

# Challenges To Sewage Lagoons





# Operations

- ◉ Access
- ◉ Air Flow
- ◉ Discharge
- ◉ Sludge Removal



# Access

- Access to lagoon should be limited.
  - Operators need easy access to lagoon.
  - Public needs limited access for dumping honey buckets.
  - Fencing must be designed appropriately for soil conditions.





# Air Flow

- Keeping brush clear to allow air flow is important to healthy lagoon and smell reduction





# Size of Lagoon

- ◎ Lagoons can be made too large.

- They don't ever fill up and can't provide treatment

- ◎ Lagoons can be made too small.

- These quickly reach capacity and require frequent discharge.





# Discharge

- ◉ River
- ◉ Wetland
- ◉ Dry land





# Sludge Removal

## ● Lack of equipment

- Dredge
- Dewatering
- Disposal



# Location

## ● In town

- Smell and disease vector

## ● Close to town

- Best for access
- Town may grow around lagoon

## ● Far from town

- Too far to transport, leads to public dumping.
- Increased pumping and collection cost.

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# Foreign Materials

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- Honey bucket liners
- Trash
- Broken Hoppers



# Collection

- Lagoons are part of a system and collection will determine the success of the Lagoon.





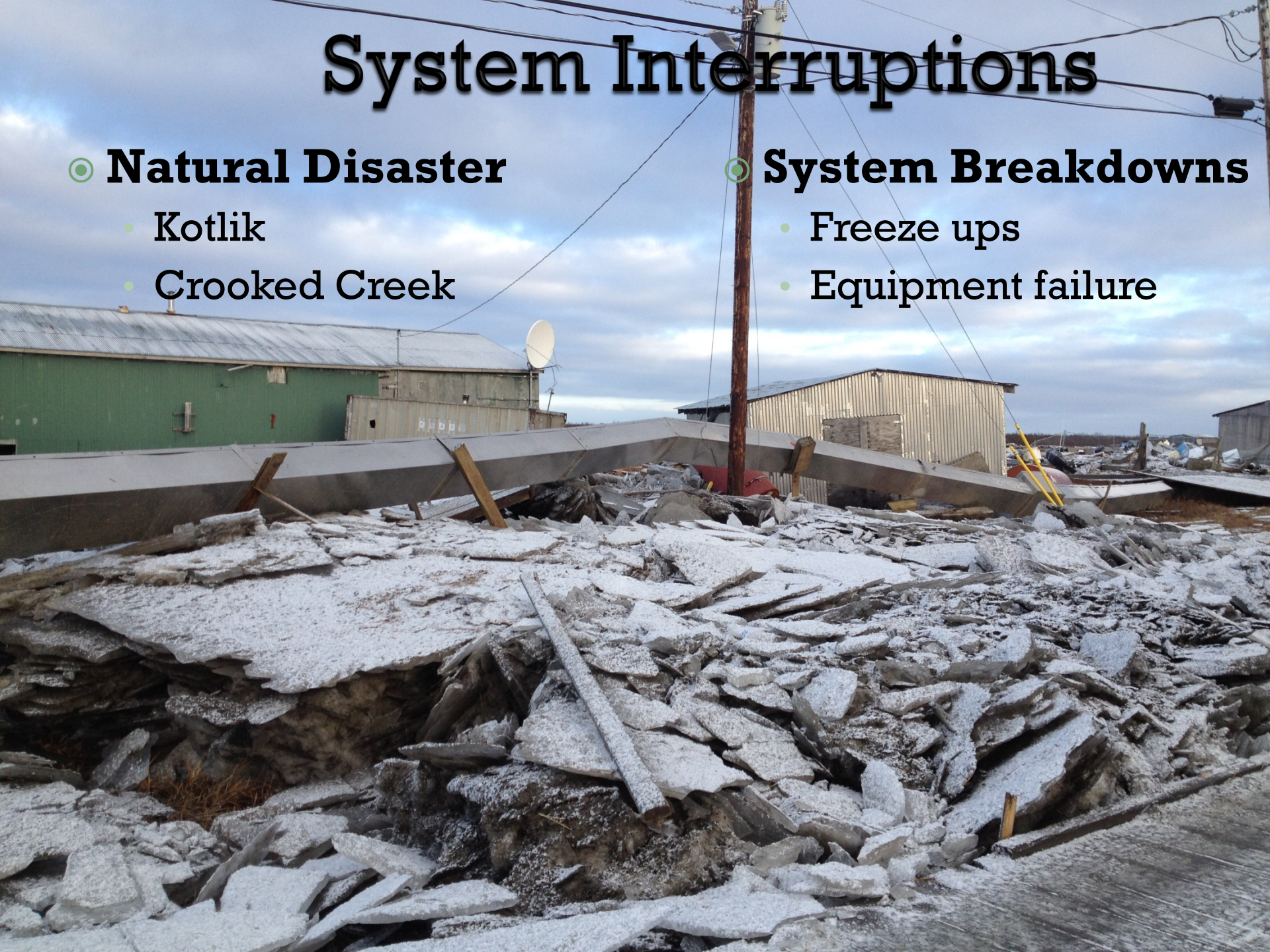
# System Interruptions

## ⦿ Natural Disaster

- Kotlik
- Crooked Creek

## ⦿ System Breakdowns

- Freeze ups
- Equipment failure





# Honey Buckets

- They are here to stay in some capacity.
- We need to have a plan for when they are needed.

