Let’s Play!
How playing games can promote water quality
GCSWCD Education Staff

- Responsible for stormwater education for the county.
- How best to accomplish this?
The Challenge

Need a way to engage all age ranges at events/festivals

Problems – only a few minutes with each person

Want to leave lasting message
Games attract crowds!

- We started with the wheel of chance with questions and small prizes...

- This attracted crowds, but by surveying, we discovered that people did not leave with any long term learning.
So, we researched how to engage while also promoting learning.

Lepper and Cordova, 1992 shows that students’ learning performance significantly improves with a story in context and a challenge to overcome (making it into a game).

A Stanford GSE Panel, 1993 suggests “Games are architectures for engagement”

IDEA! We needed to design games that will both teach and be entertaining with a very brief story that can be reduced to short soundbites.
First, we needed to address our specific goals.

What outcomes are we hoping to achieve?

This should be a simple, easily stated goal. We wanted to focus on one behavioral change, concept, or an individual action item for each game.

From there, we brainstormed types of games and storylines.
Considerations

We wanted to use a game that we don’t have to explain and we already know is fun like a relay race, and use that as a base for the rules.

Should the students play individually or in teams?

Will they compete against each other or just for a score?

If players are not competing against each other, we will need a storyline.
The Poopstacle Course

• Our first attempt at a game
• We want children (and their parents) to understand that they should pick up after their dog.
Lessons Learned

**Pros**
- Very easy to set up
- Low cost
- Children remember the game and want to repeat at subsequent event

**Cons**
- Needs a lot of space
- Only for younger children
Next steps – design for a wider demographic

The new game needs to be:

• Fun (engagement)
• Easy to play
• Appropriate for a booth event timeframe (less than 1 minute)
• Learning objectives integrated into gameplay

We needed to determine:

• Budget
• Can it be made in house or does it need to be outsourced?
Stormwater PLINKO

Focused on Multiple Pollutants
Why PLINKO?

- Well known game
- Easy to play
- Quick story about keeping pollutants out of river
- Any age can play
- Interchangeable target images/chips for different pollutants
Defend Your Drain

Storm Drain Education
Field Test Results

- Very popular game
- Any age can play
- Easy story – keep "pollution" out of your storm drain
- Had to experiment with “pollution” pucks to find best solution
- When refurbishing, we rounded interior corners so that puck didn’t get stuck
Toss Your Trash
Why it Works

• Everyone can play cornhole
• The game needs almost no explanation
• It can be very competitive so people come back to play
• Very inexpensive to create
• Custom game bags
Stormwater
Giant JENGA
Wide Range of Demographics

• Geared for older players
• Word/term on one side – definition on other
• Everyone that plays learns at least one stormwater related term
• Can be one turn or many per player
• Could be very inexpensive
• We will continue to work on new games for education and outreach
• We are working with other county departments to develop games for their programs
• We are happy to share any information / set up files with any district that would like to implement these games at no cost

For information or print files contact me via email: Lpilewski@greenvillecounty.org
Questions?