TappsWise A Social Marketing Approach to Help Prevent Harmful Algae Blooms

Puyallup Watershed Symposium Tina Friedrich, Tacoma-Pierce County Health Department Dec. 11, 2019



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Overview

Role of Health Department

Social Marketing

TappsWise



What is the Problem?

Worlwide, harmful algae blooms seem to be increasing.

Possible causes:

- Elevated nutrient levels, especially nitrogen and phosphorus.
- Rising temperatures.
- Changes in water chemistry such as pH, turbidity.



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Why, as a Health Department, do we care?

Toxic algae blooms impact public health.



- Toxins can make people sick.
 - Children very vulnerable.
- Toxins can kill pets.

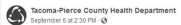


Photo by John Price on Unsplash



Traditional Role of Health Department

- Monitor lakes.
- Send samples to lab for toxin levels.
- · Issue public health advisories.
 - Emails.
 - Info on TPCHD's website.
 - Info on TPCHD's social media sites.





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Non-Traditional Role of Health Department: Preventing Toxic Algae Booms

- Algae need light, warm temperatures and nutrients to thrive.
- Lake residents influence how many nutrients enter the lake.
- How to change behavior? Education?
 - → Studies have shown that education alone has little effect on behavior.

Education campaigns don't address barriers to behavior change.



Social Marketing

Social Marketing uses marketing techniques to create behavior change that benefits the targeted individuals and society.

- Choose Behavior (KISS Keep It Simple and Singular)
- · Identify Barriers and Benefits
- Develop strategy by choosing tools



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Lake Tapps

- 4.5 sq miles, 45 miles shoreline
- White River water gets diverted into it.
- Flow through lake decreased since ownership change.

No flushing out

- → what goes into the lake, stays in the lake
- Lake closure due to toxic algae in 2016.





Choose Behavior

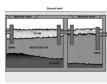


Problem:

Residential nutrient pollution causes declining water quality in lakes.

Sources of nutrients:









Fertilizers

Septic Systems

Soil erosion

Pet waste



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Choose Behavior



- Reduce fertilizer use (organic and/or slow release preferred).
- Maintain septic systems.
- Fix eroding driveways, yards and parking areas.
- Scoop pet waste.
- Keep or create natural shoreline vegetation.



Barriers



Fertilizer Use

- Knowledge
 - → Natural yard care and lawn care workshops.
- Availability of "lake-friendly" yard care products.
 - → List of slow-release fertilizers and where to get them.
- Cost of "lake-friendly" yard care products.
 - → Discount program.



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Barriers

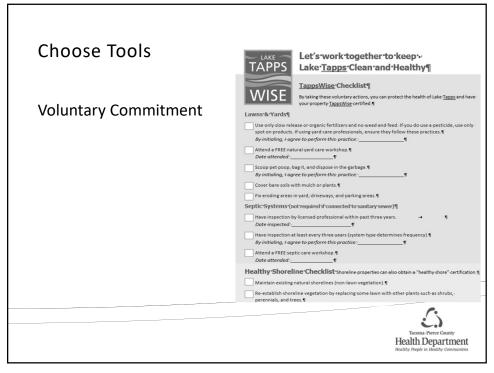


Septic System Maintenance

- Knowledge
 - → Septic care workshops.
 - → Septic care reminders.
- Cost of septic inspection
 - → Discount program.







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Choose Tools



Prompts

- Septic care reminders
- Pet waste postcards



Choose Tools



Incentives

- Septic Incentive
- Fertilizer Discount Program



Save up to \$450 on your next septic inspection, riser installation o

- Follow these steps to participate in the septic care incentive program:
- Choose a certified septic system service provider from the attached list. We recommend you compare cos
 of several service companies.
- Schedule your service. Tell the service pr Program.
- Fill in your information below. When the service provider arrives at your home, give them this form receiver.
 - \$125 off a routine inspection (required to receive other discount
 - \$125 off riser installation (inspection required first)
 \$200 off tankin numbers (inspection required first)



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Choose Tools

Change of Social Norms

Yard signs





TappsWise



So far:

- Great participation in natural yard care workshops.
- Less interest in septic workshops.
- Few properties certified. Biggest barrier is fertilizer use.

In future:

- Provide more support to residents to help switch to slowrelease fertilizers.
- · Promote program through direct mail and community events.



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TappsWise



In future:

- Cascade Water Alliance has started regular water quality monitoring.
- TPCHD will continue TappsWise.
- TPCHD will continue to monitor for toxic algae.
- Survey to determine if behaviors have changed.



Questions?

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