

**Showcasing Water Innovation  
IMAX  
Fall 2013 Monitoring Update**

---

**Monitoring Progress**

- Post-construction monitoring began in February 2013 at some monitoring stations.
- In early February flow and quality monitoring began at the control site (IX-1), Area 5 (IX-5: permeable pavement with Granular “O”), and Area 6 (IX-6: permeable pavement with ¾” Clear Stone).
- Flow monitoring started at Area 7 (IX-7: Permeable pavement with ¾” Clear Stone and Bentofix Liner) in early February
- Flow monitoring at Area’s 2, 3 and 4 (IX-2: Bioswale, IX-3: Bioswale + Jellyfish Filter and IX-4: Bioswale + Sorbtive Media) commenced in mid-March; water quality monitoring at these sites will begin soon.
- Water temperature is currently being monitored at all locales excluding Area 2 (IX-2). Area 2 will soon be equipped to monitor temperature.
- Conductivity is being monitored at the control site (IX-1).
- Precipitation and air temperature continue to be monitored at IMAX
- Water level loggers have been installed in the four monitoring wells and the five stilling wells. Samples were collected from stilling wells 3, 4, and 5 September for chloride and conductivity analysis.
- Groundwater samples were collected from the monitoring wells in April, and November.
- Since the final layer of asphalt has been applied, IMAX was re-surveyed to define post-construction catchment areas.
- A shallow and deep well configuration was installed in the bioswale of Areas 2, 3, and 4 to assess the depth of ponding water after rain events to compare with project design specifications.



**Fall 2013 – IMAX Permeable Pavement Parking Lot**

**Showcasing Water Innovation  
IMAX  
Fall 2013 Monitoring Update**

---



**Fall 2013** – IMAX Parking lot Bioswale

- **Landscaping** – Sod was applied to some sections of the IMAX site and others underwent hydroseeding and planting. The plants appear to be establishing well since planting.
- **Maintenance** – Site inspections have been completed four times so far to identify maintenance requirements and frequency. Since the site construction is now complete site inspections will take place monthly.
- **Water Levels** – Flows were observed from all stations during the largest rain event observed since monitoring equipment was installed (76 mm) with 5 days of nearly continuous rainfall.
- **Winter Monitoring** – Equipment will be removed from Area’s 5 and 6 for the winter months. Salt monitoring in the permeable pavement will be performed on Area 7 in the winter. Water level loggers in the shallow bioswale wells have been removed for the winter and will be replaced in the spring.

**Showcasing Water Innovation  
IMAX  
Fall 2013 Monitoring Update**

---

**Number of Sampling Events at each SWI Site**

Table 1 - Number of precipitation events sampled per monitoring site and the number remaining in the SWI commitment.

	<b>Elm</b>	<b>Lakeview</b>			<b>IMAX</b>
		Control	Swale	LID	Control
<b>Commitment</b>					
Surface Water	20	20	20	20	20
Groundwater	0	0	0	0	4
Soil	0	0	0	0	1
<b>Taken to Date</b>					
Surface Water	29	70	41	11	7
Groundwater	0	0	0	0	3
Soil	0	0	0	0	1
<b>Remaining</b>					
Surface Water	9	50	21	-9	-13
Groundwater					-1
Soil					0