

Reduce the personal impact of downstream nitrogen water pollution

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MEES

Audience perspective

When participants arrive at the room, they will be greeted by our co-organizer, a leader from the local garden club, who has a strong connection to the participant's community. Our team members will provide a brief introduction and a handout containing key information about our activity. The handout will also include a set of questions related to nitrogen pollution.

Next, the participants will be invited to take part in a brief presentation about nitrogen pollution and its effects on the environment, which will be delivered by a knowledgeable expert from the local university.

After that, it's time for a poster presentation for the children of residents. They will use posters to share what they have learned about nitrogen pollution from their school. The participants will sit in groups with their children and share their posters with each other.

Audience perspective

After the poster communication, participants will be invited to take part in a hands-on activity that demonstrates the effects of different fertilizers on plant growth. This activity will be designed to encourage participants to think about their own gardening practices impact on environments and how they can reduce their nitrogen footprint by composting.

Finally, the participants will be invited to take part in a community garden event in groups and Q&A session. They will have the opportunity to ask questions from the gardening expert and experienced residents by sharing their thoughts and experiences related to composting.

At the end of the activity, participants will be asked to complete the questionnaire that was provided to them at the beginning of the activity. This will enable us to evaluate how much knowledge they have gained about nitrogen pollution and their future intention to adopt composting.

Topic and goal

- My topic is to reduce the personal impact of downstream nitrogen water pollution.
- Excess nitrogen pollution are largely from agricultural and urban sources. They enters the rivers, streams and flow into the Bay. It caused algal blooms and other harmful conditions for aquatic life. By reducing the amount of nitrogen that homeowners release by their personal gardening practices into the environment, we can help alleviate this problem.
- My goal is to encourage my audience to use compost instead of fertilizer when fertilizing their plants. It helps to reduce nitrogen pollution for long-term benefits.
- Composting is a natural way to feed the soil and provides a healthier environment for plants while also reducing the amount of nitrogen that leaches into the waterways. By achieving this goal, we can help reduce the amount of nitrogen that enters the Chesapeake Bay downstream and improve water quality for aquatic life. In conclusion, my PES activity aims to address the root cause of the problem by targeting individual behaviors that contribute to excess nitrogen pollution.

Audience

A specific group of homeowners who live near the upstream of the Chesapeake Bay and have a large garden backyard.

Help to connect and encourage them to change

- Older and lived in the community for a long time
 - connected to and have a strong sense of the local community
 - might interested in preserving the local environment for future generations.
- They are members of the local garden clubs
 - have some experience in gardening
 - value the aesthetic beauty of their gardens and are willing to try new gardening techniques (composting) to maintain the health and beauty of their plants.
- Have a big backyard
 - may have grandchildren who visit their homes and could be motivated to make their backyard a safe and healthy place for them to play.
 - may have a relatively high economic level
 - they may be receptive to the idea of composting if in a clear and accessible way, with information about how to get started and the benefits of using compost
 - they understand nature but may know little about personal effects on nitrogen pollution.

Make it challenging for them to change

- Garden is their own property
 - feel a sense of ownership over their gardening practices and be resistant to external influence or advice
- Have been used traditional fertilizer method for a long time
 - may be set in their ways and resistant to change
 - may be skeptical of the effectiveness of composting and need to be convinced through clear and compelling evidence
 - may be hesitant to try new methods that they perceive as more complicated or time-consuming, especially if they already have a busy schedule.
- Physical limitations :
 - make it difficult for them to handle the labor-intensive process of composting.
- The initial cost of composting equipment or materials:
 - need reassurance that it is a cost-effective and sustainable option in the long run.

Outcome

Audiences know or are aware of specific scientific information about nitrogen pollution.

Justification:

- My audience has a higher financial level because they have a large backyard, therefore if they know the scientific information, they'll have more ability to achieve it.
- Because they have an interest in nature and gardening, they are more likely to be receptive to scientific information about nitrogen pollution. Informing my audience about scientific information is essential in helping them understand the necessity and significance of fertilizing their garden in a greener way.

Outcome

Tactics:

First, I will identify an influential and well-respected person in my audience's local community to organize the engagement event. This person can be a local leader from the garden club, a well-known gardener, or a popular business owner who has a strong connection with the community.

Second, I will invite a well-known local university teacher as a guest speaker to give a scientific seminar on nitrogen pollution. This will provide my audience with credible scientific information and help them understand the importance of the nitrogen pollution issue.

Third, I will invite the children of residents who are still in school to participate in activities. They'll share what they have learned about nitrogen pollution from their classrooms. This will create a fun and interactive learning experience for both children and adults.

Outcome

- These tactics are appropriate because they leverage the influence of local leaders, credible scientific information, and the involvement of children to engage my audience and make the information more relatable and interesting.
- The involvement of a well-respected community member in the garden club and a local university teacher will help establish trust and credibility with my audience.
- The inclusion of children in the activities will help create a sense of community involvement and encourage family participation.

Outcome

Audiences believe they have the ability to do a certain behavior (composting).

Justification:

- Retired individuals often have more flexible time to spend on gardening activities, and they are likely to be invested in adopting eco-friendly practices to reduce nitrogen pollution.

Outcome

Tactics:

During the in-person investigation, I will investigate my audience's gardening habits in person to know how much time/cost they were willing to pay for green ways, how they typically fertilize plants in their gardens, how many of them have used composting before, and even what composting methods they often use.

The community garden event will provide my audience with a first hand look at composting, and give them the opportunity to ask questions and learn from experienced residents and gardening experts. During the event, I'll let my audience sit in groups to discuss the obstacles which they think might prevent them from doing it and the reason why they currently don't feel they have the ability.

By providing resources and educational materials, such as brochures, flyers, zines, and online guides.

Outcome

- Tactics engage my audience on multiple levels, including in-person interactions, hands-on experience, and educational resources. By providing a variety of opportunities for engagement, it can appeal to different learning styles and increase the likelihood of my audience adopting composting.
- In-person investigation allows me to gain valuable insights into my audience's willingness to adopt composting and their current composting methods, and also tailor my messaging and approach to reach my audience effectively in the future.
- And the community garden event will allow residents to see composting in action and give them the opportunity to ask questions and learn from each other. The experience of seeing others' successful achievements in using composting will inspire my audiences' confidence in their own ability to do so. And inviting a gardening expert will lend credibility to the event and provide residents with expert advice on composting.
- Furthermore, providing resources and educational materials will give residents the necessary information and tools to adopt composting.