



Understanding Northwest Indiana's Septic System Maintenance and Care Behavior

*Information To Enhance Agency Outreach and
Education Efforts*



Challenges

Unsuitable Soil

According to the most recent soil surveys conducted by NRCS and Soil Survey Staff, approximately 80% of the Little Calumet-Galien watershed's soil is 'severely limited,' likely caused by an overabundance of sand (Soil Survey Division Staff, 2012). Another 5% of the watershed has soil that is classified as 'moderately limited' (i.e. soil has somewhat favorable soil conditions for septic systems) (Soil Survey Division Staff, 2012).

Lifespan & Public Record

Although the average system lifespan ranges from 11 to 30 years, half of U.S. septic systems are estimated to be more than 30 years old (Ferrell & Grimes, 2005; Siegrist, Tyler, & Jenssen, 2001). In northwest Indiana, public records about septic system locations and ages vary across the region. Public health officials estimate that many septic systems are over 20 years old and were installed before installation permits were issued by county governments.

Challenges

Water Table

Septic Systems are designed to function when at a minimum of 2 feet above the water table (Purdue Extension, 2005). According to LaPorte County ground water surveys, the mean depth is approximately 5 ft and has been known to reach highs of 1.5 ft (USGS, 2016).

Limited Regulation

LaPorte County Health Department is the only local department that has implemented permitting for new and repaired septic systems to date as well as a point of sale ordinance.

✓ **Keep it Protected—Get it Inspected!**

Have your septic tank inspected and pumped out by a licensed septic tank contractor as needed (on average every three to five years).

✓ **Don't Strain your Drain!**

Use water efficiently to avoid overtaxing your system. Fix household leaks, run the dishwasher and clothes washer only on full loads, and consider installing high-efficiency fixtures.

✓ **Think at the Sink!**

Don't pour grease, fats, or harmful chemicals like paints and solvents down your sink. They can clog or harm your system.

✓ **Don't Overload the Commode!**

Do not flush non-degradable items such as dental floss, diapers, coffee grounds, or feminine hygiene products.

✓ **Shield your Field!**

Care for your drainfield by only planting grass, not driving or parking on it, and reducing roof and surface water drainage near the drainfield.

Proper septic system function relies on informed, proactive homeowners

(Halvorsen & Gorman, 2006)

Know your part, be SepticSmart!

Learn more at www.epa.gov/septicmart.



Septic System Coordination Work Group



Indiana State
Department of Health





**Homeowners' Knowledge & Awareness
of Septic Systems and Barriers to Septic
System Maintenance in Northwest
Indiana: Information to Enhance Agency
Outreach and Education Efforts**

Methods

Focus Groups

- Recruited from suspected septic system communities
- Did not disclose that focus group was on septic systems
- \$25 gift card & drawing for \$100 gift card incentive
- Included interactive polling and moderated discussion

Surveys

- Those unavailable to attend offered an on-site survey
- No incentive

- 82% of participants reported having a septic system
- Only one individual did not know if his/her household had a septic system
- Most participants found out during the home-buying process or building process
- Half of participants indicated their septic system was 20 years old or older

Study Findings



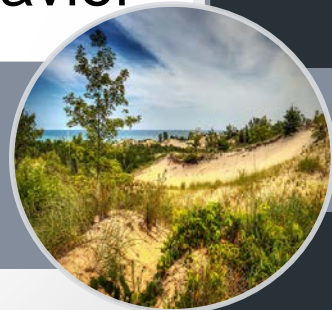
- Most participants rated their knowledge of septic systems as very knowledgeable or somewhat knowledgeable
- However, participants could not indicate how frequently practices should occur, nor could they indicate a broad range of practices other than pumping
- Participants made their own judgement of when a tank needs to be pumped out
- Many participants didn't know to contact their local health department for more information

Study Findings



- Rid-X came up frequently as an adequate form of maintenance
- Inspections were not considered a form of regular maintenance
- Lack of knowledge reported as greatest barrier
- Cost was second greatest barrier
- Most participants indicated that septic system maintenance and care is a norm, a standard practice of behavior, and that most people would not be trying to avoid the behavior

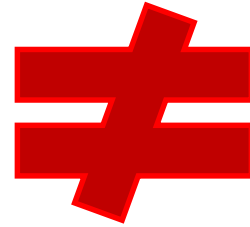
Study Findings



- Participants made little to no connection with failing septic systems and public health
- Participants made little to no connection with failing septic systems and the environment
- High E.coli levels in Lake Michigan were associated with combined sewer overflows
- Participants don't think failing septic systems are a problem in their community

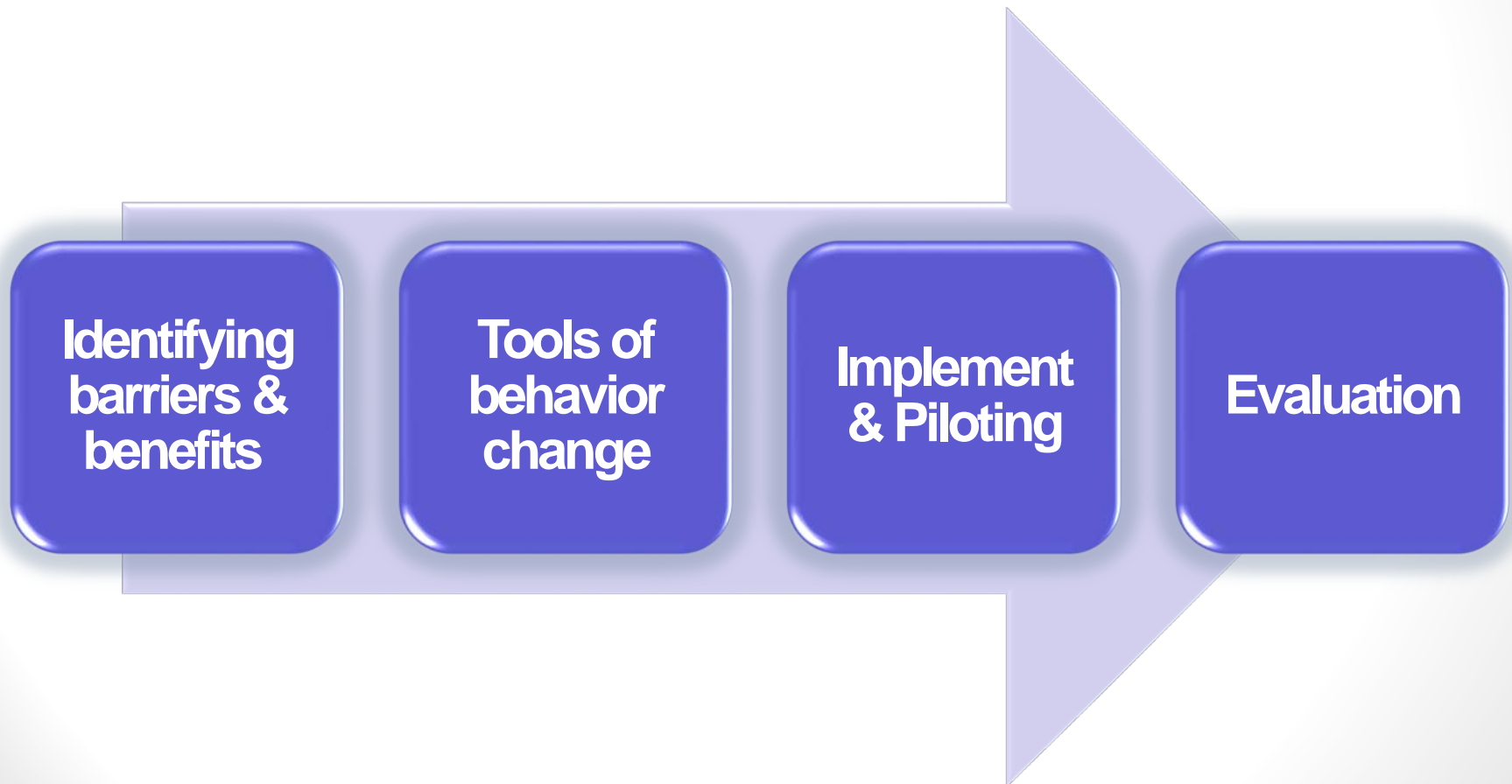
Study Findings



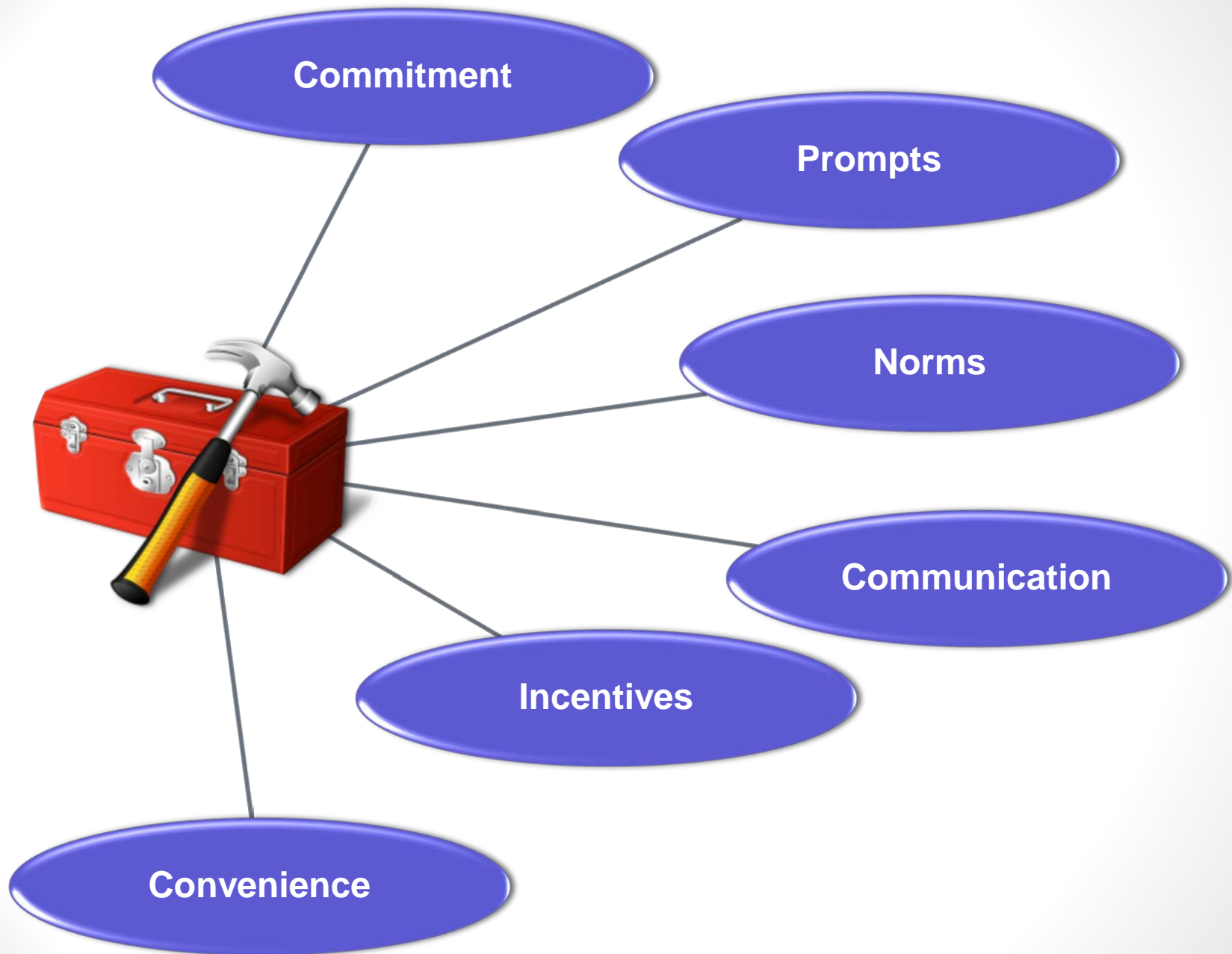


**Pro-environmental
behavior change**

Community-Based Social Marketing



McKenzie-Mohr and Smith (1999)



- **Disseminate information at the local level**
 - Local community groups, decision makers, realtors are used to reach homeowners
- Authentic community engagement using the right messenger
- **Develop locally relevant language for septic system brochure or postcard**
 - Septic system maintenance and care depends on YOU!
 - Identify that septic system failure is a problem locally
 - Provide a clear list of positive actions
 - Inform that additives are an inadequate care

Recommended Actions



- **Educate about public health and environmental implications, but do not make this the primary message (“good neighbor” approach)**
- **Community campaigning products**
 - Yard signage
 - Public advertisement (local radio reminders to pump, etc.)
 - Written commitment logs
 - Incentives (coupons, awards, etc.)
- **Reminder, prompts**
 - Magnet with placement recommendations

Recommended Actions



**Learn more about community-based
social marketing:**

www.cbasm.com

