



Boston Scientific Water Assessment

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UNIVERSITY OF MINNESOTA
Driven to DiscoverSM

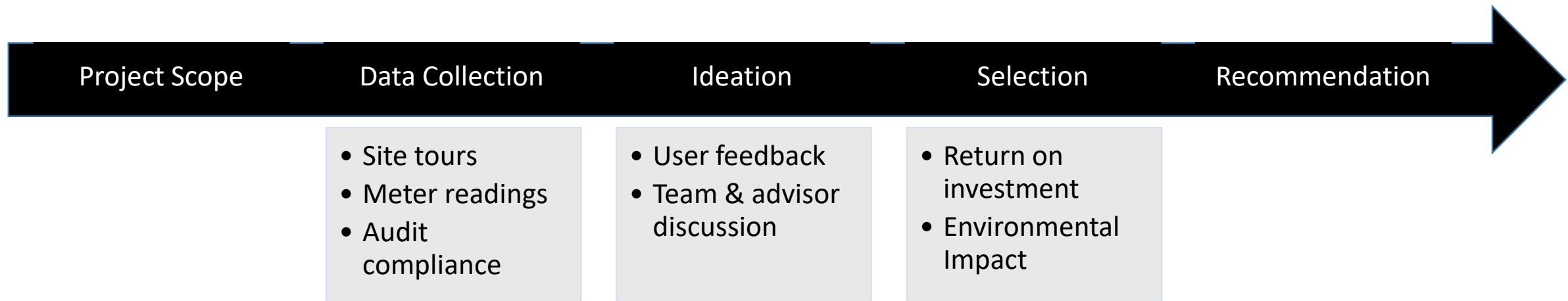
Company Background – Maple Grove Site

- Interventional cardiology medical manufacturer
 - NAICS Code: 339112, Surgical & Medical Instrument Manufacturing
 - Stents, catheters, Watchman
- 4,500 employees, 24/7 operation
- ISO14001 Environmental Management Service Program



**Boston
Scientific**

Approach – Water Assessment

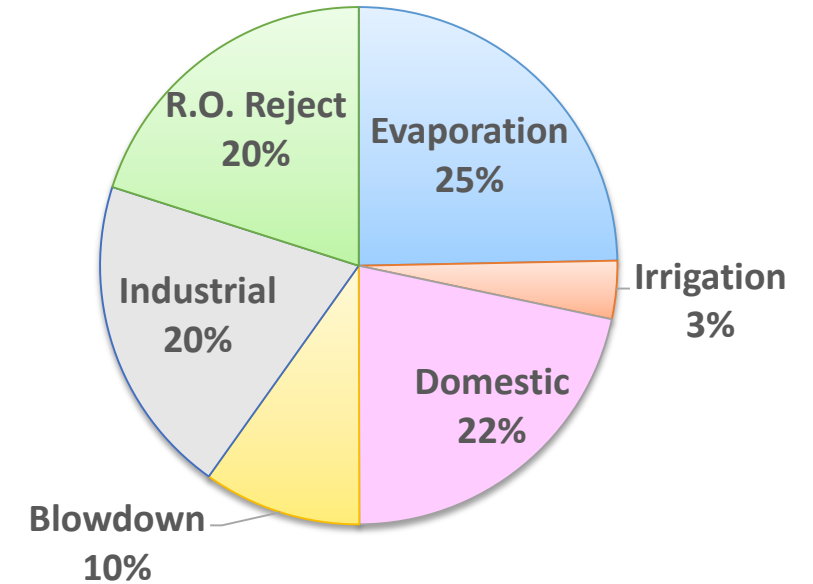


Water Balance

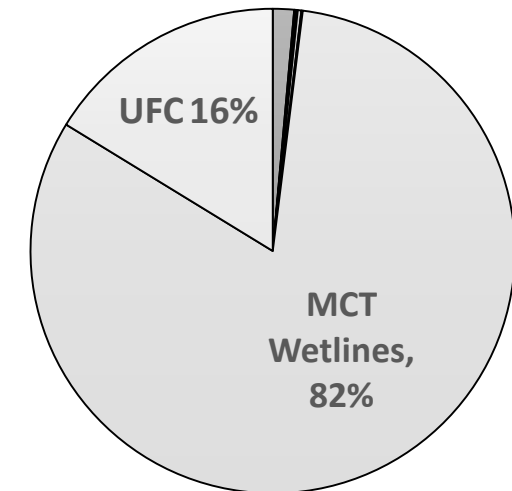
- 40 million gallons used per year
- Industrial wastewater 99% metered

➤ Where are possible savings?

Water Use Distribution

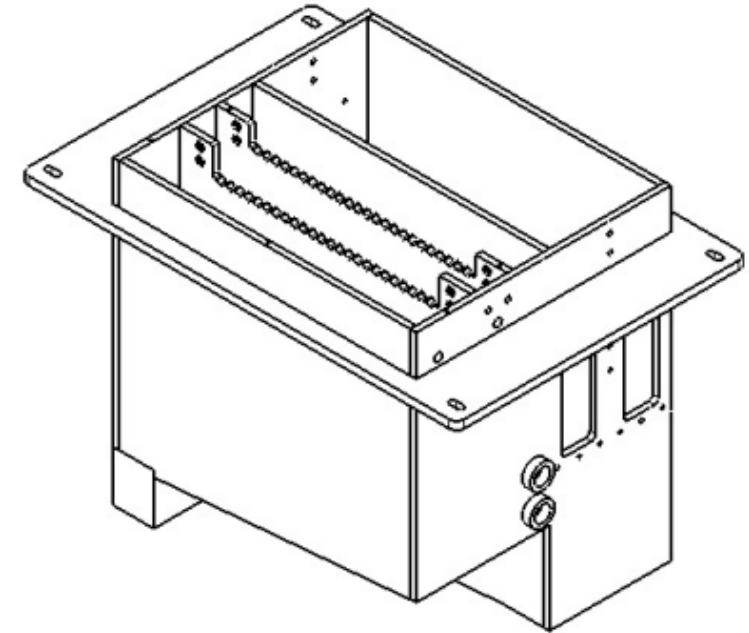


Industrial Wastewater Distribution



Metal Etch Tank Configuration Change

- 265,000 racks/year
- Change
 - 1 rack/dump, before
 - 5 racks/dump, after
- Savings
 - 3,816,000 gal/year
 - \$14,800/year
 - \$99,500 Sewer Availability Charge (SAC)
- Reduces wastewater treatment system strain



Summary of Solutions

Recommendation	Annual reduction	Total cost	Annual savings	Payback period	Status
<i>Reduce metal etch tank dump frequency</i>	3,816,000 gpy	\$0	\$14,800 \$99,500 SAC	Immediate	Implemented 7/8/19
<i>Add faucet aerators</i>	176,500 gpy	\$65	\$700 \$4,600 SAC	1 month	Implemented 7/29/19
<i>Self-report evaporative losses to utility</i>	-	-	\$17,700	-	Investigating
<i>Reclaim building 2 water softener brine discharge</i>	96,300 lbs salt	\$3,600	\$8,300	5 months	Investigating
<i>Fix steam valve leak</i>	2000 therms	\$500	\$900	7 months	Investigating

Personal Benefits

- Working with a fantastic, encouraging, and creative team
- Growing confident with taking on new projects
- Prioritizing ideas and day-to-day tasks

