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Hidden Toilet Leaks

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1. Impact Design

Impact Statement - If I check my household for leaky toilets, and share my process and findings with others, I can drastically reduce wasted water across my community's infrastructure systems.

Community Alignment	
Group	Goal/Action
City of Kirkland	The Kirkland Sustainability Master Plan - Many municipal plans relate closely to the central goal of water conservation, including a section on water efficiency in buildings/infrastructure and a section on sustainable urban waterways and conservation in natural environment/ecosystems

Procedure - *Steps for implementation!*

1. Place 10-15 drops of food coloring in my toilet tank.
2. Wait 10 minutes without flushing.
3. Check if colored water shows up in the toilet bowl. If so, the toilet has a leak.
4. Flush after the experiment to avoid staining the tank.
5. Fix any leaks detected. The cause is often an old, faulty toilet flapper. Over time, this inexpensive rubber part decays, or minerals build up on it. Replace any decayed rubber flappers the house, or investigate other possible toilet issues such as leaks around the plunger ball

2. Impact Data Tracking - Quantify your impact!

The average household's leaks can account for more than [10,000 gallons of water](#) wasted every year, or the amount of water needed to wash 270 loads of laundry. As approximately [27%](#) of your water usage comes from toilet flushing, a leaky toilet can have a major impact on your bill.

My Household's Toilets: 4

Toilets w/ Leaks Detected: 1



My toilet



Guest room toilet



Sister's toilet



Parent's toilet — leak detected



Post test— leak fixed

Toilet leaks can waste up to [300 gallons](#) of water per day

If I fix my 1 toilet leak, I will save my family **109,500 gallons of water** per year (1 leak x 300 gallons per day x 365 days per year)

3. Impact Storytelling - Share your data with who needs to know! See more [tips](#)

Think on 4 scales of stakeholders... Family, School, Community, and Aligned Groups

Stakeholder	Interests	Approach
Family — Parents	Saving Money	<u>Math Calculations:</u> Show math on how much water, and hence money, was saved by fixing household toilet leaks.
Peers	Saving water	<u>Toilet Leaks Infographic:</u> I will design and share an infographic about the hidden dangers of toilet leaks.
Community — City Facebook Groups	Preventing home damages	<u>Toilet Leaks Video:</u> Capture a creative video about toilet leaks collection containers. How can you spot one? How can food coloring be used and what does it look like?
Aligned Groups — City Utilities	Water Conservation	<u>Presentation:</u> Tell a data-driven story to demonstrate my impact and seek guidance in involving a wider audience in checking for toilet leaks.

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