handheld GPS		4.5	0		
TYPE 0		couldn't get inv open	Surveyed with Handheld GPS		0	0		
TYPE 0			Surveyed with Handheld GPS		2	0		
TYPE 0		blocked by ice	Surveyed with Handheld GPS		0	0		
TYPE 0			Surveyed with Handheld GPS		0	0		
TYPE 13			Surveyed with Handheld GPS		13	0		Grated
TYPE 0		Grate has not yet been installed	Surveyed with Handheld GPS		5	0		Grated
TYPE 0		Grate has not yet been installed	Surveyed with Handheld GPS		6	0		Grated
TYPE 0		Grate has not yet been installed	Surveyed with Handheld GPS		6.5	0		Grated
TYPE 0		Drops into box culvert	Surveyed with Handheld GPS		0	0		
TYPE 0		Drops into box culvert	Surveyed with Handheld GPS		0	0		
TYPE 13			Surveyed with Handheld GPS		2.5	0		Single
TYPE 13			Surveyed with Handheld GPS		3.5	0		Single
TYPE 0		unknown inv	Surveyed with Handheld GPS		0	0		
TYPE 0			Surveyed with Handheld GPS		4.5	0		
TYPE 0			Surveyed with Handheld GPS		6.3	0		



Preliminary Stormwater Inventory & Condition Rating Figures (Pipes)

	Total	Length	Good	Fair	Poor
Corrugated Metal Pipe (CMP)	659	66,623 Ft.	70	568	21
Reinforced Concrete Pipe (RCP)	8406	935,065 Ft.	7255	1100	51

Preliminary Stormwater Inventory & Condition Rating Figures (Inlets)

	Total	Good	Fair	Poor
Type R	2535	1607	858	70
R-13 Combo	659	359	245	55
Total Inlets	6730	4865	1686	179

