

Unanticipated Events

Facilitator, use your discretion in applying these to any of the land uses between round 1 & 2 and again between round 2 & 3. Some of the scenarios are more appropriate for certain land uses than others.

You may want to use an event on a land use that has not made a significant contribution to reducing the load, or perhaps even on one that seems fairly confident about their position. Some are positive rewards that can be applied to those teams doing an excellent job of reducing their load. Feel free to adapt or customize the scripts, points, and candy numbers to your situation, and use creativity in applying them.

Goal for using Unanticipated Events: The intention of the use of these is to limit the amount of money (candy) that a team has available to invest towards a BMP in the following rounds of the Game. Declining resources encourages and requires the team to start thinking about cost-benefit ratios, targeting where they can have the greatest, cost effective solution, and then eventually towards working together (as the Facilitator makes this option available during round 3).

NEGATIVE CONSEQUENCES

<u>Cost</u>	<u>Event</u>	<u>Script</u>
-2	Flood	“Never underestimate Mother Nature and the power of spring runoff. You’ve experienced localized flooding and must invest additional resources to deal with the results: public safety, clean up and restoration. You must give up 2 candies. ”
-1	Drought	“Mother Nature can be so fickle. Unfortunately there has been insufficient rainfall this summer and much of the vegetation you planted in your BMPs needs to be replaced. This drought will cost you 1 candy. ”
-2	EAB	“We knew it was coming. The non-native beetle, Emerald Ash Borer (EAB) , has invaded your community's trees. The cost of removing infested trees and replanting will cost you 2 candies. ”
-1	Spill	“There was a _____ (e.g., traffic, industrial, farm) accident and the resulting toxic spill is affecting all down stream users. Each down stream land use must give up 1 candy to cover the costs of cleanup and public safety.” <i>[If the land use team responsible for the spill wants to help downstream land use teams pay for the clean up, they may.]</i>
-3	Slump	“During a recent rainstorm there was a major slump along the stream bank. The erosion and resulting sedimentation affects everyone along the river, so everyone has to pay. The land use where it occurred must give up 3 candies ; downstream land uses give up 2 candies each.”
-2	Neglect	“You’ve installed excellent BMPs to reduce your pollutant load, but unfortunately you neglected to maintain them. Recent heavy rains have overwhelmed the capacity and you have to pay to clean up and reinstall the BMPs. That will cost you 2 candies. ”
-1	Salt	“ Salt pollution in runoff from your road salt loading area was identified during recent monitoring. You are penalized for not containing the salt and must give up 1 candy. ”
-1	AIS	Aquatic Invasive Species (carp, curly pond weed, other) results in increasing phosphorus or re-suspending sediment. Costs money to manage.

- 1 Climate “Climate change scientists have been predicting it; increase intensity in storms, in localized places, with fewer smaller events. We have just experienced one. A localized 100 year storm event delivered more than 8” of rain in less than 2 days. The result has been severe erosion along streams, in open, unprotected construction sites, etc providing more sediment. **Each team must give 1-2 candies.**” If paying with phosphorus, “Septic systems and tanks were overwhelmed and polluted the lake.”
- 1 O&M “**Operation and maintenance of practices** are essential and while we are glad you have implemented some BMPs already, there is a cost to maintaining those in the community that you did not properly budget for last year.” **Give up 1 candy**
- Policy
+10 points The lack of having specific rules, ordinances, and policies for _____ has resulted in increased pollution. Your land use pollution contribution just increased 10 points.

POSITIVE OUTCOMES

- | <u>Benefit</u> | <u>Event</u> | <u>Script</u> |
|----------------|--------------|--|
| +1 | grant | “Congratulations! Because you have such an engaged and committed community (or group of experts) you have received a Clean Water Grant from the state government. This additional funding will allow you to further reduce your pollutant load or to support cooperative partnerships. You receive 1 extra candy to use at your discretion.” |
| +1 | Partnering | “Because you’re so effective at achieving common good by coordinating and collaborating with other lands uses, each team that is part of the partnership receives 1 candy. ” |
| +1 | Maintenance | “Good work! Because you installed appropriate, effective BMPs and maintained them as needed , you have saved money that would have been spent on replacement. Receive 1 extra candy. ” |

WATERSHED WIDE EFFECTS THAT CHANGE LOADING

“There has been a change in land use upstream in the watershed. The pollutant load reaching this lake/stream/river has increased to _____”

[You may invoke this change if the group appears to be reaching the load reductions too easily. The recommended upstream load increased would be 20 points. Not applicable to the headwaters stream version of the game]

“New research has found that the current water quality criterion for sediment/phosphorus is not clean enough to attain the designated use for this lake/stream/river. Regulations have been changed so we need to reduce the pollutant load still further to achieve our goal.”

[Recommend additional reduction in load would be 20 points.]

“You’ve done an excellent job in dealing with your existing stormwater issues, but haven’t considered how new development might add to the problem. The pollutant load will be increased by ____ points from a new development which is allowable under your community’s current regulations.”

[The recommended increase would be between 5-15 points. This scenario is recommended for city/residential land uses without a stormwater plan.]