Mobile Forms
Good to Great

2018 Esri Southwest User Conference

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Sample Forms

ALL | STORM WATER | SANITARY SEWER | WATER | CONSTRUCTION | DEVELOPMENT REVIEW | STREETS | GENERAL
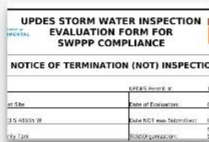
Sanitary Sewer Manhole Inspection	SWPPP Compliance Inspection Form	SWPPP Notice of Termination	Daily Progress Report	Post Construction Inspection	Post Construction Compliance

Final Inspection	Official Notice of Violation	MACP Inspection Form	Concrete Observation	Masonry Observation Report	Reinforced Concrete Observation

Daily Inspection Diary	High Priority Facility Inspection	IDDE Response Form	Dry and Wet Weather Screening	Priority Area Inspection	Equipment Inspection Report
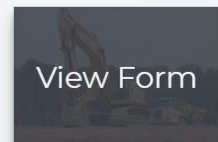
View Form

Why Forms?

- Almost every business uses forms. Why?
- Forms provide ***structure***.
- Forms are part of a workflow/process.
- The alternative…
- …free form.

The Advantages of Paper

- Quick to complete
- Portable

The Problem with Paper

- "Paper is not the enemy. Inefficient processes are."
- "Paper is just another technology that is available to the process designers. It has a place, but it isn't the point."

- Ray H. Killam

Disadvantages of Paper

- Lost/Damaged
- Incomplete
- Transcribing: Time-intensive, Errors
- Expensive
- Not ecology friendly

Advantages of Electronic Forms

- Enforce Data collection completeness
  - Paper: 80% Error Frequency
  - Electronic: Not possible
- Pre-filled
- More input options
- Cost (overall)
- Accuracy
  - Paper: 6.7% Error Frequency
  - Electronic: 2.8% Error Freqency
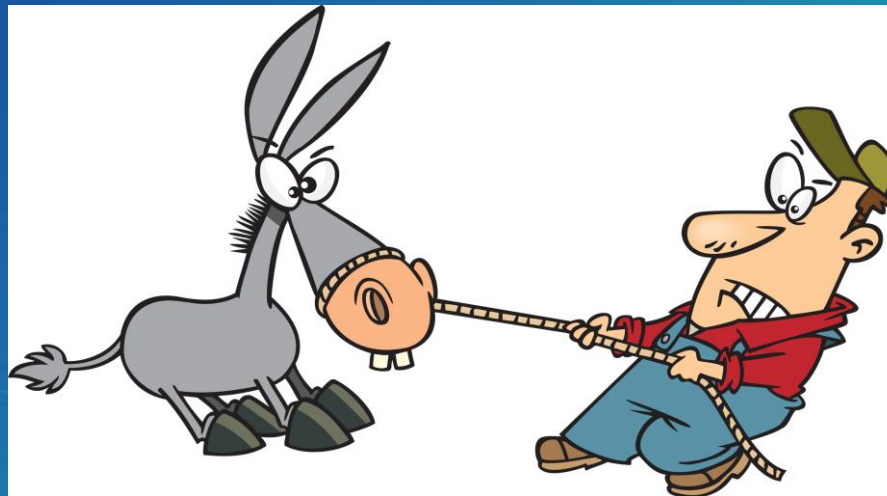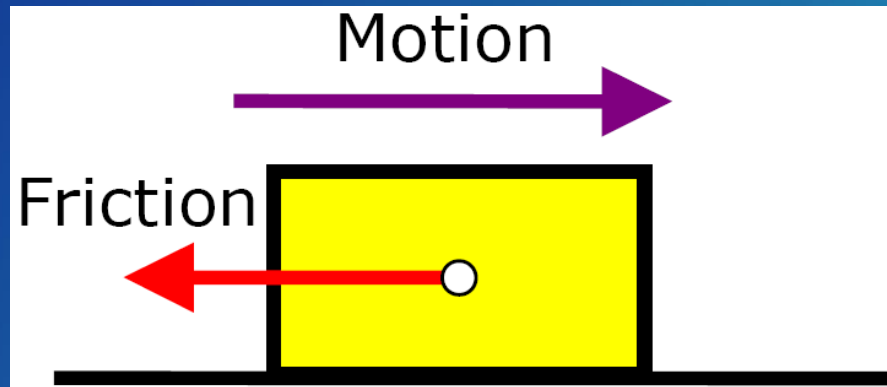- Time to complete
- Skip logic

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Why is Change hard?

- Friction

Input Type: Text Fields

- Real meat of the inspection
- Allows the inspector to be descriptive

Pro Tip #1: Consider the length of the answer and the size of the input field.

Pro Tip #2: If you are expecting a number, email or phone number don't use a text field!

Pro Tip #3: Use bullet or numbered lists

Input Type: Text Fields

Construction Site ID

Maple Grove Apartments

WDID#

W-3487-89043

Reference/File No

Z234212

WQMP ID#

887465832

If complaint or follow-up, describe reason:

Normal ⇕ **B** *I* U S̶ ≡ ≣ ☰ A ⌗

The NPDES Coordinator must report the following non-compliant conditions to the RWQCB within 24 hours:
- Discharges of permitted storm and non-storm water that result in a serious violation or a serious threatened violation of the Permit
- Discharges of spills of petroleum products, hazardous waste or toxic chemicals
- Discharges due to failed/damaged BMP controls that result in a serious *violation* of the Permit

A discharge of any quantity is considered a serious violation of the Permit if the resulting adverse impact to the environment requires immediate action to stop the discharge and its impacts, or the discharge requires notification to protect human health and safety.

Input Type: Single/Multi-Select

- **Not many options (1 to 5), show all at once**
  - Reduces the number of clicks
- **A lot of options (5 or more), show in dropdown**
  - Form is too long if you show all at once
- **Pro Tip #1: If the option is really long/wordy, you will want to show them all at once (doesn't fit well in a dropdown)**
- **Pro Tip #2: Keep your options short**
- **Pro Tip #3: Always consider include an "Other" option.**

Input Type: Single/Multi-Select

Input Type: Repeating Field/Section

- Easy way to complete a table
- Simplifies Input
- Simplifies Report
- Perfect for when you don't know how many you are going to complete

Pro Tip: Consider Using repeating sections when you have multiple items to enter

Input Type: Repeating Field/Section

FOOD ESTABLISHMENT INSPECTION REPORT

Unless otherwise stated, violations cited in this report shall be corrected within a period not to exceed 10 calendar days for Critical items (§8-405.11) or 90 days for Non Critical items (§8-406.11).

PURPOSE
Regular...............1
Follow-up............2
Complaint............3
Investigation........4
Other................5

VIOLATIONS: **CRITICAL:** _____   **NON CRITICAL:** _____

TEMPERATURE OBSERVATIONS

FOOD PRODUCT	PRODUCT TEMP.	LOCATION	FOOD PRODUCT	PRODUCT TEMP.	LOCATION

	Critical (x)	Code Reference	Violation Description/Remarks/Corrections
↑ add as many as they need			

Input Type: Repeating Field/Section

Notifications

Name

Jason Jones

Title

Code Enforcement Officer

Contact Phone

909-684-5289

Notifications

Name

Sally Johnson

Title

Flood Control District

Contact Phone

909-589-6512

➕ ADD SECTION

Sweeping

Total Inventory (miles)	Swept (%)	Frequency (times/yr)	Debris Collected (tons)
50	80	12	2
100	78	6	4
78	90	8	3.5

➕ ADD ROW

Input Type: Numbers and Calculations

- You are guaranteed to get a number
- Calculations are consistent and correct

Pro Tip #1: Include the units for the number.

Pro Tip #2: Include look-up values. User just provides the quantity and the total volume and the form can provide the rest.

Input Type: Numbers and Calculations

Input Type: Other

Current Date
📅 3/27/2018 ▼

Last Date Inspected
📅 2/28/2018 ▼

Follow-up Due
📅 4/26/2018 ▼

Appointment Time
🕐 10:30 AM

Start Time
🕐 10:28 AM

End Time
🕐 10:50 AM

Contractor Signature (CLEAR)

Jim Jackson

Contractor Name
Jim Jackson

Send email to:
mstayner@utilisync.com

Send additional email to:
etani@utilisync.com

Send additional email to:
test@test.com

Send additional email to:
jblanch@utilisync.com

Photos
ADD MULTIPLE PHOTOS

✕ CLEAR

✏️ SKETCH ON IMAGE

Description
Permanent Swale

Attach PDF
ADD MULTIPLE FILES

Final Review.pdf   ✕ CLEAR

Inspection Log.pdf   🗑️ DELETE

Tracking Log.pdf   🗑️ DELETE

Pre-Populate Fields

- Saves time
- Provide focus for inspector ("You make the observation, UtiliSync will do the rest")
- Provides consistent results

Pro Tip: Provide ability to pre-populate from multiple sources (GIS attributes, users data, organization data, current date/time, previous forms)

Skip Logic

- Only show the information that applies
- Can dramatically reduce the amount of time required to complete a form

Required Fields

- **Guaranteed to have the information you need on every form**

- **Pro Tip: Required fields are often over used. Only use on field you *really* need to have.**

Anatomy of a Form

SWPPP COMPLIANCE INSPECTION FORM

UTAH DEPARTMENT of ENVIRONMENTAL QUALITY

SALT LAKE COUNTY

Project Name:	Test Site		Address:	123 Test Ave		Date:	06/21/2016
Owner:	John		Contractor (Gen/Sub):	Big J		Start time:	3:37 PM
UPDES Permit #:	45689		Expiration: 06/21/2016	Weather: Sunny		Stop time:	12:00 AM

Site Contact: Emily		Phone:	3852755540	Email:	etani@utilisync.com,	
Date of last rain event:	06/13/2016	Duration (hours):	-2	Approximate Rainfall (in):	0.75	
Inspected By: Matt Stayner				Local Jurisdiction or County:	Salt Lake County	
Reason for Inspection:	Scheduled			Receiving Waters:	Great Salt Lake	
Inspection Code:	SW Non-Sampling	Inspector Code:	Local	Type Code:	Municipal	

SWPPP, EROSION, SEDIMENT AND HOUSEKEEPING BMP's INFORMATION

1. Is the SWPPP on site and accessible, or is the SWPPP location posted in an obvious place and reasonably accessible (in a short time)?	Yes
2. Are erosion control, sediment control, buffer controls and good housekeeping BMP's installed on the site as shown in the SWPPP?	Yes
3. Has the SWPPP been updated to reflect the current site conditions (modifications dated & initialed on site map, new BMPs on site map, discontinued BMPs crossed off site map, new BMP details & spec's in SWPPP, SWPPP amendment Log, etc.)?	Yes
4. Are on-site inspections being performed and recorded by a qualified person on a weekly or biweekly basis, reporting items required by permit? (Inspector name, qualifications and signature, weather, problems/repairs, corrective action, new BMPs, removed BMPs, discharges, etc.)	Yes
5. Have all corrective action items from previous inspections been logged, addressed and documented within the time frame allotted?	Yes
6. Are SW flows entering and leaving the construction site controlled, managed, or diverted around the	

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Inspector:	Matt Stayner	SWPPP Inspector		06/21/2016
	(Print Name)	(Title)	(Signature)	(Date)

Operator:	Emily	Operator		06/21/2016
	(Print Name)	(Title)	(Signature)	(Date)

Salt Lake County Case Study

- Salt Lake County paid a $280,000 fine for stormwater violations.

- "We had been complying, but we hadn't been documenting everything we were doing, so there was no proof of what we had been doing." – Russ Wall, PW Director

The Salt Lake Tribune

Salt Lake County to pay $280k to resolve water-pollution violations

By EMMA PENROD | The Salt Lake Tribune

First Published Jan 02 2016 10:48AM

After years of failing to meet runoff from reaching streams be paid to the state of Utah
state and federal expectations and rivers, but inspections directly; the other half will go to
for storm water pollution conducted by the state in 2007 the EPA

Salt Lake County Case Study

- Our process is 2 to 4 times faster. No more paper. It is all completed electronically in the field.

- We are confident a record of every inspection is being distributed to the appropriate parties and archived for audit purposes.

- The work satisfaction of our inspectors has increased. They see this as an investment in making their job easier.