
INDIANA CONSTRUCTION PERMIT:

UNDERSTANDING SITES,
INSPECTION PROCESSES AND
DEVELOPMENT STANDARDS

Joe Moore and Braden Reynolds



AGENDA

- Semi-Professional Introductions
- Survey Question: Who wants clean water?
- WHY am I speaking today?
- 20-25 Minutes:
 - Construction Site SW Run-off
 - How to Prioritize Sites
 - How/When to Inspect
 - How to Deal With Complaints
 - Developing Standards






HOW DID WE LAND HERE TODAY? (my semi-professional into)

Purdue

Pre-med (smarter people)
Education (student teaching)
Science (political)
5.5 years
Still Trying to figure it out
1996-2001



Corporate builder

Dayton-Cinci
High Volume
Hot Market
Stillwater River
Major Polluter
7 years
2001-2007

Custom Builder

Family
A move back home
Do it myself
A struggle with St. John Inspection
Birth of Siltworm
2007-2013

Siltworm Inc/ECS

New Technology.
Needs to be Proven
Birth of Erosion and Construction Services
Complete SWPPP mgmt./implementation
2009-Present

Affiliations

IECA
Published in Environmental Connection and Erosion Control Magazines
ECTC
Indiana MS4
NISWAG
St John Stormwater Utility
2010-Present

WHY ARE WE SPEAKING TODAY?

BECAUSE “TOO
MUCH GERMS IN
OUR WATER IS
BAD!”

-Fischer Moore Feb 2022....





**CONSTRUCTION
SITE RUN-OFF**

IT IS EASY as 1..2..3...

OR IS IT?

CONSTRUCTION SITE RUNOFF

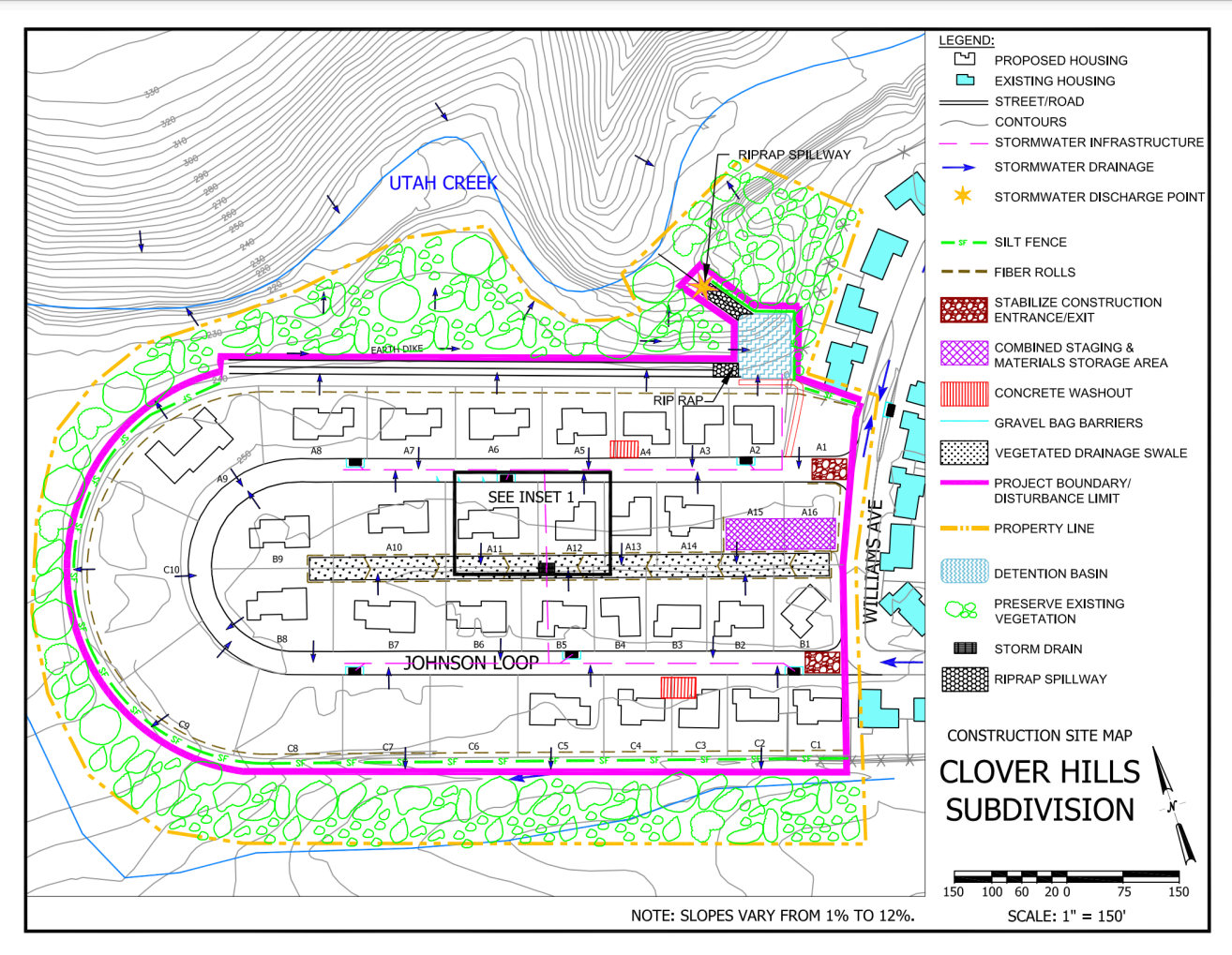
Maintaining Those Practices and BMP's, and implementing new practices

1. **Perimeter Controls**
2. **Concrete Washout**
3. **Construction Phasing/Grading**
4. Vegetation Efforts
5. Construction Entrances
6. Inlet Protection
7. Street Sweeping
8. Stockpile Protection
9. Dewatering Practices
10. Washout/Waste Facilities
11. Inlets/Outlets/Outflows
- 12-75.....



COUNT ON ENGINEERS

SWPPP: Paying for an Engineered Design

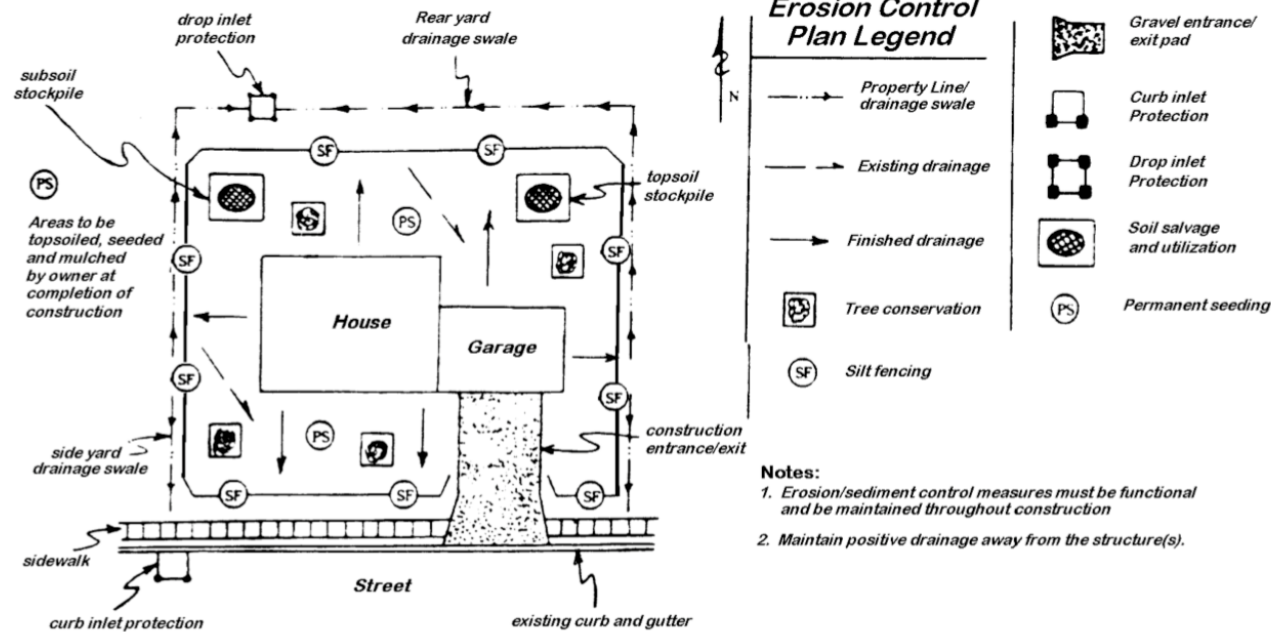


PLANNED STANDARDS REVIEWED?

Implementing/Installing the engineered practices designed by a P.E. Who is using science, physics, and math to meet the requirement for you.

SAMPLE EROSION/SEDIMENT CONTROL PRACTICE PLAN

FOR A TYPICAL ONE OR TWO FAMILY DWELLING UNDER CONSTRUCTION



"QUALIFIED INDIVIDUALS INSPECTING"

Weekly Inspections




SWPPP Inspection Report

SWPPP Inspection Form Centennial Estates

General Information

Field Contact	Jeff Yatsko
Inspector Name	Sam Blauert
Inspection Date	01-31-2022
Inspection Time	Morning
24 Hour Rainfall Total (In)	0.0
Current Weather Conditions	Partly Cloudy
Reason for Inspection	Weekly
Current Project Status	Both Active Vertical and Horizontal Construction

Issue

Date Noted	11-18-21 Production
List	Concrete Washout
Location	CWO Station
Describe Issue	Washouts are to be located at least 50 feet from storm inlets per SWPPP. Liners are required to be a minimum of 10 mil or reinforced and pinned. Straw bales or sand bags are to be continuous and staked in place
Corrective Action Recommended	Reference swppp detail/IDEM field manual specification for for proper washout construction
Picture(s)	

HOW DO I PRIORITIZE MY MUNICIPAL INSPECTIONS?

1. Does this flow into a recognized Regulated Waterway?
2. Is it on a major thoroughfare where IDEM can see it?
3. Can I get in trouble too?
4. Is the builder/developer/owner or company small enough for me to control?
5. Is it warm enough today?
6. Am I so sick of the office that I need to get out?
7. Am I politically roadblocked?



THE **WRONG** QUESTIONS

HOW DO I PRIORITIZE MY MUNICIPAL INSPECTIONS?

1. How often do I have to inspect?
 1. IDEM: New permit requirement says _____ times per _____?
 2. How many sites am I responsible to inspect?
 3. How many active sites do I have in my jurisdiction?
 4. Can I inspect my own sites?



Why does IDEM put the ownness on the permit holder first, and then the municipality?

THE **RIGHT** QUESTIONS

WHEN DO I INSPECT?

1. How often do I have to inspect?
 1. IDEM: New permit requirement says _____ times per _____?
 2. How many sites am I responsible to inspect?
 3. How many active sites do I have in my jurisdiction?
 4. Can I inspect my own sites?



Why does IDEM put the ownness on the permit holder first, and then the municipality?

WHY DOES IDEM PUT THE OWNNESS ON THE PERMIT HOLDER FIRST, AND THEN THE MUNICIPALITY?

1. Public Education and Outreach
2. Public Participation/Involvement
3. Illicit Discharge
- 4. Construction Site Runoff**
5. Post Construction
6. Pollution Prevention/Good Housekeeping

My Questions: How many Ms4's in the room?

Show of hands...How many are a one person staff, 2 person, 3 person.....



WHY DOES IDEM PUT THE OWNNESS ON THE PERMIT HOLDER FIRST, AND THEN THE MUNICIPALITY?

**ANSWER #1: IDEM HAS THE SAME ISSUE AS
THE MUNICIPALITIES!**



OH YEAH? WHAT IS THAT ISSUE??

WHY DOES IDEM PUT THE OWNNESS ON THE PERMIT HOLDER FIRST, AND THEN THE MUNICIPALITY?

THE ISSUE:



THE ANSWER:

Page 16 of **Construction** Stormwater General Permit:

1. Trained individual
2. 24 hours prior to or by the end of following business day
3. Greater than ½” in 24 hours
4. At least one inspection per week

5. Report Must include: Name, title, and signature of inspector
6. Date
7. Observations of measures on site
8. Failures/Discharges
9. Details of Corrective actions
- 10. Timelines** for repairs

THE ANSWER:

Page 16 of **Construction** Stormwater General Permit:

11. Timelines of repairs:

A. on the day of discovery

B. when not applicable: no later than 48 hours for repair or a temp measure

12. Within 7 days for a new Alternative Measure:

13. “The inspecting Authority may also allow additional time to take corrective action”

14. Providing reports within 48 hours

THE CONSTRUCTION PERMIT PUTS THE MAJORITY OF THE INSPECTION OWNNESS ON:

THE PERMITEE

CGP INSPECTION BASICS

- Presented by Braden Reynolds
- Indiana MS4 Partnership Conference
- May 9, 2022



- Keeps our water and soils clean for fishing, swimming, and wildlife.
- Helps keep contractors and residents **safe**.
- Helps organize the construction process and visual on-site appearance...**curb appeal!**
- Fines (local, state, federal authorities)
- *Federal knowing violations for 1st offense of up to \$50,000 per day of violation and/or 3 yr in jail. Up to \$25,000 per day of violation and or 1 yr in jail for negligent violations.*



PEELING BACK THE ONION

- * Project Entrance
 - * Easily accessible, and visible while driving past.
 - * Postings (NOI, Contact info, SWPPP/PML location)
 - * Construction Entrance
 - * Updated Project Management Logs?
- * Outfalls/discharge points free of pollutants?
 - * Actually first place to look if accessible, and/or time allows.
 - * If sediment/construction debris is present work up grade to find origins



EROSION AND SEDIMENT CONTROL PRINCIPLES FOR PROJECT SUCCESS

Success= “Keeping your sand in your sandbox.”

Fundamentals for achieving success include:

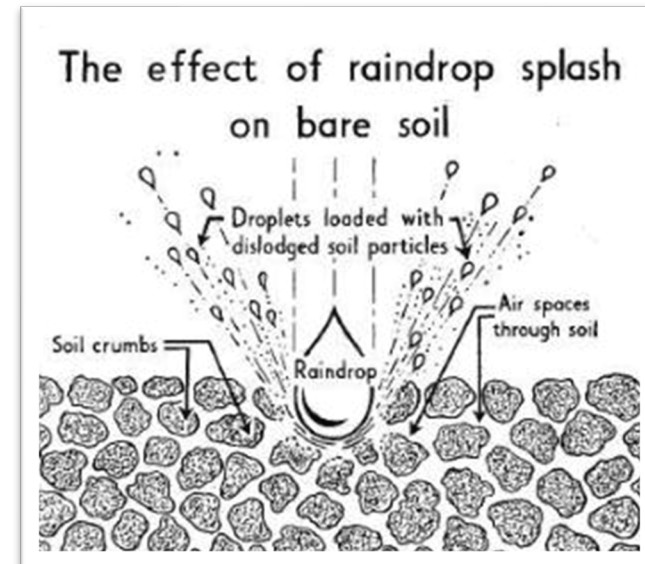
- Sequence of Construction adherence
- Stabilization of exposed areas and slopes
- Consistency holding vendors accountable for their role in creating Responsive Actions.
- Routine Maintenance Plan



- Are they sticking to the **PLAN**?
 - Ensure Initial BMP Installation completed per plans, **BEFORE** earth disturbing activities commence.
 - Perimeter Controls
 - Rock Construction Entrance
 - Protect Existing Inlets
 - Postings
 - Possible solutions:
 - Certified Inspector and MS4 delegate perform initial BMP inspection together, prior to earth disturbance.
 - Certified Inspector/PE/Permittee submit form stating initial BMPs in place prior to earth disturbance, for later accountability.
 - Copy of the Initial weekly inspection must be sent to MS4.

STABILIZATION IS A KEY TO SUCCESS

- Protects exposed soils from rain and wind displacement.
- CGP now requires initiation by 7th day, and completion by 14th day of inactivity.
 - Fugitive weed growth



CGP now requires BMPs are repaired within 48hrs, versus 7 days.

Encourage your Permittees to implement a plan to timely complete Corrective Actions.

Encourage your Permittees to implement a plan to timely complete Corrective Actions



- Use it or lose it!
 - You can learn more in a few moments, than you can learn in months.
 - Visit problem sites when storms are expected, if safe.



WHY DOES IDEM PUT THE OWNNESS ON THE PERMIT HOLDER FIRST, AND THEN THE MUNICIPALITY?

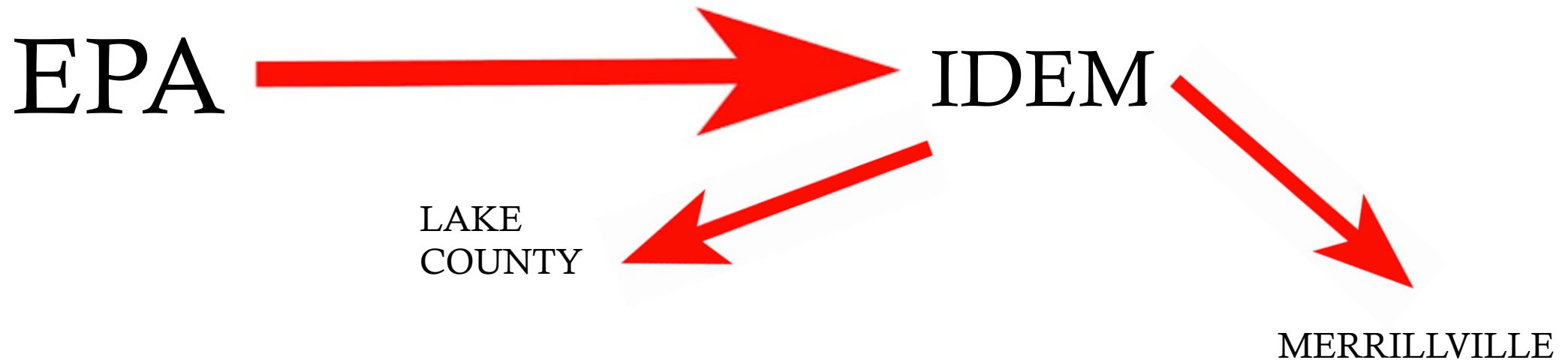
THE ANSWER:



You Don't have to inspect Every Site: You do have to make sure every site is being inspected

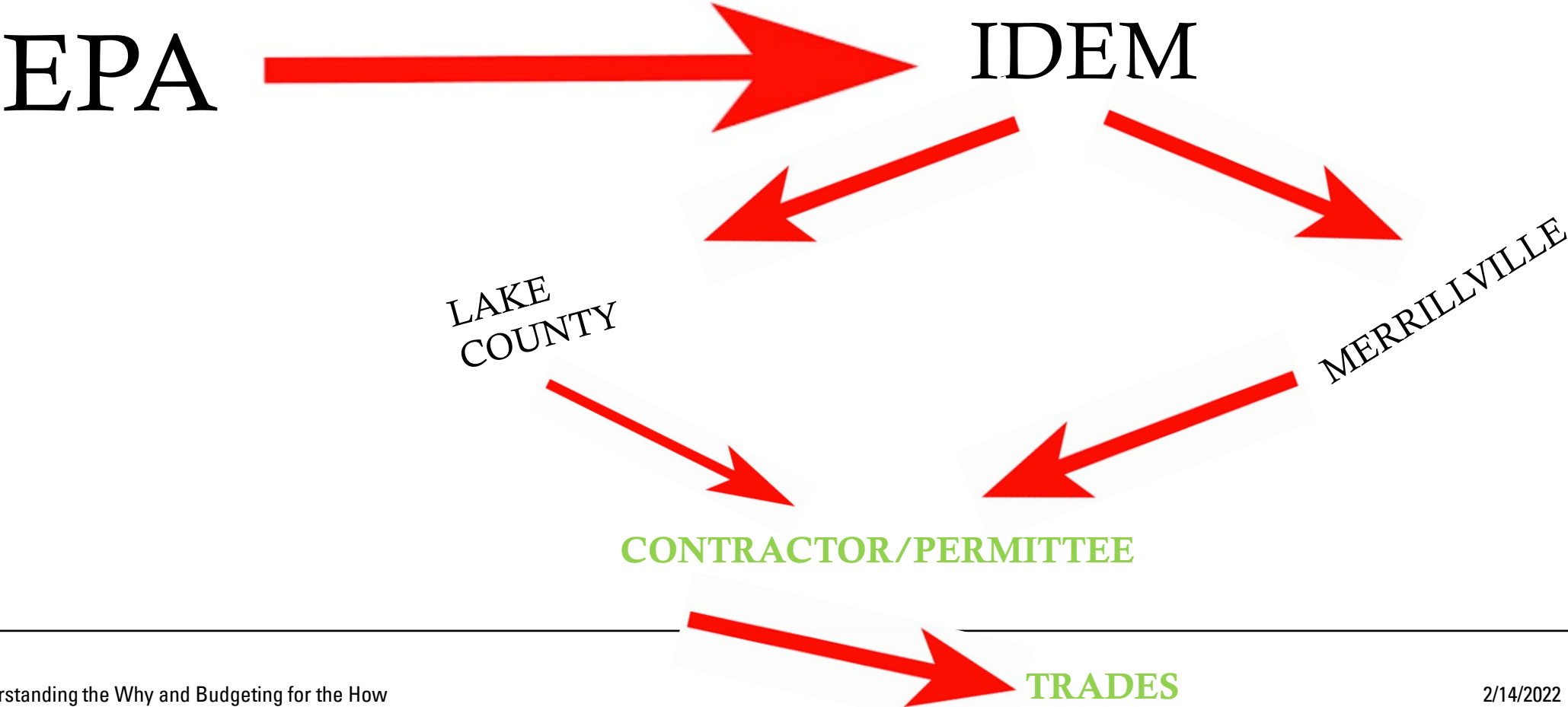
UNDERSTANDING THE PERMIT PROCESS

AIM SMALL/MISS SMALL CONTINUED



UNDERSTANDING THE PERMIT PROCESS

AIM SMALL/MISS SMALL CONTINUED



WHY DOES IDEM PUT THE OWNNESS ON THE PERMIT HOLDER FIRST, AND THEN THE MUNICIPALITY?

THE ANSWER:



TONY ROBBINS KNOWS: WATER POLLUTION PREVENTION

WHY DOES IDEM PUT THE OWNNESS ON THE PERMIT HOLDER FIRST, AND THEN THE MUNICIPALITY?

1. Public Education and Outreach
2. Public Participation/Involvement
3. Illicit Discharge
- 4. Construction Site Runoff**
5. Post Construction
6. Pollution Prevention/Good Housekeeping



WHY DOES IDEM PUT THE OWNNESS ON THE PERMIT HOLDER FIRST, AND THEN THE MUNICIPALITY?

1. How many Ms4's in the room?

2. Show of hands...How many are a 1 person staff, 2 person, 3 person.....

3. HOW MANY HAVE THEIR OWN SET OF STANDARDS?

4. HOW DO YOU ACCOMPLISH THAT IF YOU DO NOT

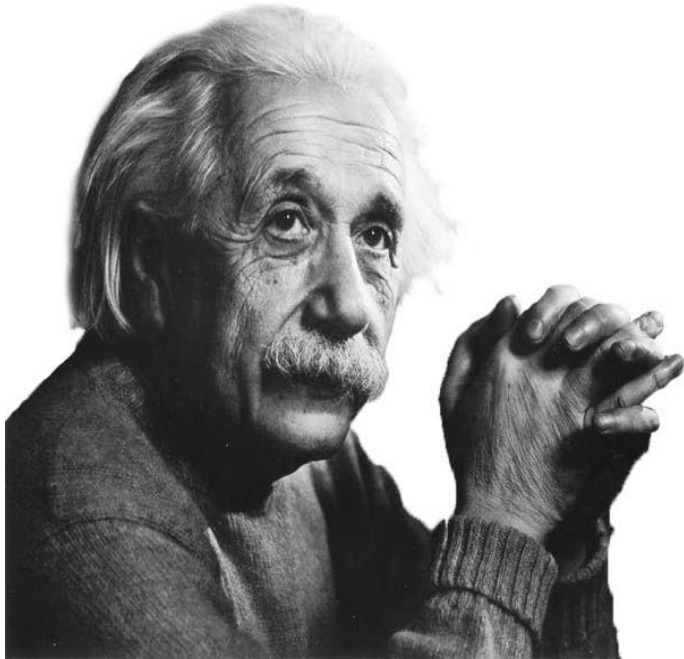
5. WHAT RESOURCES CAN BE USED?

1. EXAMPLE NISWAG
2. ENGINEERING FIRMS
3. CONSULTING FIRMS



ALBERT EINSTEIN SAID:

“We Believe that an informed citizenry will act for life and not for death.”



BRAD PITT SAID:



“Democracy does not work unless the public is informed.”

WHAT IS THE **PROBLEM** WITH PUBLIC EDUCATION/OUTREACH/INVOLVEMENT?

1. **Public Education and Outreach**
2. **Public Participation/Involvement**
3. Illicit Discharge
4. **Construction Site Runoff**
5. Post Construction
6. Pollution Prevention/Good Housekeeping



WHAT IS THE **PROBLEM** WITH PUBLIC EDUCATION/OUTREACH/INVOLVEMENT?



WHEN YOU THE MS4 SATISFIES MCM #1 AND #2:

The Public Acts as the watch dog:

HOW DO WE DEAL WITH COMPLAINTS?



shutterstock.com · 269047922

Yikes !!



U.S. Environmental Protection Agency

Protect Your Tap: Lead in Drinking Water

Learn how to reduce lead exposure with our lead pipe detection tool.

- [Use the Protect Your Tap Tool](#)
- [Utilice la herramienta Proteja su agua potable](#)

AND EPA HAS REACTED TO THAT NEED!!

Report a Complaint Online

State Form 57061 (1-21)

Please Note: If you need to report an environmental emergency or a spill, please contact us via IDEM's 24-hour Emergency Spill Line toll free at (888) 233-7745 or (317) 233-7745.

When filing a complaint, please provide as much detail as possible about the location of the complaint, when the activity occurred, and what happened.

Note: Providing your contact information under the General Information section below will allow IDEM staff to contact you for any additional information they need. It will also allow us to contact you with the findings from the complaint investigation.

About anonymous complaints: Any contact information submitted on this form, including name and address, becomes part of the public record and may be subject to public disclosure, upon request. Individuals who wish to remain anonymous should click the Anonymous radio button, which will blank out the fields for name, address, telephone number and e-mail address.

* Yellow items are required

Personal Information

Are you an:

Individual

Public Official

Anonymous

YIKES !!
←

Name:

Street Address:

State:

AND IDEM HAS REACTED TO THAT NEED!!

ZIP:

Telephone:

Secondary Telephone:

Email Address:



THE DRAIN IS JUST FOR RAIN

Yikes!

Report a MS4 Violator

AND ST JOHN HAS REACTED TO THAT NEED!!

CONSISTENT RULES/CONSISTENT ENFORCEMENT/CONSISTENT PROGRAMS

1. MEMBERS OF NISWAG: NORTHWEST INDIANA STORMWATER ADVISORY GROUP
Regional MS4 programs/regulators who meet monthly to plan: Being consistent across the board is a focus
2. WHY DO WE HAVE TO DO THIS WHEN THEY DON'T?
At this point we all have to do it, and should want to.
3. RECOGNITION OF NATIONAL/REGIONAL BUILDERS and THIRD-PARTY INSPECTION GROUPS
How Do the Leaders Do it?



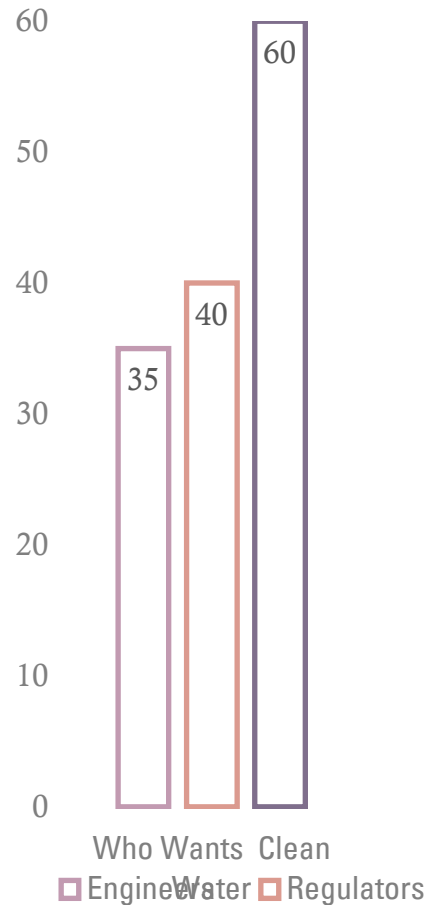
SUMMARY

Your Water depends on Your
Action or Inaction

Your Choices Will Impact Your
Family and our Earth

Let's leave here today remembering
the "WHY and the HOW"

INTERACTIVE LIVE SURVEY FROM THIS TRAINING



AND THE SURVEY SAYS...



100% of this Room Prefer Clean Water

The background of the left half of the slide is a close-up photograph of a tree trunk's cross-section, showing concentric growth rings in shades of brown and tan. A dark, irregular hole is visible in the wood, slightly to the right of the center.

WHY DO WE WANT TO DO THIS?

The way to get started
is to quit talking and
begin doing

-Walt Disney





ECS,SILTWORM, VALOR AND ALPHA EMC ALL THANK YOU FOR YOUR
TIME TODAY AND YOUR EFFORTS IN THE FUTURE

Joe Moore | joe@ecsontime.com | www.ecsontime.com. **Braden Reynolds**
breynolds@ValorEnv.com

ater

7y 238d 08h 52m 22s

Earth running out of freshwater

UNLESS WATER USE IS DRASTICALLY REDUCED

Put this counter on your website



FRESH WATER WORLD CLOCK

Joe Moore | joe@ecsontime.com | www.ecsontime.com

Indiana Construction Permit: Understanding the Why and Budgeting for the How

2/14/2022

45