


Catch Basin Cleaning and Assessment Program(CBAP)

Introduction and Implementation

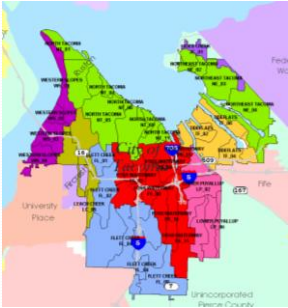


NPDES Permit Requirements

- City of Tacoma's Phase I permit
 - S5.C.9.d.i.(1) Maintenance of Catch Basins Owned or Operated by the Permittee
 - "...The annual catch basin inspection schedule may be changed as appropriate to meet the maintenance standards based on maintenance records of double the length of time of the proposed inspection frequency".
 - S5.C.9.d.i.(2)
 - "...Annual inspections may be conducted on a "circuit basis" whereby 25% of catch basins and inlets within each circuit are inspected to identify maintenance needs..."

Tacoma Stats

- Phase 1 NPDES community
- Within Pierce County
- 9 Storm water basins
 - 68 Sub basins
- Over 19500 catch basins
- Approx. 250 catch basins per sub-basin
- 488 miles of pipe



History

- GPS Sweeper program
 - Inaccurate
 - Not in auditable
 - Not in compliance
- Paper records
 - Slow
 - Inaccurate
 - Unable to track trends
- Changes
 - January 1, 2014
 - 6 month development
 - 3 months work
 - 2 months pilot
 - 1 month pilot

Goals

- Assessment
 - Quick
 - Easy
 - To the point
- Data
 - KPI's
 - Easy compliance
 - Live
 - Sustainable
 - Find trends
- GIS
 - Live
 - Easy to follow

Assessment Goals

- Minimum Goal Quantity
 - 25% of catch basins in all sub basins
 - Outfalls in Foss
- Desired Goals
 - Acquire data set
 - Update GIS
 - Find trends
 - cleaning frequency
 - Source Control issues

Cleaning Goals

- Minimum goals
 - 33% of basins in all sub-basins
 - 6 month basins
 - 150 catch basins a week
 - 7800 basins a year
 - Clean all basins in under 3 years
- Desired goals
 - Find trends

Data Goals

- Data
 - KPI's
 - Easy compliance
 - Live
 - Sustainable
 - Find trends

Data Goals(KPI's)

By Count

Basin Totals to Date

View percentages or counts

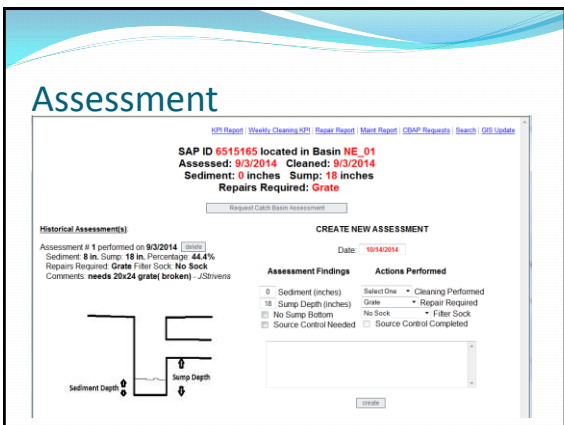
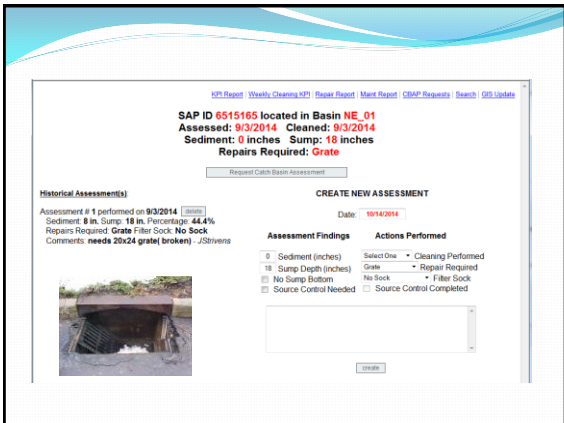
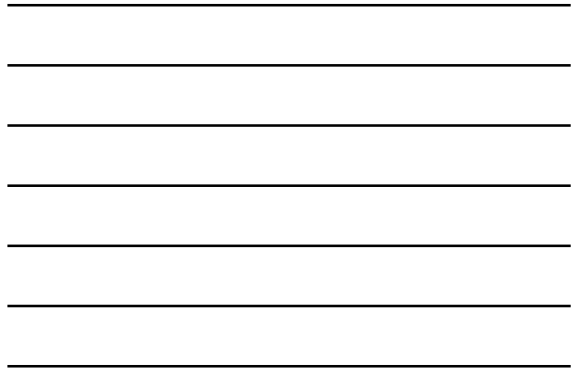
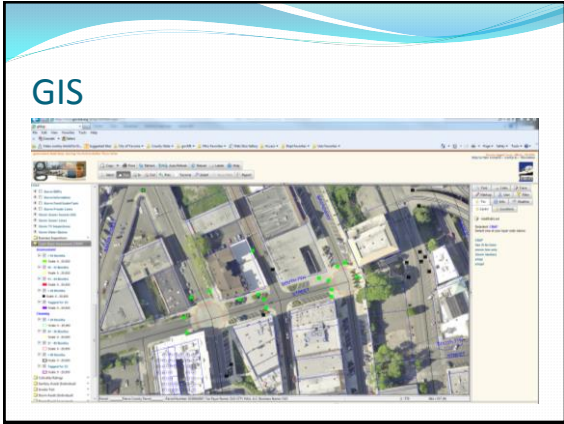
Basin	Total CIBs	Assessment			Cleaning			Source Control	Year to Date	
		Green	Yellow	Red	Green	Yellow	Red		Assessed	Removed
FL_01	334	130	0	0	222	198	0	0	107	100
FL_02	370	78	0	0	292	74	0	0	76	74
FL_03	166	108	0	0	58	58	0	0	90	94
FL_04	488	178	0	0	310	100	0	0	176	160
FL_05	463	100	0	0	363	140	0	0	14	14

By Percentage

FL_01	334	39.2%	0.0%	0.0%	65.9%	59.6%	0.0%	0.0%	32.1%	30.0%
FL_02	370	21.1%	0.0%	0.0%	78.9%	20.0%	0.0%	0.0%	20.5%	20.0%
FL_03	166	64.5%	0.0%	0.0%	34.9%	34.9%	0.0%	0.0%	54.2%	57.1%
FL_04	488	36.5%	0.0%	0.0%	63.5%	20.5%	0.0%	0.0%	36.1%	32.8%
FL_05	463	21.6%	0.0%	0.0%	78.4%	30.2%	0.0%	0.0%	3.0%	3.0%
Total	1808	38.9%	0.0%	0.1%	63.3%	38.0%	0.0%	0.0%	33.3%	33.9%

By Time Frame

38	9/29/2014	10/2/2014	151	20/21
39	10/7/2014	10/10/2014	58	11/14
40	10/13/2014	10/14/2014	77	13/83
Grand Totals			6610	831/79



Lessons Learned

- Inputs/Outputs
- Work Flow
- Organization
- Field Crews
 - Pilot
 - Complacent vs innovation
 - Ownership
- Integration
 - Taps
 - GIS updates

The Future

- Manholes
- GIS error tracking
- Pictures
- Structure/Lid info
- Connect with other DB's
- ESRI
- Tablets/APPS

The screenshot shows a web form titled "CREATE NEW ASSESSMENT" with a date field set to "11/17/2014". It is divided into three main sections: "Surface", "Structure", and "Actions".

Surface	Structure	Actions
<input type="checkbox"/> Cast Iron <input type="checkbox"/> Asphalt <input type="checkbox"/> No Sock <input type="checkbox"/> Concrete <input type="checkbox"/> (Lid) W/L (inches)	<input type="checkbox"/> 2 Sediment (inches) <input type="checkbox"/> 3 Spring Depth (inches) <input type="checkbox"/> No Stamp Bottom <input type="checkbox"/> Structure - Structure Type <input type="checkbox"/> Structure W/L (inches) <input type="checkbox"/> Inlets - Inlet Type	<input type="checkbox"/> Source Control Needed <input type="checkbox"/> Source Control Completed <input type="checkbox"/> Check One - Cleaning <input type="checkbox"/> No Repairs <input type="checkbox"/> Lid Repair <input type="checkbox"/> Structure Repair

Below the form fields is a large empty text area and a "Submit" button.

Questions/Tour

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