Detecting wastewater tracers can help us identify areas affected by wastewater and to what extent in Southeastern Florida’s urban water systems.

RESULTS

- Higher concentrations of both Sucralose and Carbamazepine were detected further inland (highest latitude/longitude). As latitude decreased (towards coast), so did the concentrations of both compounds.

<table>
<thead>
<tr>
<th>Organic Contaminants</th>
<th>Uses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbamazepine</td>
<td>Treatment for epilepsy and bipolar disorder</td>
</tr>
<tr>
<td>Sucralose</td>
<td>Artificial Sweetener</td>
</tr>
</tbody>
</table>

Table 1: Target compounds and uses.

**DISCUSSION**

- Results show that anthropogenic pollution is affecting our urban water systems.
- Wastewater treatment plants as well as septic tanks are not doing an effective job in removing these compounds.
- This research can be applied to assess to what extent is Southeastern Florida’s surface water being influenced.

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