

LCA Infrastructure Stability Goal

SUBURBAN DIVISION FACILITIES 2017 ASSET MANAGEMENT
UPGRADE PROJECT

FINAL COMPLETION PROJECT RECAP

ASSET MANAGEMENT

Effective Asset Management is:

*An integrated set of processes to **minimize the life-cycle costs** of owning, operating and maintaining assets, at an acceptable level of risk, while **continuously delivering established levels of service***

Field Investigation Activities

- Visited 32 sites
- Captured notes on templates
- Assessed by Discipline – Structural, Electrical, HVAC
- Documented conditions with photos
- Performed by D'Huy Engineering, assisted by LCA operations staff



FACILITY RISK TABULATION: BEFORE UPGRADES

Building	Condition Assessment Rating 1 to 5 (5 is worst)			Consequence Rating 1 to 3 (3 is worst)	Safety/ Compliance Issue		Risk Score				Facility	OPCC
	Str.	Mech.	Elect.		Str/ Mech	Elect.	Str.	Mec.	Elect.	Overall (Max 45)		
WL4	3	4	5	3		XX	9	12	15	36	\$	95,000
WL6	3	4	5	3		XX	9	12	15	36	\$	54,000
NL15-16	5	2	5	3	X	XX	15	6	15	36	\$	113,000
Bev. Hills	3	3	4	3	X	XX	9	9	12	30	\$	73,000
Buss Ac 5130 Laurie Ln	3	3	4	3		XX	9	9	12	30	\$	38,000
WL13	4	2	4	3		XX	12	6	12	30	\$	45,000
Buss Ac 5086 Gary Dr	2	3	4	3		XX	6	9	12	27	\$	37,000
PS Clear View Farms	2	2	5	3		XX	6	6	15	27	\$	33,000
WL10	2	2	5	3		XX	6	6	15	27	\$	53,000
WL11	2	2	5	3		XX	6	6	15	27	\$	97,000
WL16	2	2	5	3		XX	6	6	15	27	\$	36,000
NL19	3	4	5	2		XX	6	8	10	24	\$	23,000
WWTP Lynn Twp	4	5	3	2	X	XX	8	10	6	24	\$	360,000
MS2	3	3	4	2		XX	6	6	8	20	\$	30,000
MS3	3	3	4	2		XX	6	6	8	20	\$	31,000
MS4	3	2	5	2		XX	6	4	10	20	\$	48,000
MS5	3	3	4	2		XX	6	6	8	20	\$	26,000
NL1 (well)	5	2	3	2		XX	10	4	6	20	\$	140,000
NL11-12	3	2	5	2		X	6	4	10	20	\$	49,000
WWTP Heidelberg Hts	2	3	5	2		X	4	6	10	20	\$	70,000
MS1	2	3	4	2		XX	4	6	8	18	\$	31,000
NL17-18	2	2	5	2		XX	4	4	10	18	\$	39,000
SCRPS	3	5	1	2		X	6	10	2	18	\$	216,000
WL5	2	1	3	3		X	6	3	9	18	\$	15,000
Schnecksville North BS	2	2	4	2		X	4	4	8	16	\$	84,000
WL17	3	2	3	2		XX	6	4	6	16	\$	69,000
WL8	4	1	3	2		X	8	2	6	16	\$	48,000
WL18-19	3	3	1	2		X	6	6	2	14	\$	37,000
WL1	2	1	4	2		XX	4	2	8	14	\$	34,000
WL7	4	4	4	1		XX	4	4	4	12	\$	84,000
WL9	2	2	2	2		X	4	4	4	12	\$	6,000
ASPS Arcadia West	2	1	1	1		X	2	1	1	4	\$	12,000
TOTAL OPCC FOR ALL FACILITIES											\$	2,126,000
Note for electrical safety/compliance issues:												
X denotes required improvements can be performed with in-house resources						denotes no redundancy available						
XX denotes external contractor required for electrical repairs												

FACILITY RISK TABULATION: AFTER UPGRADES

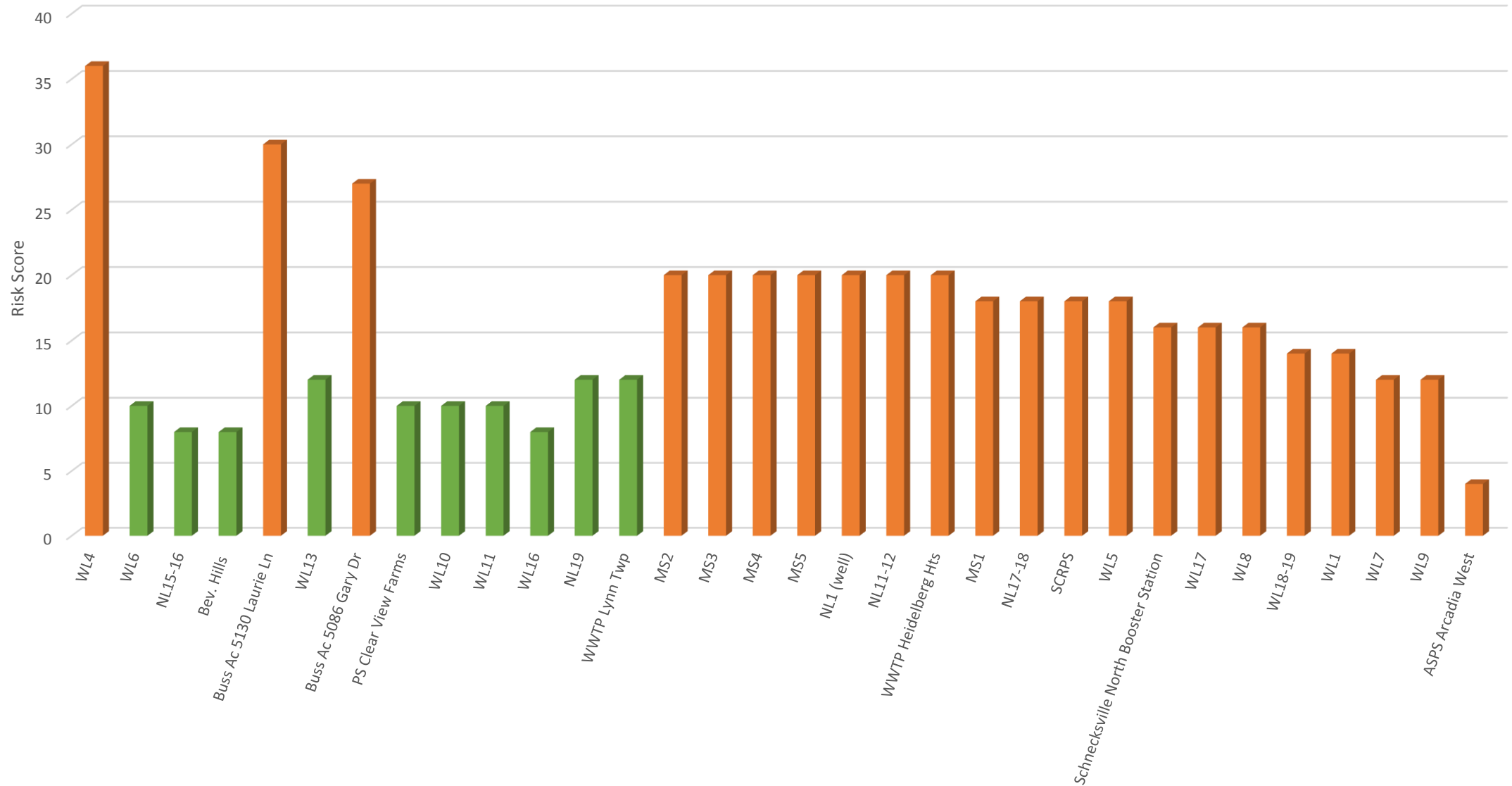
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ASPS Arcadia West	2	1	1	1		X	2	1	1	4	\$ 12,000
TOTAL OPCC FOR ALL FACILITIES											\$ 2,126,000
Note for electrical safety/compliance issues:											
X denotes required improvements can be performed with in-house resources						denotes upgraded facilities					
XX denotes external contractor required for electrical repairs											

FACILITY RISK GRAPH: BEFORE UPGRADES



FACILITY RISK GRAPH: AFTER UPGRADES

Post Construction Project Risk Scoring





BEFORE
UPGRADES

AFTER
UPGRADES

Beverly Hills





NL15/16



BEFORE UPGRADES

AFTER UPGRADES



BEFORE
UPGRADES

AFTER
UPGRADES

WL 10





BEFORE
UPGRADES



WL 16



AFTER
UPGRADES





BEFORE
UPGRADES

AFTER
UPGRADES

Clear View Farms



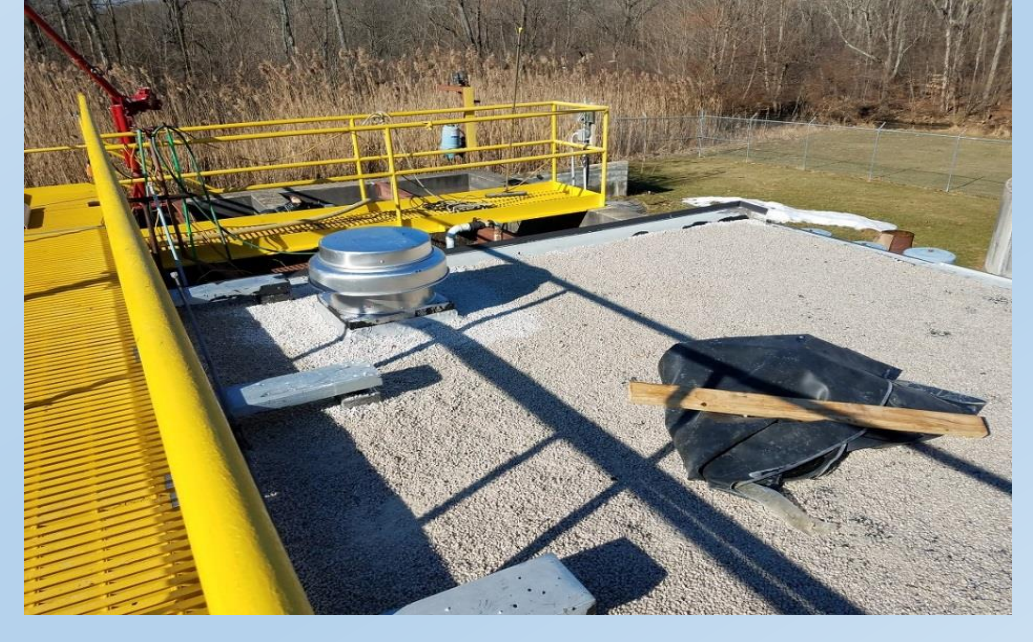
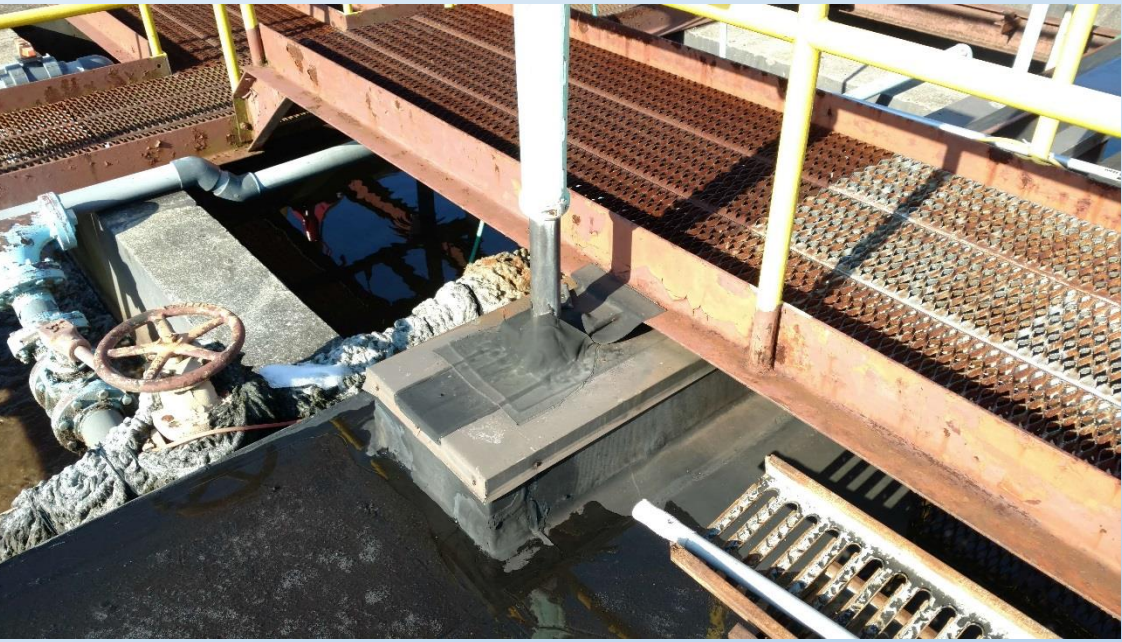
Lynn Twp WWTP



BEFORE UPGRADES



AFTER UPGRADES



WL-6



NL-15/16



Electrical Upgrades

AFTER UPGRADES

NL-19



WL-16



WL-16



SIPHON CHAMBERS - before



SIPHON CHAMBERS – after



Questions?

Next Phase: 2018 Suburban Division Mechanical Asset Management Upgrade Project