MICHIGAN DEPARTMENT OF
ENVIRONMENT, GREAT LAKES, AND ENERGY

Streamlining Project Workflows that Involve Multiple Esri Applications

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INFORMATION MANAGEMENT DIVISION

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Making an Awesome Project Awesomer

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Outline

STREAMLINING PROJECT WORKFLOWS THAT INVOLVE MULTIPLE ESRI APPLICATIONS

1. Streamlining the Drinking Water Concern System
2. What are StoryMap Collections? And how to Create Your Own!
3. StoryMap Collections Tips and Tricks!

EGLE

Michigan Department of Environment, Great Lakes, and Energy

To protect Michigan's
environment and **public health**
by managing **air**, **water**, land,
and **energy resources**.

EGLE

EGLE Organizational Chart

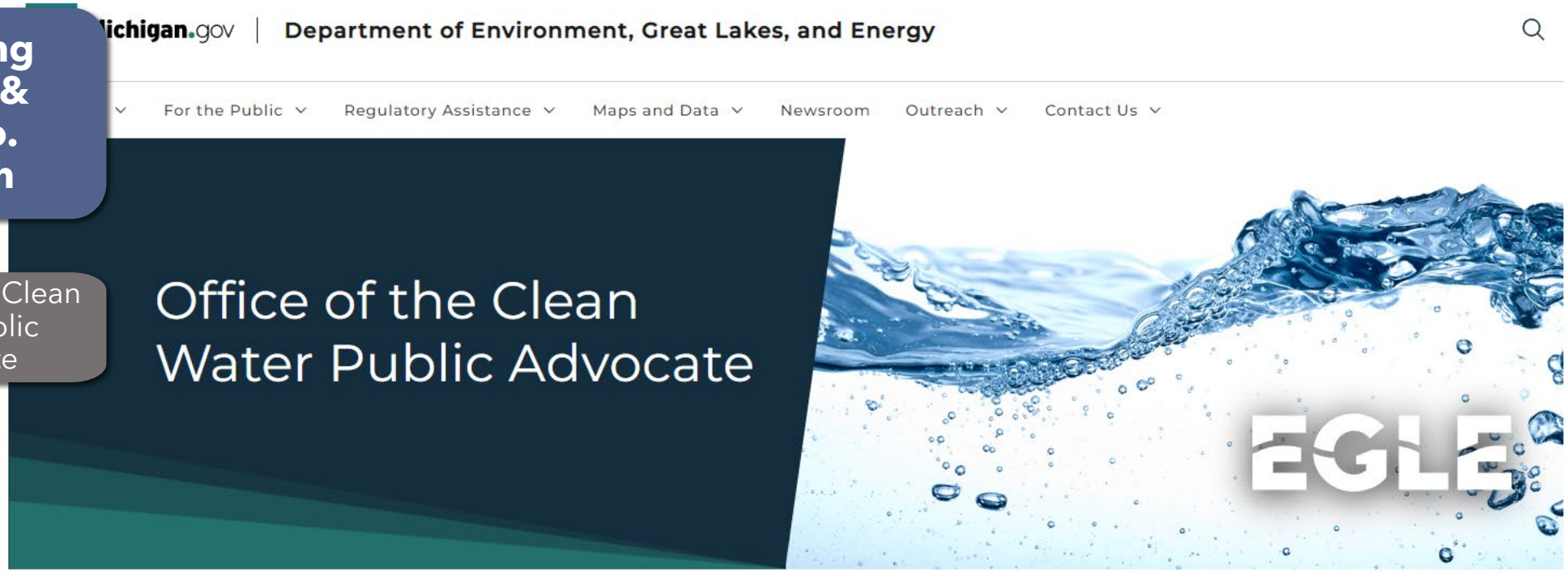
- Office of the Clean Water Public Advocate
- Office of Climate and Energy
- Office of the Enviro. Justice Public Advocate
- Office of the Great Lakes
- Office of Legislative Affairs
- Office of Public Information

- Environmental Support
- Finance
- Information Management

EGLE

Drinking Water & Enviro. Health

Office of the Clean Water Public Advocate



"The OCWPA also ensures that the public can **report drinking water concerns** through the statewide concerns reporting system and that those **concerns are heard and investigated** by the appropriate entity."

Prior Project Workflow

public concern is **submitted** and saved into spreadsheet-based system

concern is **emailed** to central email and distributed manually to correct staff

staff **address concern** manually, concerns can't be edited in original system

New Project Workflow

public concern is **submitted** and saved into a geographic information system (GIS)

concern is **linked** with correct **EGLE District** based on concern topic and location

concern is **emailed** to specific District staff

staff address concern and add **case notes** to original concern

staff **monitor** concerns and patterns

New Project Applications

public concern is **submitted** and saved into a geographic information system (GIS)

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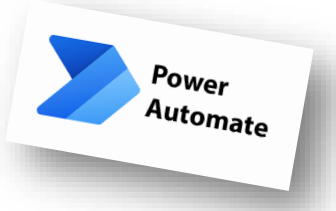


staff address concern and add **case notes** to original concern

staff **monitor** concerns and patterns

Submitting Drinking Water Concerns

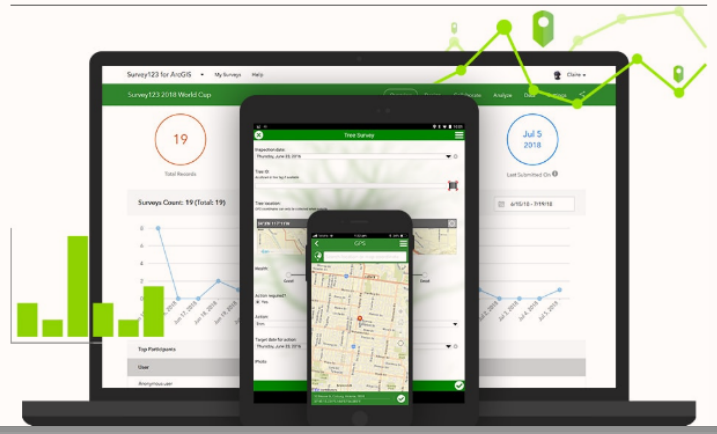
EGLE Clean Water Public Advocate launches online tool to report drinking water concerns

FOR IMMEDIATE RELEASE
October 26, 2020
EGLE Media Office, EGLE-Assist@Michigan.gov, 517-284

esri
ArcGIS Survey123 | Launch

ArcGIS Survey123

Smarter forms, smarter data collection



Michigan.gov | Department of Environment, Great Lakes, and Energy

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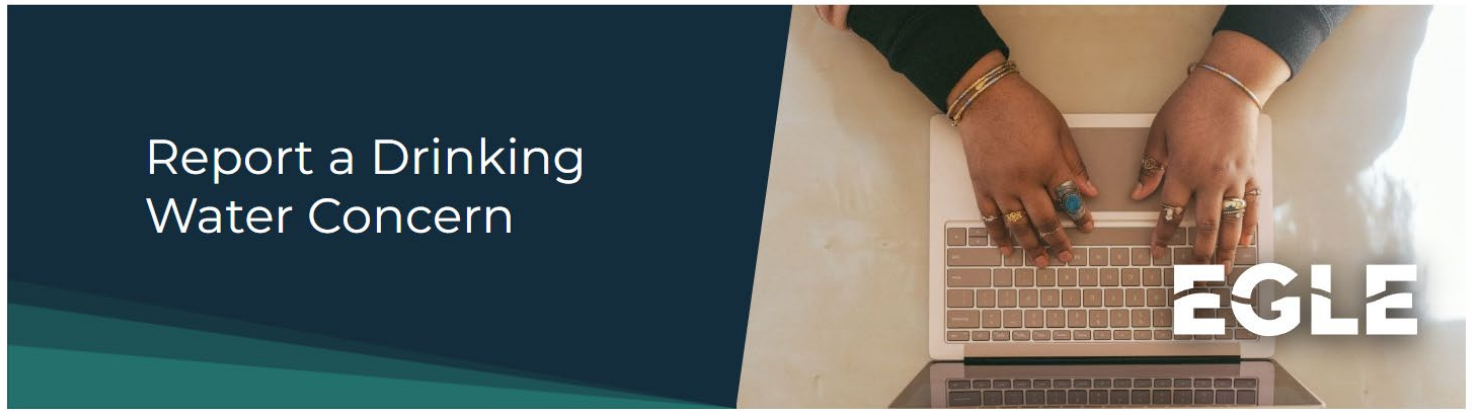


Home > About Us > Divisions and Offices > Office of the Clean Water Public Advocate > Report a Concern

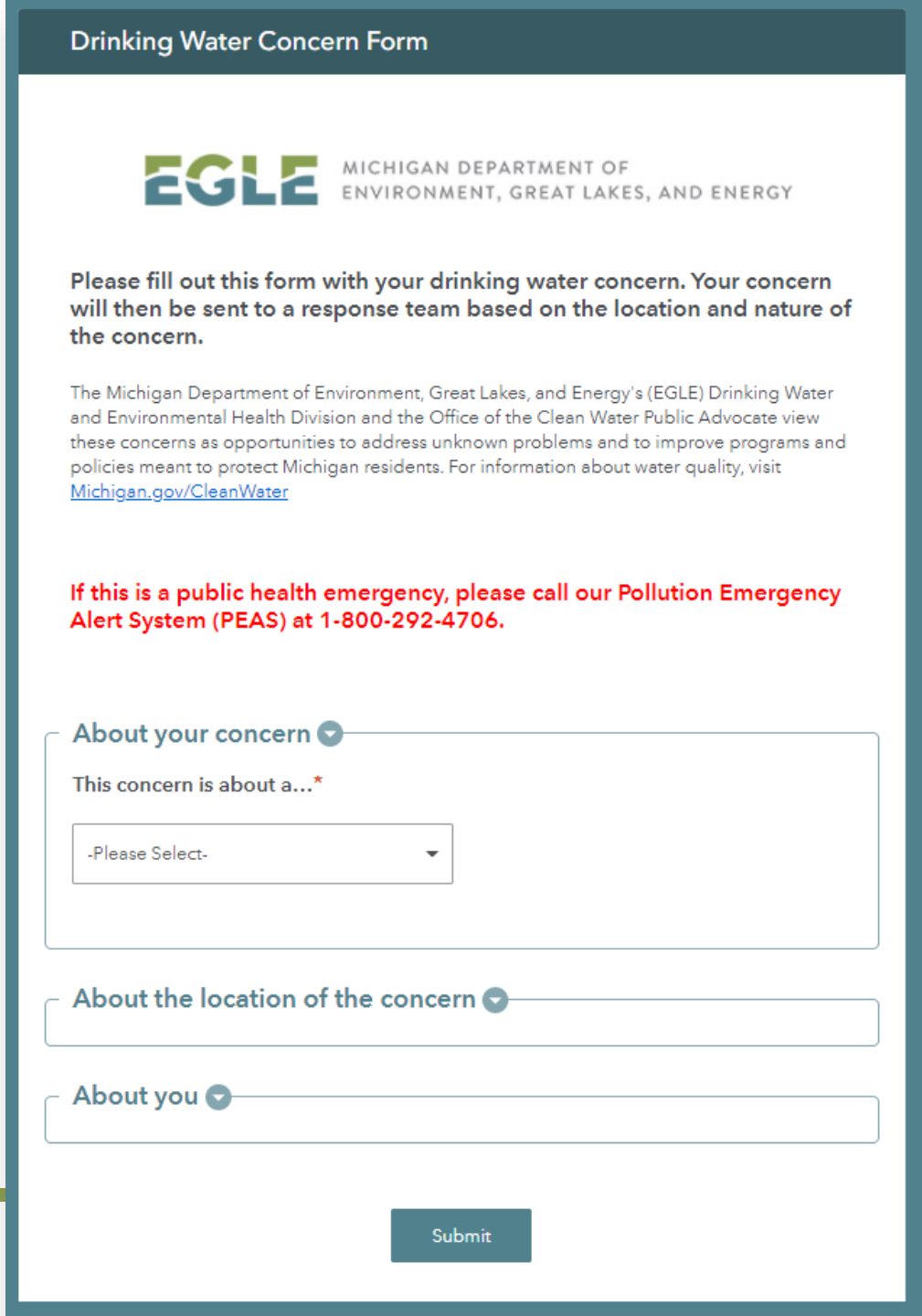
The online drinking water concern system was developed to provide Michigan residents with an additional channel to submit their water quality concerns to EGLE or their Local Health Department (LHD). Michigan residents can submit their water quality concerns using a mobile device or computer.

Before reporting a concern, please check out the following resources, which may help you report your concern more accurately and may help to answer or address your concern. For future reference, this page can be accessed by simply typing Michigan.gov/DrinkingWaterConcerns in the URL bar.

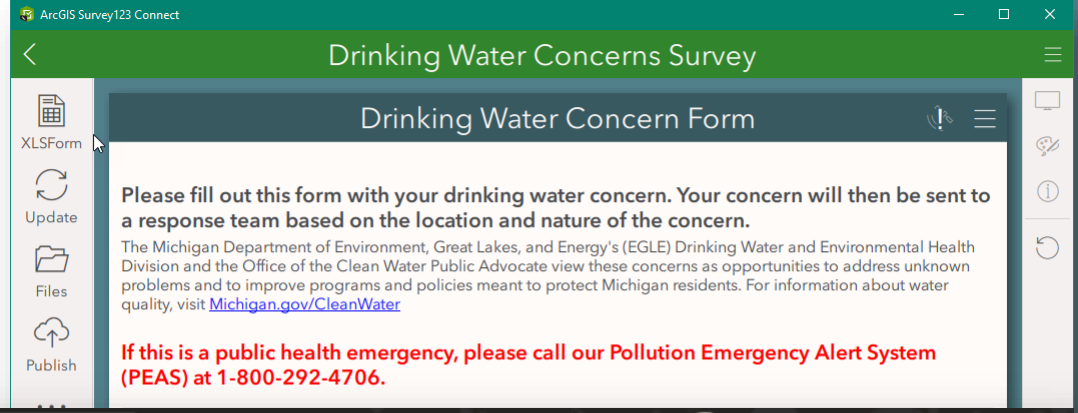
Submit a Drinking Water Concern

Submitting Drinking Water Concerns

- Survey123 Connect (desktop software)
  - More powerful than the web Survey123 Creator



Submitting Drinking Water Concerns



AutoSave Off | Drinking Water Concerns Survey | Search (Alt+Q) | Berg, Kate (EGLE)

File Home Insert Page Layout Formulas Data Review View Help Acrobat Table Design | Comments | Share

M58

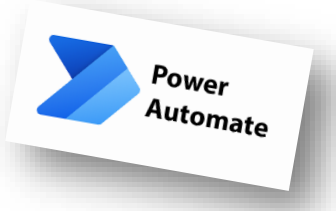
	type	name	label	relevant	calculation	label::Español (es)	label::عربي	h
50	text	ConcernCity	City:	string-length(${ConcernRecurring})>0	pulldata("@geopoint",${DrinkingWaterConcernSurvey_point},"reversegeocode.address.City","https://utility.arcgis.com/us[redacted]/services/World/GeocodeServer")	Ciudad:	المدينة:	
51	text	ConcernZip	Zip code:	string-length(${ConcernRecurring})>0	pulldata("@geopoint",${DrinkingWaterConcernSurvey_point},"reversegeocode.address.Postal","https://utility.arcgis.com[redacted]/rest/services/World/GeocodeServer")	Código postal:	الرمز البريدي:	
52	text	ConcernCounty	County:	string-length(${ConcernRecurring})>0	pulldata("@geopoint",${DrinkingWaterConcernSurvey_point},"reversegeocode.address.Subregion","https://utility.arcgis.co[redacted]/rest/services/World/GeocodeServer")	Condado:	مقاطعة:	
53	text	District	EGLE Drinking Water District	selected(${ConcernSupply},'Public') or selected(${ConcernSupply},'Unsure') and string-length(${ConcernCounty})>0	pulldata('districts','district','county',${ConcernCounty})	Distrito de agua potable del EGLE:	منطقة مياه الشرب التابعة إدارة البيئة (EGLE)	
54	text	LocalHealth	Local Health Department	selected(${ConcernSupply},'Private') or selected(${ConcernSupply},'NonCommunity') and string-length(${ConcernCounty})>0	pulldata('localhealthdepartments','lhd','county',${ConcernCounty})	Departamento de Salud local:	دائرة الصحة المحلية	
55	end group							
56	begin group	GroupSubmitter	About you			Sobre usted	معلومات عنك	
57	select_one YesNo	Anonymous	Do you wish to remain anonymous?	string-length(${ConcernCounty})>0		¿Desea permanecer anónimo?	هل تود أن تبقى مجهول الهوية؟	

Project Workflow

public concern is **submitted** and saved into a geographic information system (GIS)

concern is **linked** with correct **EGLE District** based on concern topic and location

concern is **emailed** to specific District staff



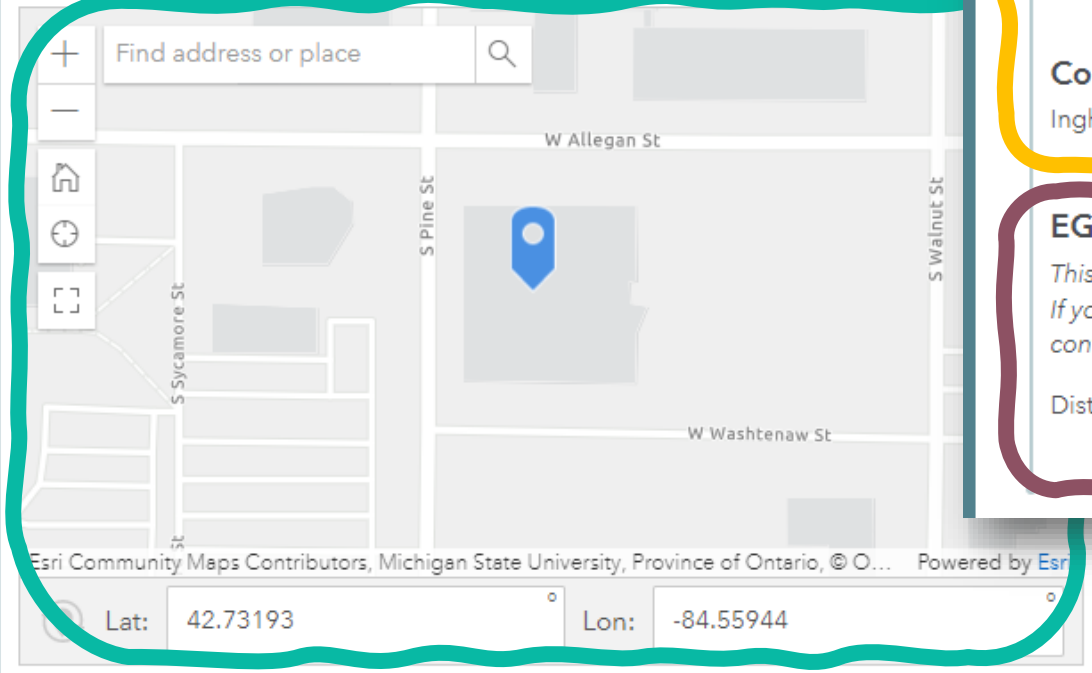
staff address concern and add **case notes** to original concern

staff **monitor** concerns and patterns

About the location of the concern

Where is this concern located?*

Use the search bar to type in an address, then select from the list of suggestions



IMPORTANT: The following address has been populated from your choice above. Please review it for accuracy. If it is not accurate, please re-enter you address into the searchbar in the map above.

Street address:
525 W Allegan St

City:
Lansing

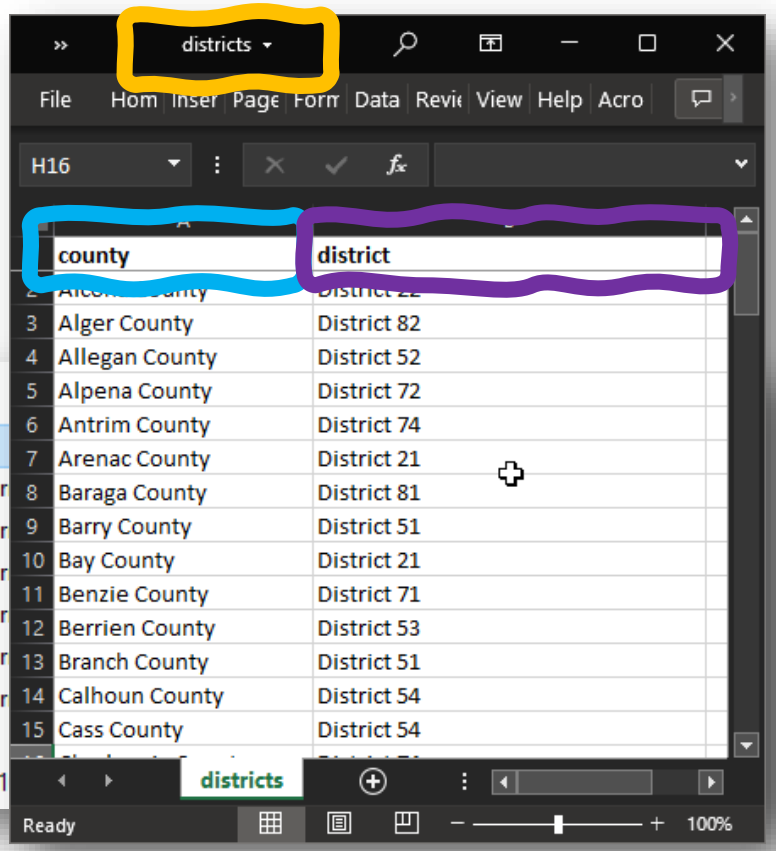
Zip code:
48933

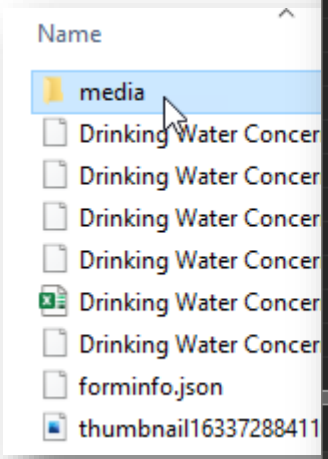
County:
Ingham County

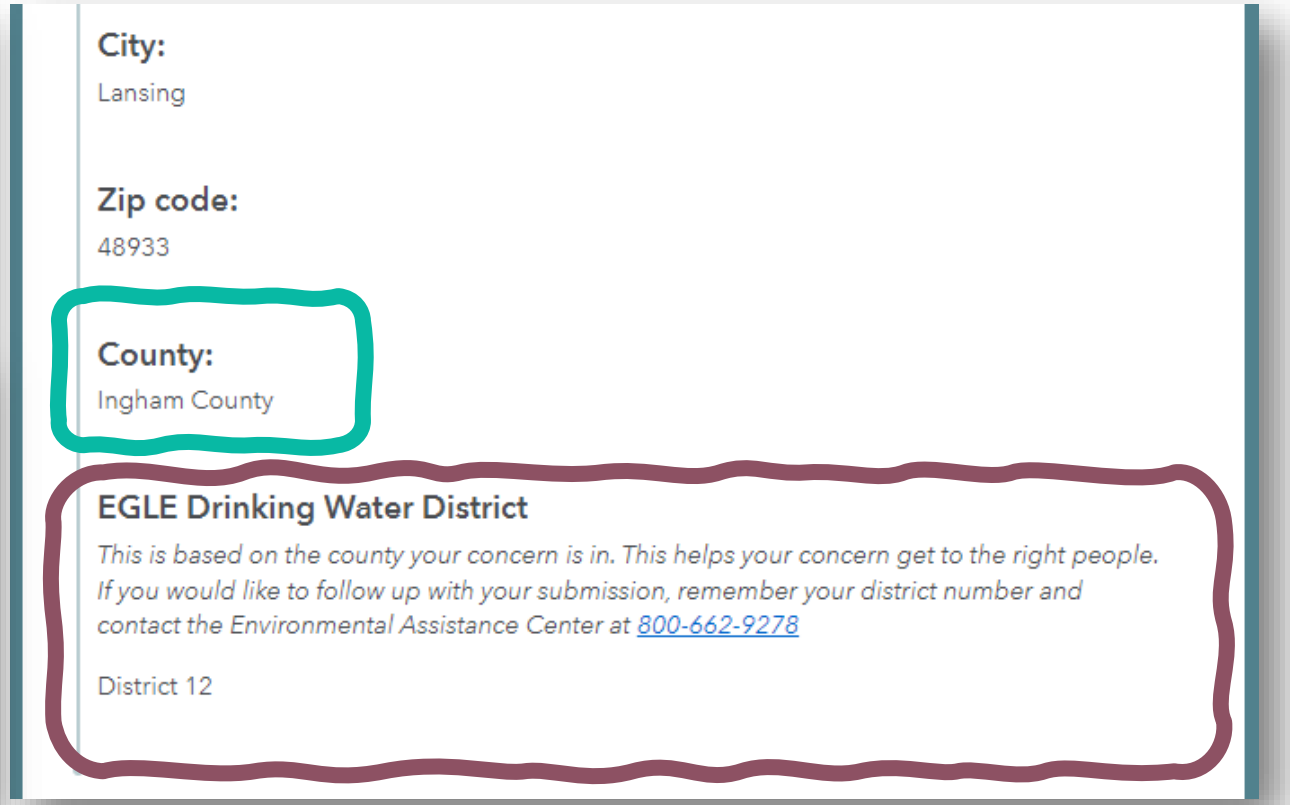
EGLE Drinking Water District

This is based on the county your concern is in. This helps your concern get to the right people. If you would like to follow up with your submission, remember your district number and contact the Environmental Assistance Center at 800-662-9278

District 12







label	relevant	calculation
EGLE Drinking Water District	selected(${ConcernSupply},'Public') or selected(${ConcernSupply},'Unsure') and string-length(${ConcernCounty})>0	pulldata('districts','district','county',${ConcernCounty})

pulldata('filename', 'field name of info to pull', 'field name of Survey123 A', ${name of Survey123 Q with A to lookup})

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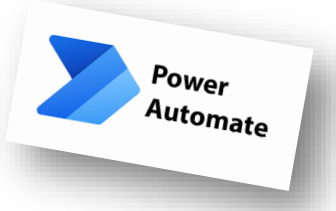

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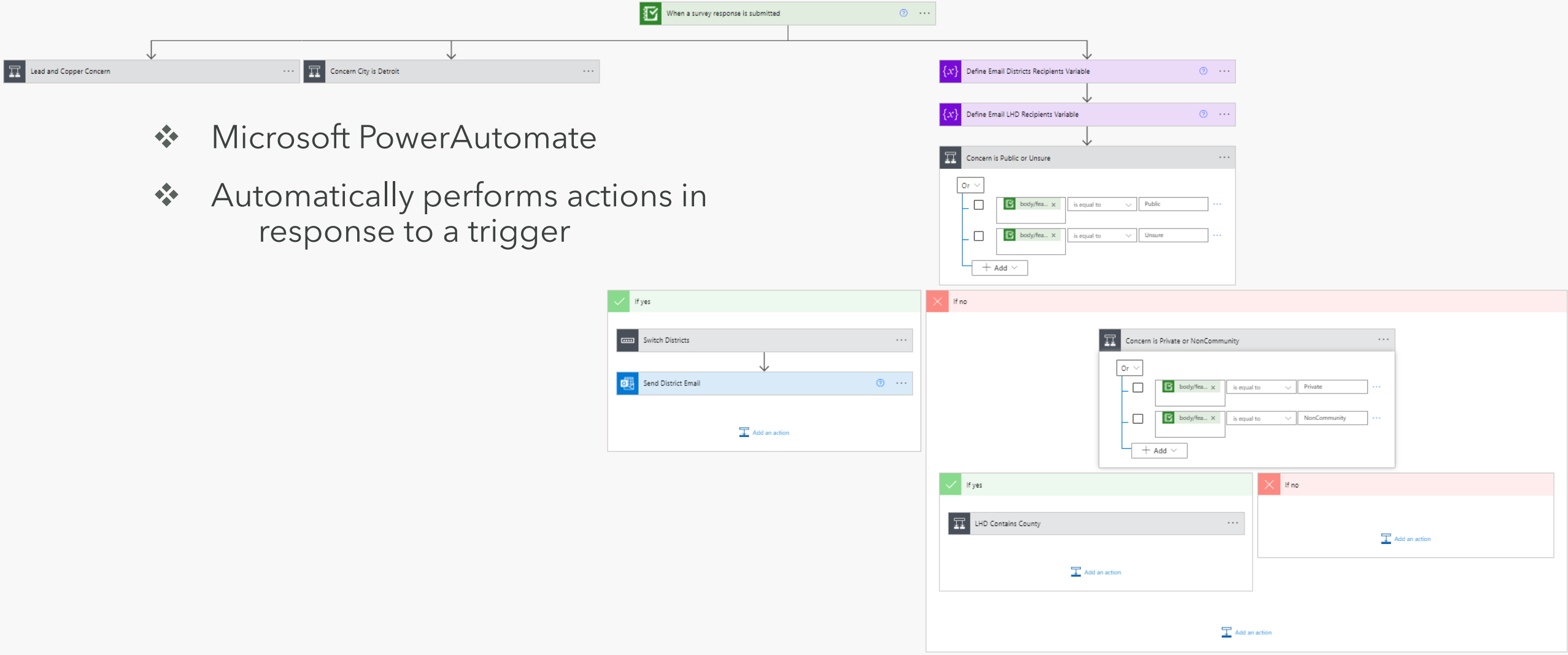
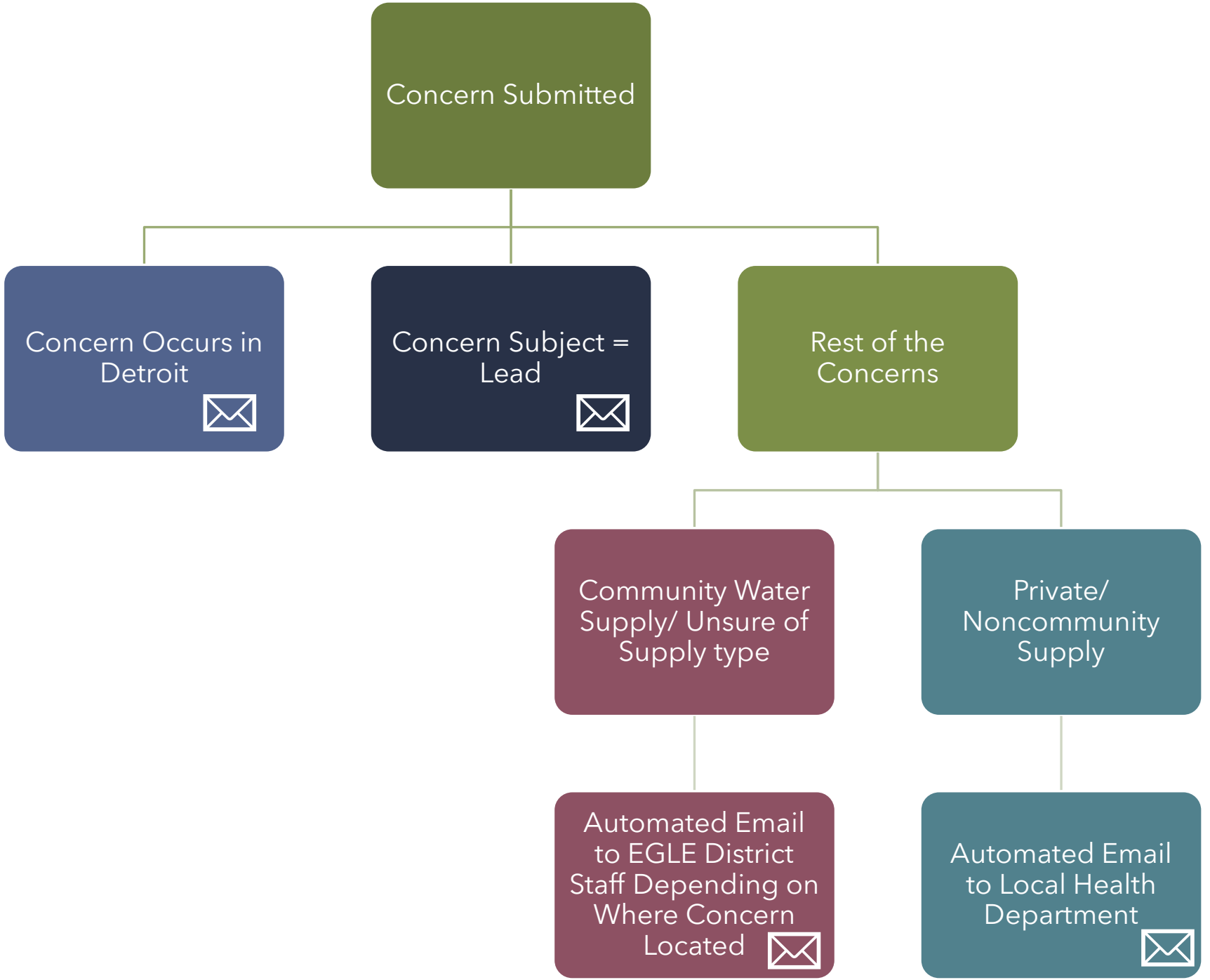
Automatically Route Concerns to Appropriate Staff

- Microsoft PowerAutomate
- Automatically performs actions in response to a trigger



Power Automate



Power Automate

District 11

Send District Email

*To: Email Recipients

*Subject: New Concern submitted for body/feature/a... (body/feature/a... , body/feature/a...)

*Body

Font 12

There has been a new Drinking Water Concern submitted for body/feature/attributes/District . View all concerns in the Drinking Water Concern System Project Manager.

CONCERN DETAILS

Supply: body/feature/attributes/ConcernSupply

Subject: body/feature/attributes/ConcernSubject

Subject details: body/feature/attributes/ConcernSubjectATDetails / body/feature/attributes/ConcernSubjectODetails body/feature/attributes/ConcernSubjectLeadCopperDetails body/feature/attributes/ConcernSubjectLeaksDetails body/feature/attributes/ConcernSubjectPLDetails body/feature/attributes/ConcernSubjectPFASDetails body/feature/attributes/ConcernSubjectPressureDetails body/feature/attributes/ConcernSubjectSafetyDetails

Lead service line (conditional question): body/feature/attributes/LeadServiceLine

Recurring: body/feature/attributes/ConcernRecurring

Description: body/feature/attributes/ConcernDescription

District 12

*Equals: District 12

Set D12 Emails

*Name: Email Recipients

*Value: [redacted]@michigan.gov;

Community Water Supply/ Unsure of Supply type

Private/ Noncommunity Supply

Automated Email to EGLE District Staff Depending on Where Concern Located

Automated Email to Local Health Department

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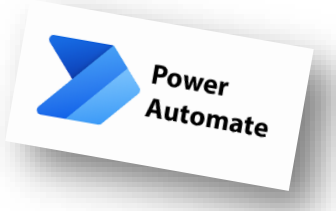

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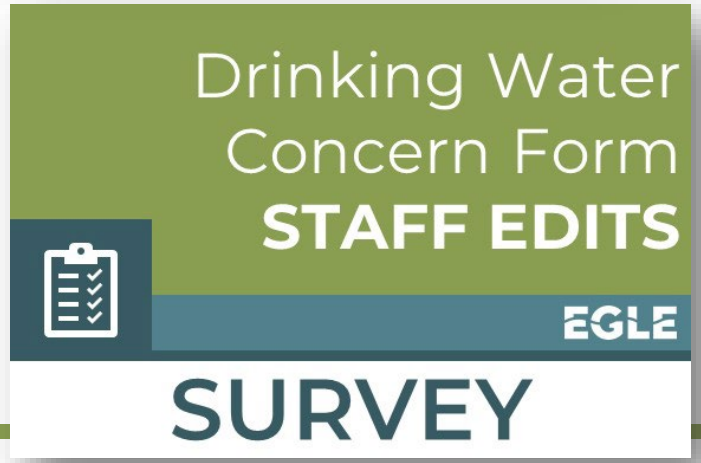
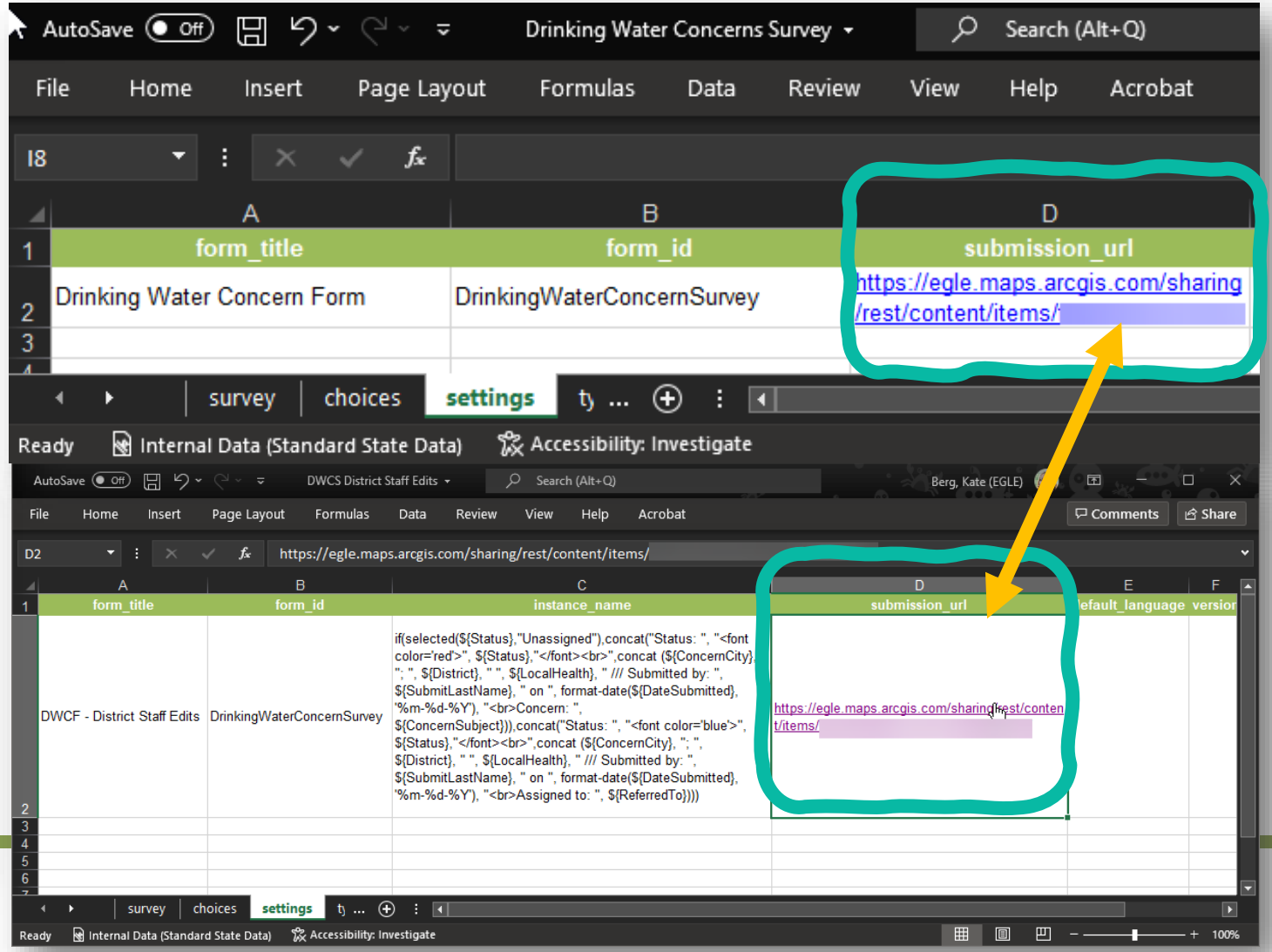
Add Case Notes to Received Concerns





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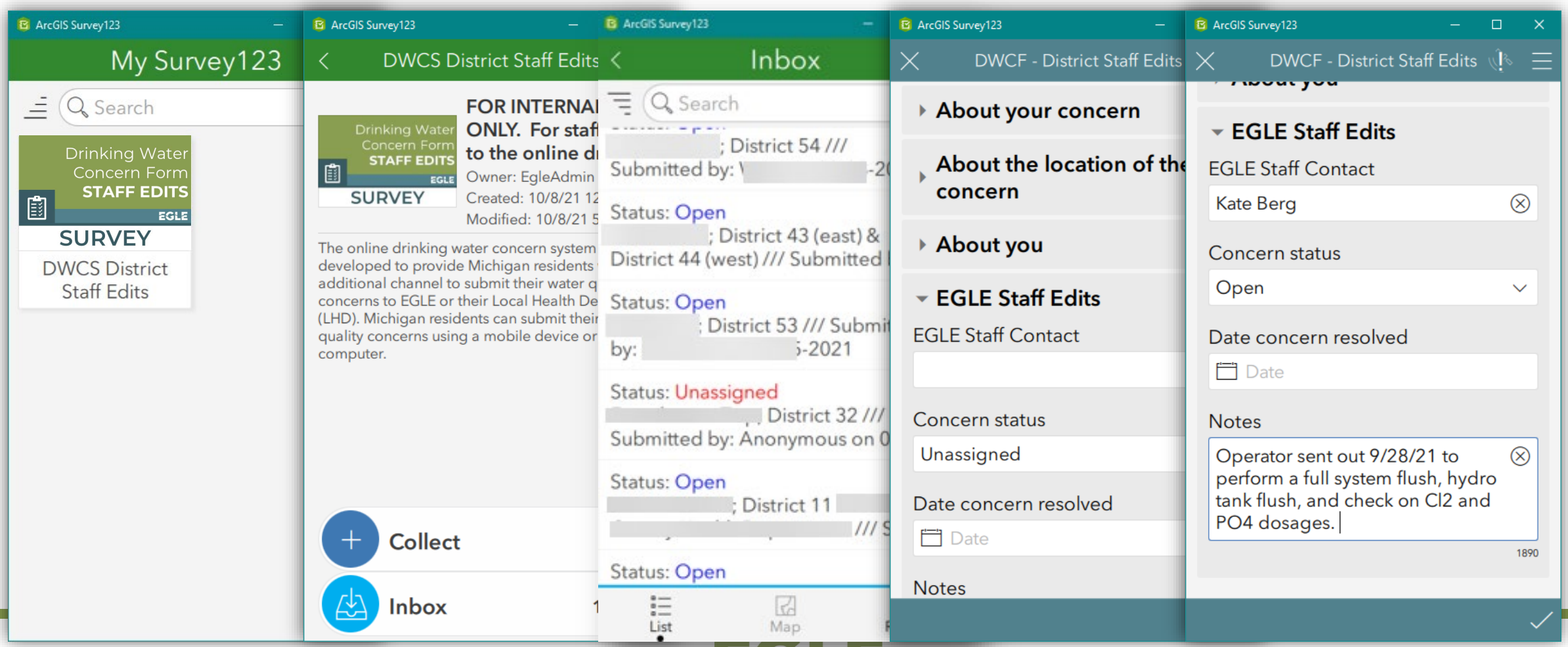

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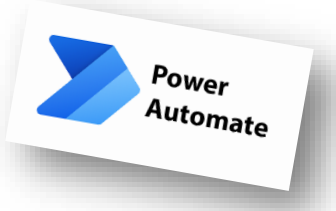

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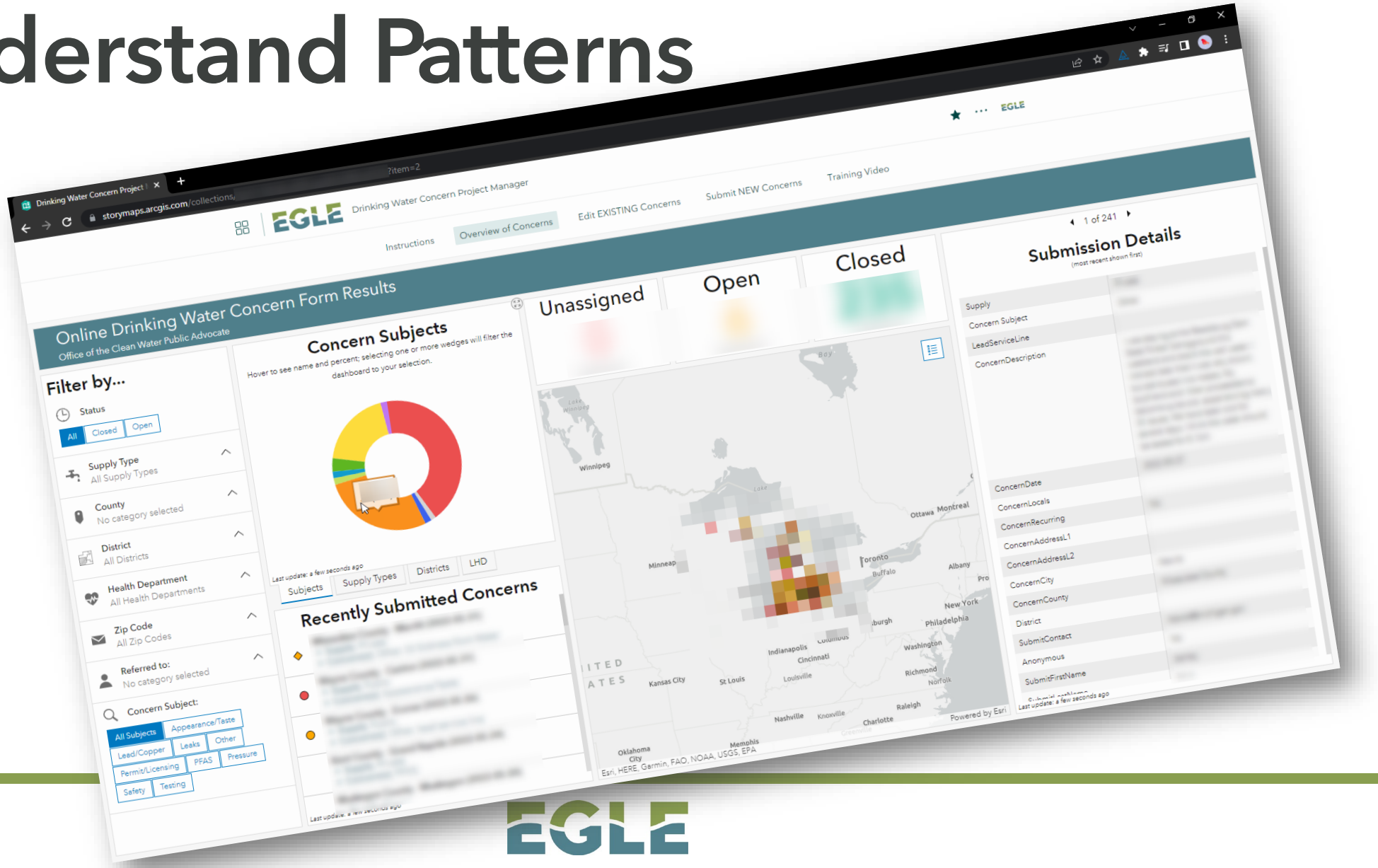
Monitor Concerns and Understand Patterns



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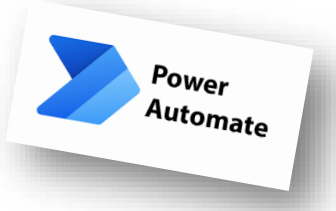

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Install Survey123 for Desktop
(Drinking Water Concern Form)

1. Open Software Center

Locate and open the Software Center application on your computer. If do not know where it is, use the search function on your task bar (or click the magnifying glass icon) and simply type "Software Center".

2. Install Survey123

Within Software Center, use the search function and type in "Survey123". Select "Survey123 for ArcGIS" to get to the application details screen; then click the blue install button. Follow the instructions on the screen.

NOTE: Two applications may appear in your search results – do NOT download "Survey123 Connect for ArcGIS".

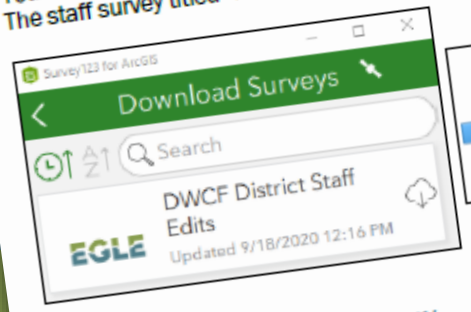
3. Open Survey123

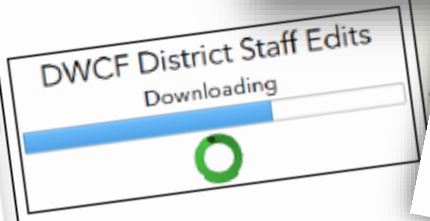
Once installed, locate and open Survey123. You may see the program as a small, rectangular window; you can resize this or maximize th screen if you want.

NOTE: You may get an "Unable to connect: position sour closed error" when first opening the program – disregard t error. This simply refers to the application's ability to pinpo your location – click 'Ok'.

4. Download Staff Edits Survey

You should see a message, "No surveys on device" followed by a gre The staff survey titled "DWCF District Staff Edits" should appear as



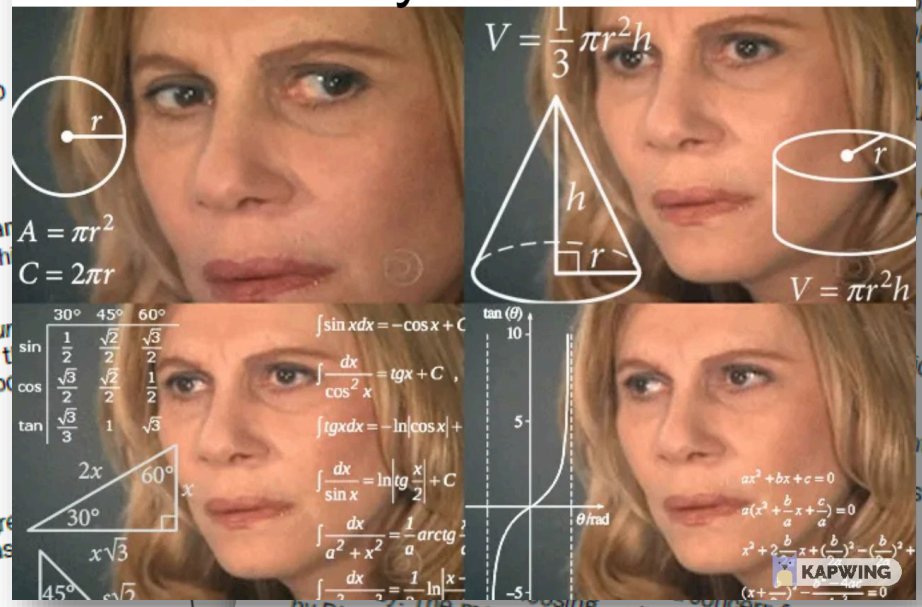


the Staff Edits Survey

...n of the program. You will see two options; "Collect" ...y need to click "Refresh" if no

Refresh

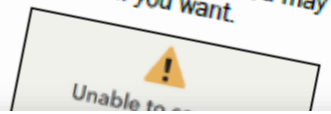
Staff trying to access Survey123 Inbox



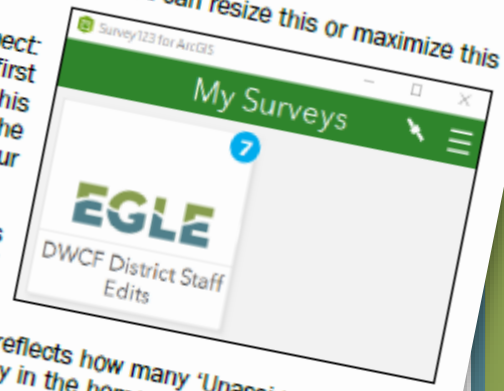
Making Edits within the Survey123 App
(Drinking Water Concern Form)

1. Open Staff Edits Survey

Open Survey123. You may see the program as a small, rectangular window; you can resize this or maximize this screen if you want.



NOTE: You ma... get an "Unable to connect: ...e closed error" when first ...rogram – disregard this ...imply refers to the ...ility to pinpoint your ...k'.



...VCF District Staff Edits ...urvey123 for Desktop"

...of the thumbnail; this reflects how many 'Unassigned' / 'Open' ...rvey. Click on the survey in the home screen of the program to

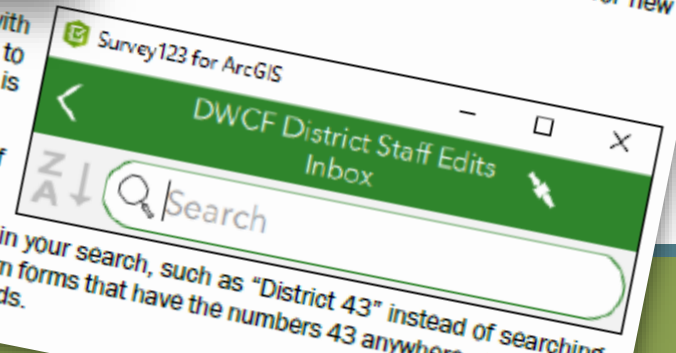
...ons; "Collect" and "Inbox". To edit submitted concern forms, ...tries are showing.

Refresh

...status field set to 'Unassigned' (the default value for new ...concern forms with ...sing – all fields are available to ...by District.

While typing your search criteria, you'll notice the list of available concern forms grow smaller.

NOTE: It's best practice to use the word District in your search, such as "District 43" instead of searching by "43" alone – this will turn up submitted concern forms that have the numbers 43 anywhere such as the phone number, address, or email fields.



Project Workflow

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Website

staff **monitor** concerns and patterns

Updated Project Workflow

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Power Automate

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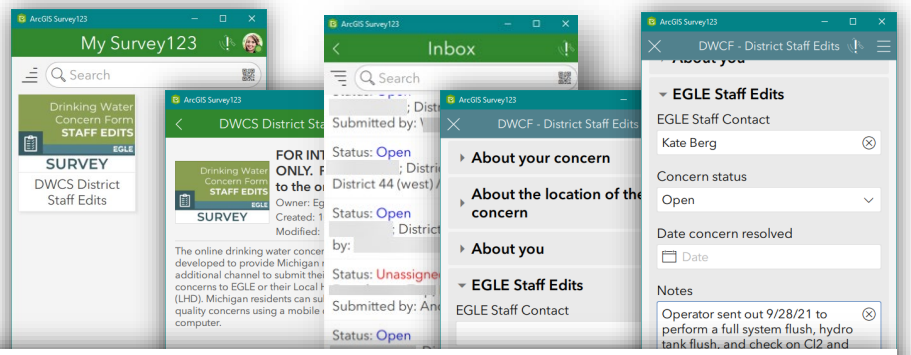


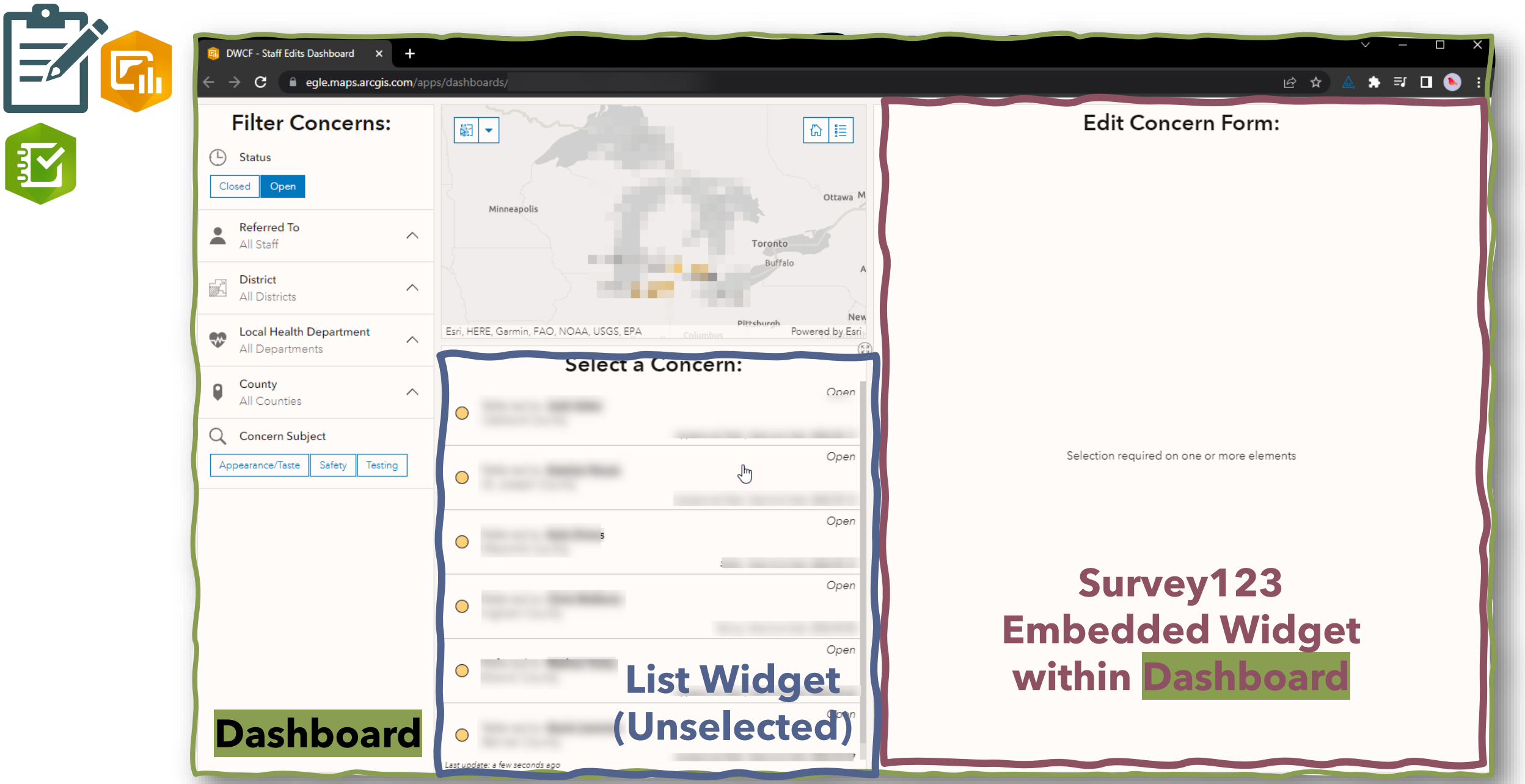
How To: Embed a survey form and edit existing data from ArcGIS Survey123 in ArcGIS Dashboards

Summary

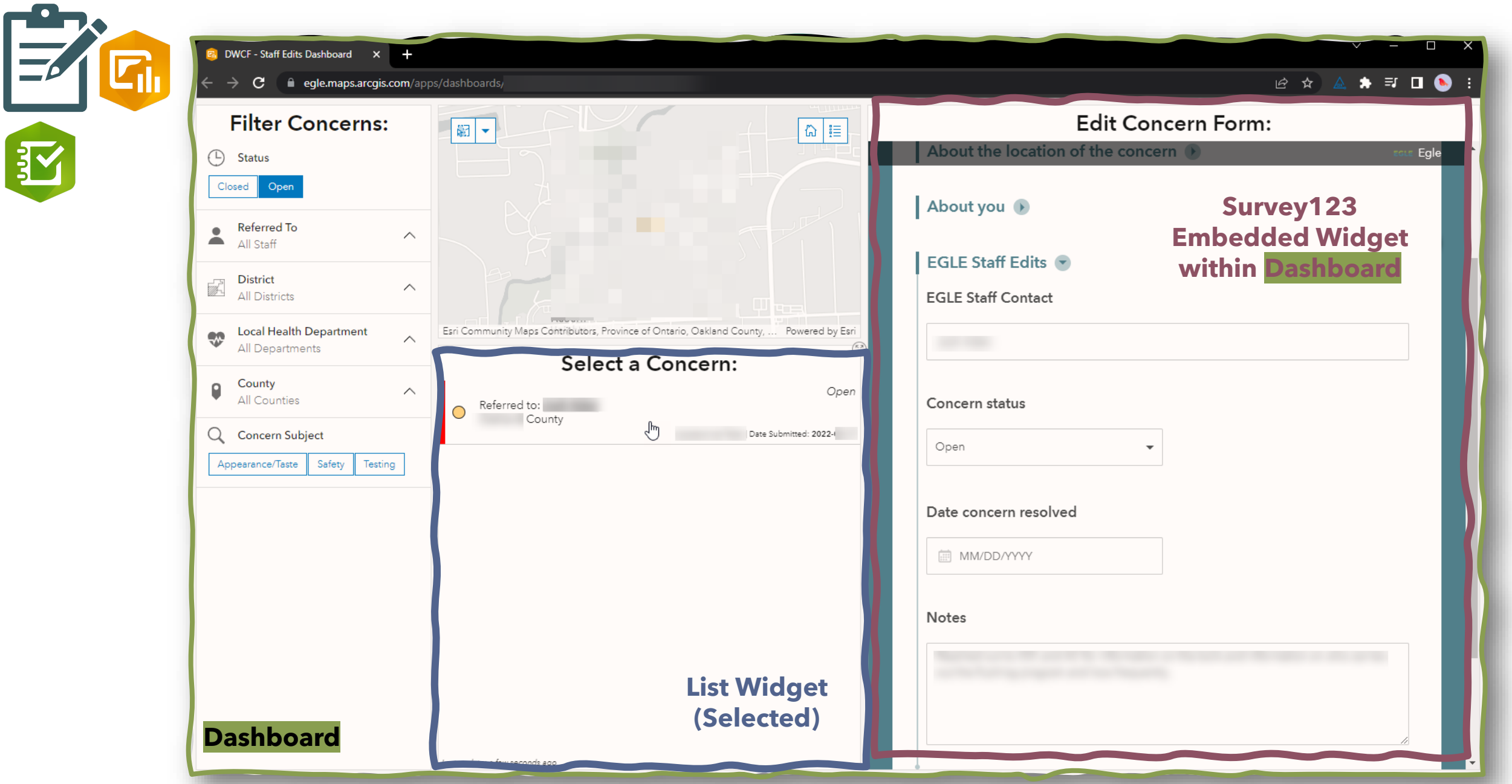
ArcGIS Dashboards supports embedded content in dashboard elements. The content may vary from images and videos, to website pages and more. Embedding surveys from ArcGIS Survey123 combines the visual appeal and understanding of Dashboards with real-time data editing and response.

This article describes how to embed a survey form from ArcGIS Survey123 in ArcGIS Dashboards, and customize the form to edit existing data.

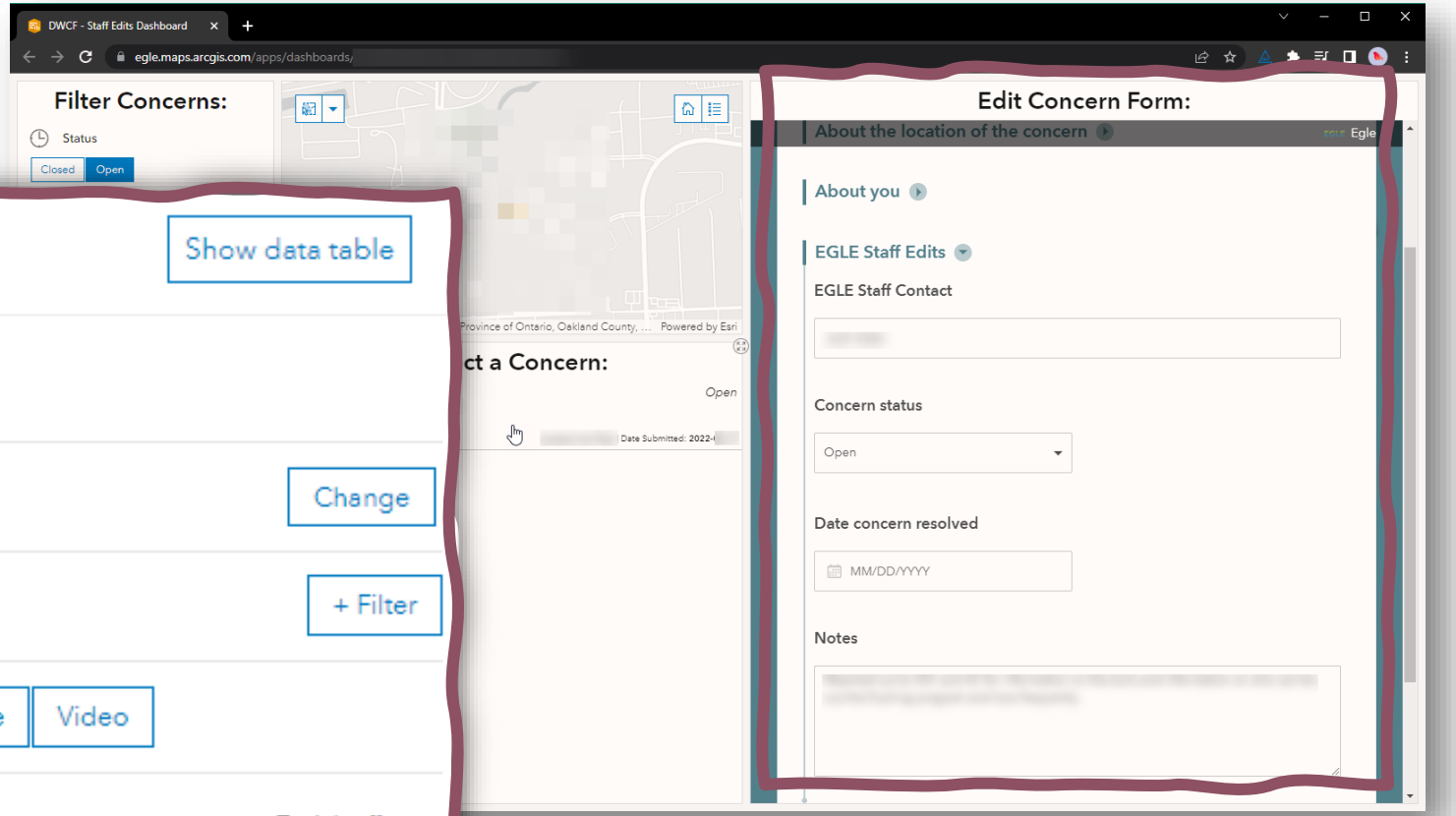
support.esri.com/en/technical-article/000021897

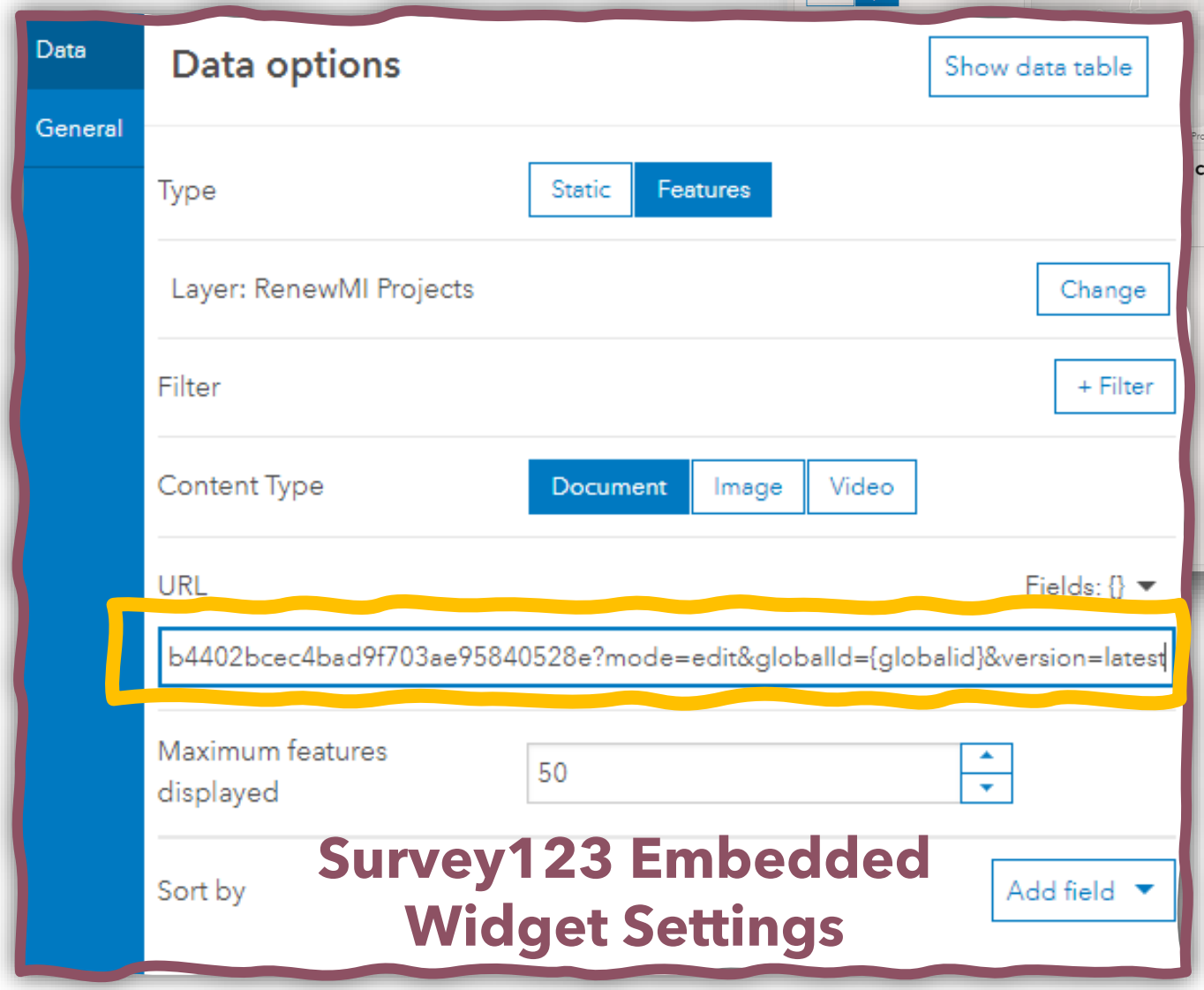


support.esri.com/en/technical-article/000021897



support.esri.com/en/technical-article/000021897





Survey123 URL **+**

?mode=edit&

globalId={globalid}

&version=latest

support.esri.com/en/technical-article/000021897

Download Survey123 app

Embed Survey123 in a Dashboard

Updated Project Workflow

Website

staff address concern and add **case notes** to original concern

Website

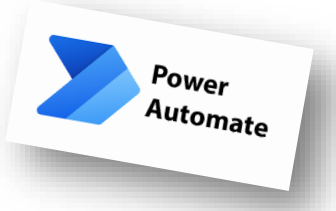
staff **monitor** concerns and patterns

Project Workflow

public concern is **submitted** and saved into a geographic information system (GIS)

concern is **linked** with correct **EGLE District** based on concern topic and location

concern is **emailed** to specific District staff



staff address concern and add **case notes** to original concern

staff **monitor** concerns and patterns

EGLE

Collection

Drinking Water Concern Project Manager

A collection of items related to the Drinking Water Concern System.

For internal use only.

Get started

1 Instructions

2 Overview of Concerns

3 Edit EXISTING Concerns

4 Submit NEW Concerns

5 Training Video

What are ArcGIS StoryMap Collections?

What are ArcGIS StoryMaps?

"Transform your digital storytelling with custom maps."

ArcGIS StoryMaps helps you tell remarkable stories with custom maps that inform and inspire.

Use our simple map maker to create custom maps to enhance your digital storytelling. Or **add text, photos, and videos** to your existing ArcGIS web maps and web scenes to **create an interactive narrative** that's easy to publish and share.

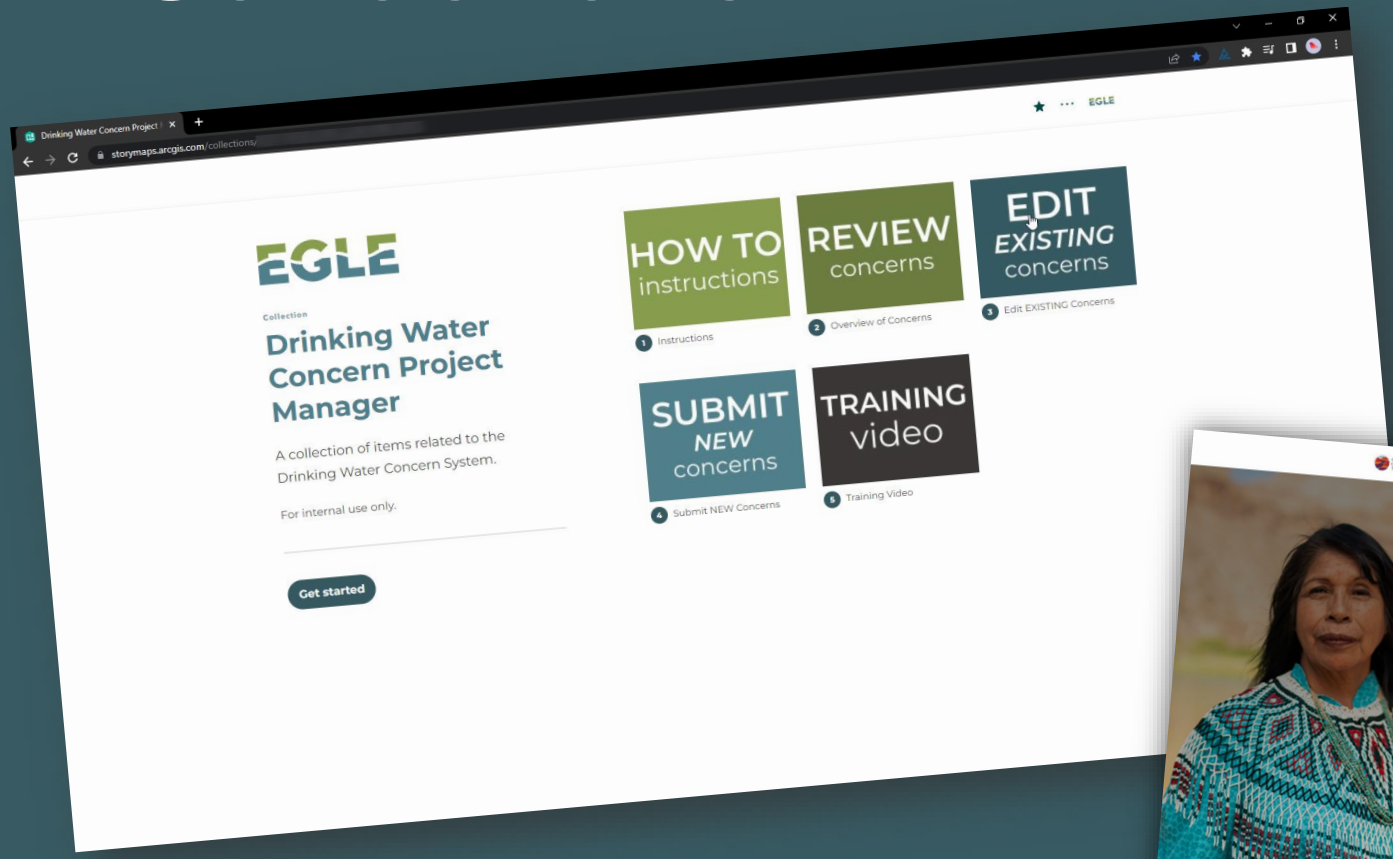
https://www.esri.com/en-us/arcgis/products/arcgis-storymaps/overview

EGLE

What are ArcGIS StoryMap Collections?

- Feature introduced August 2019 by Esri StoryMaps team
- Way to quickly group StoryMaps together as one organized cluster
- Can group more than StoryMaps!:
  - Configurable apps
  - ArcGIS Experience Builder, Insights, Dashboards, Web AppBuilder, etc.
  - Files (e.g. images, PDFs, etc.) uploaded to ArcGIS Online
  - Any URLs

What are ArcGIS StoryMap Collections?



DEMO

arcg.is/1LLGbX

Drinking Water Concern Project

storymaps.arcgis.com/collections/

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EGLE MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY

Welcome to the Drinking Water Concern Project Manager

This document serves as an overview of the features of the new Drinking Water Concern Project Manager system, a new browser-based solution for reviewing, editing, and submitting to the Drinking Water Concern Form. This new system will serve as your one-stop-shop for all

Drinking Water Concern Project

storymaps.arcgis.com/collections/ ?item=2

EGLE Drinking Water Concern Project Manager

EGLE

Instructions | Overview of Concerns | Edit EXISTING Concerns | Submit NEW Concerns | Training Video

Online Drinking Water Concern Form Results

Office of the Clean Water Public Advocate

Filter by...

Status

All | Closed | Open

Supply Type
All Supply Types

County
No category selected

District
All Districts

Health Department
All Health Departments

Zip Code
All Zip Codes

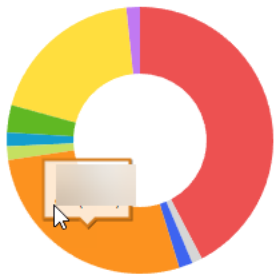
Referred to:
No category selected

Concern Subject:

All Subjects | Appearance/Taste | Lead/Copper | Leaks | Other | Permit/Licensing | PFAS | Pressure | Safety | Testing

Concern Subjects

Hover to see name and percent; selecting one or more wedges will filter the dashboard to your selection.



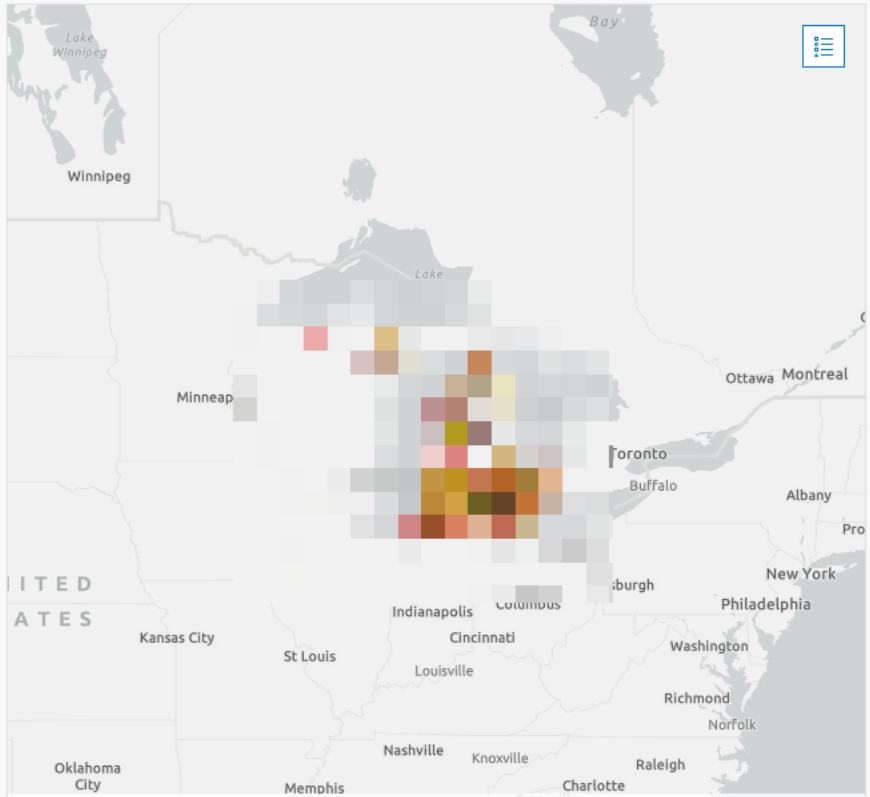
Last update: a few seconds ago

Subjects | Supply Types | Districts | LHD

Recently Submitted Concerns

Last update: a few seconds ago

Unassigned	Open	Closed
[redacted]	[redacted]	[redacted]



1 of 241

Submission Details

(most recent shown first)

Supply	[redacted]
Concern Subject	[redacted]
LeadServiceLine	
ConcernDescription	[redacted]
ConcernDate	[redacted]
ConcernLocals	
ConcernRecurring	[redacted]
ConcernAddressL1	
ConcernAddressL2	
ConcernCity	[redacted]
ConcernCounty	[redacted]
District	
SubmitContact	[redacted]
Anonymous	[redacted]
SubmitFirstName	[redacted]

Last update: a few seconds ago

Drinking Water Concern Project

storymaps.arcgis.com/collections/[redacted]?item=3

EGLE Drinking Water Concern Project Manager

EGLE

Instructions | Overview of Concerns | Edit EXISTING Concerns | Submit NEW Concerns | Training Video

Filter Concerns:

Status

Closed | Open

Referred To
All Staff

District
All Districts

Local Health Department
All Departments

County
All Counties

Concern Subject

Appearance/Taste | Safety | Testing

Select a Concern:

Open

Referred to: [redacted]
[redacted] County

[redacted] | Date Submitted: 2022

Last update: a few seconds ago

Edit Concern Form:

Egle

EGLE Staff Edits

EGLE Staff Contact

[redacted]

Concern status

Open

Date concern resolved

MM/DD/YYYY

Notes

[redacted]

Drinking Water Concern Form

Michigan Department of Environment, Great Lakes, and Energy

Please fill out this form with your drinking water concern. Your concern will then be sent to a response team based on the location and nature of the concern.

The Michigan Department of Environment, Great Lakes, and Energy's (EGLE) Drinking Water and Environmental Health Division and the Office of the Clean Water Public Advocate view these concerns as opportunities to address unknown problems and to improve programs and policies meant to protect Michigan residents. For information about water quality, visit Michigan.gov/CleanWater

If this is a public health emergency, please call our Pollution Emergency Alert System (PEAS) at 1-800-292-4706.

About your concern

This concern is about a...*

-Please Select-

- Private Individual Well (private residential well)
- Community Water Supply (local water department)
- Noncommunity Water Supply (well water for a business, schools, daycares, industries, etc.)

Drinking Water Concern Project

EGLE Drinking Water Concern Project Manager

EGLE

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Training: New Drinking Water Concern "Project Manager" System

Drinking Water Concern Project

storymaps.arcgis.com/collections/

EGLE

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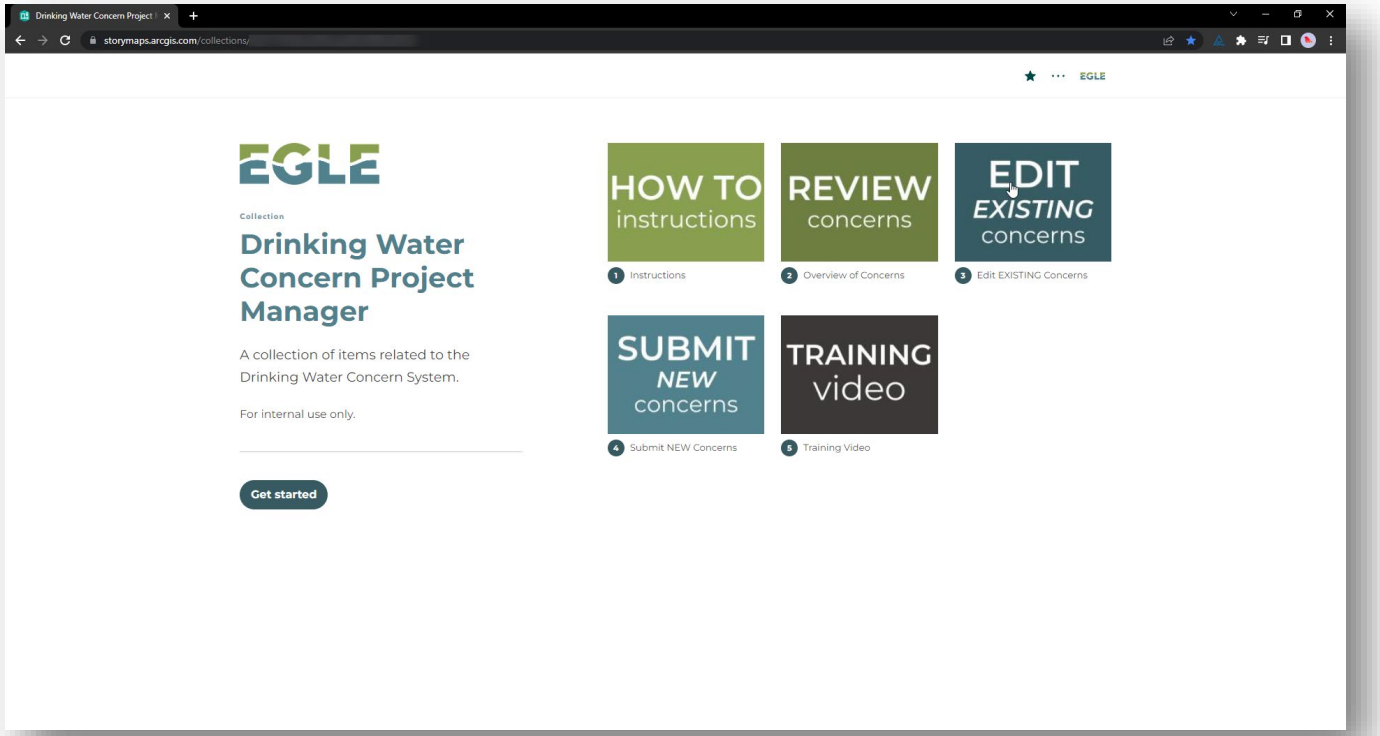
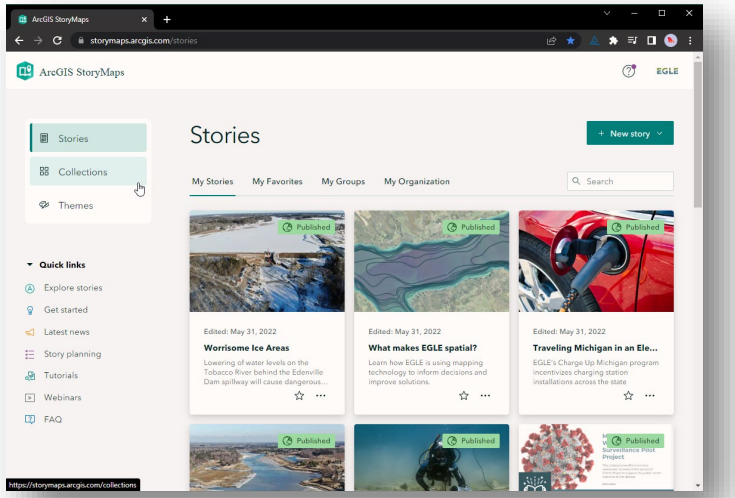
Create Your Own Collection!

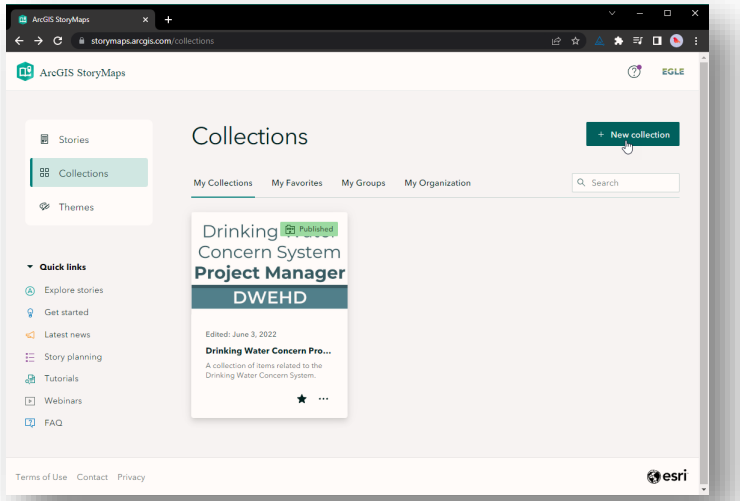
DEMO

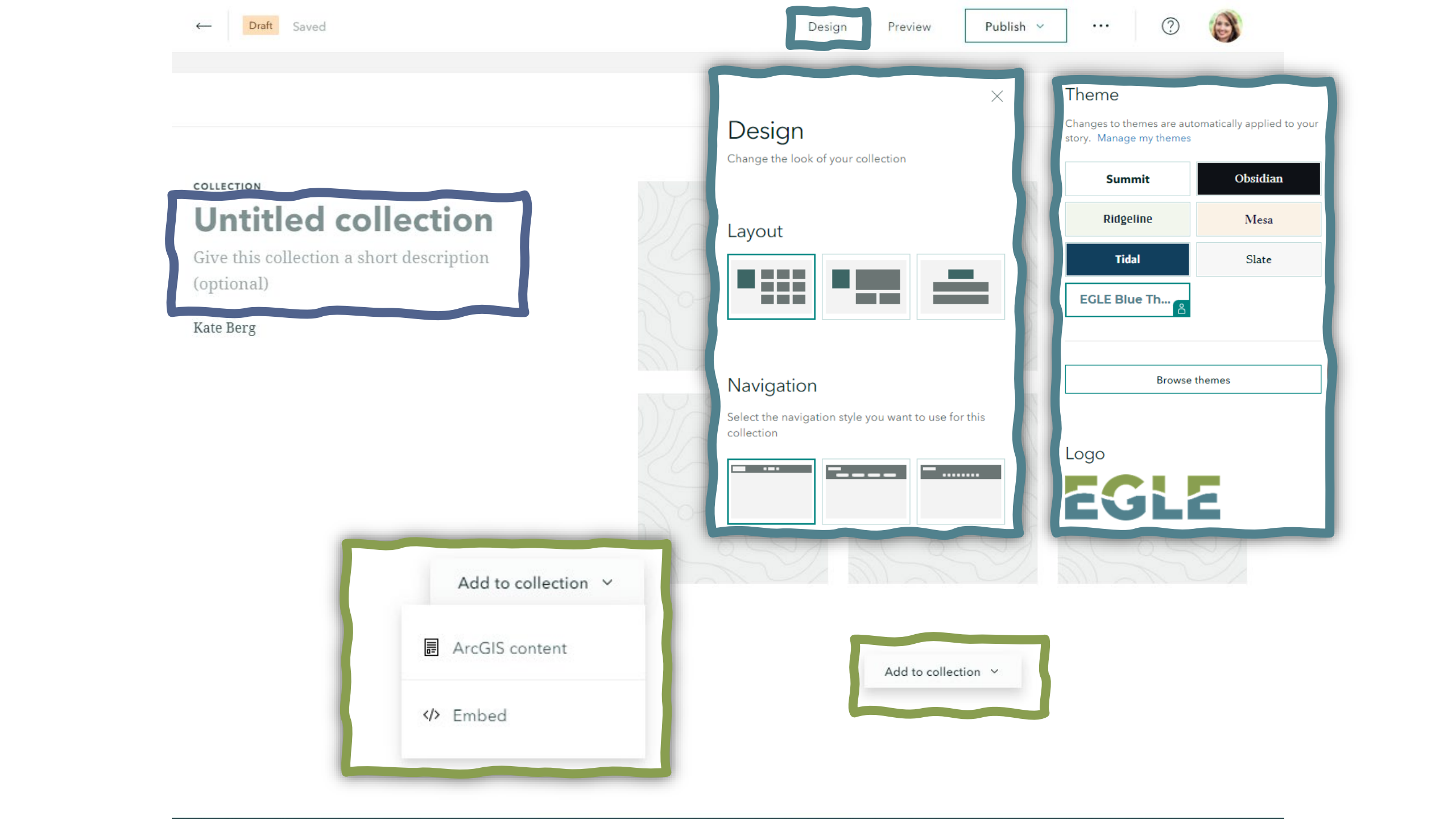


Create Your Own Collection!

- Go to storymaps.arcgis.com
- Click on “Collections” tab (top left)
- Click “+ New collection” (top right)






Draft
Saved
Design
Preview
Publish
COLLECTION
Untitled collection
Give this collection a short description (optional)
Kate Berg
Design
Change the look of your collection
Layout
Navigation
Select the navigation style you want to use for this collection
Theme
Changes to themes are automatically applied to your story. Manage my themes
Summit
Obsidian
Ridgeline
Mesa
Tidal
Slate
EGLE Blue Th...
Browse themes
Logo
EGLE
Add to collection
ArcGIS content
Embed
Add to collection

Drinking Water Concern Project

storymaps.arcgis.com/collections/

EGLE

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Current Project Workflow

public concern is **submitted** and saved into a geographic information system (GIS)

(Background)

concern is **linked** with correct **EGLE District** based on concern topic and location

(Background)

concern is **emailed** to specific District staff

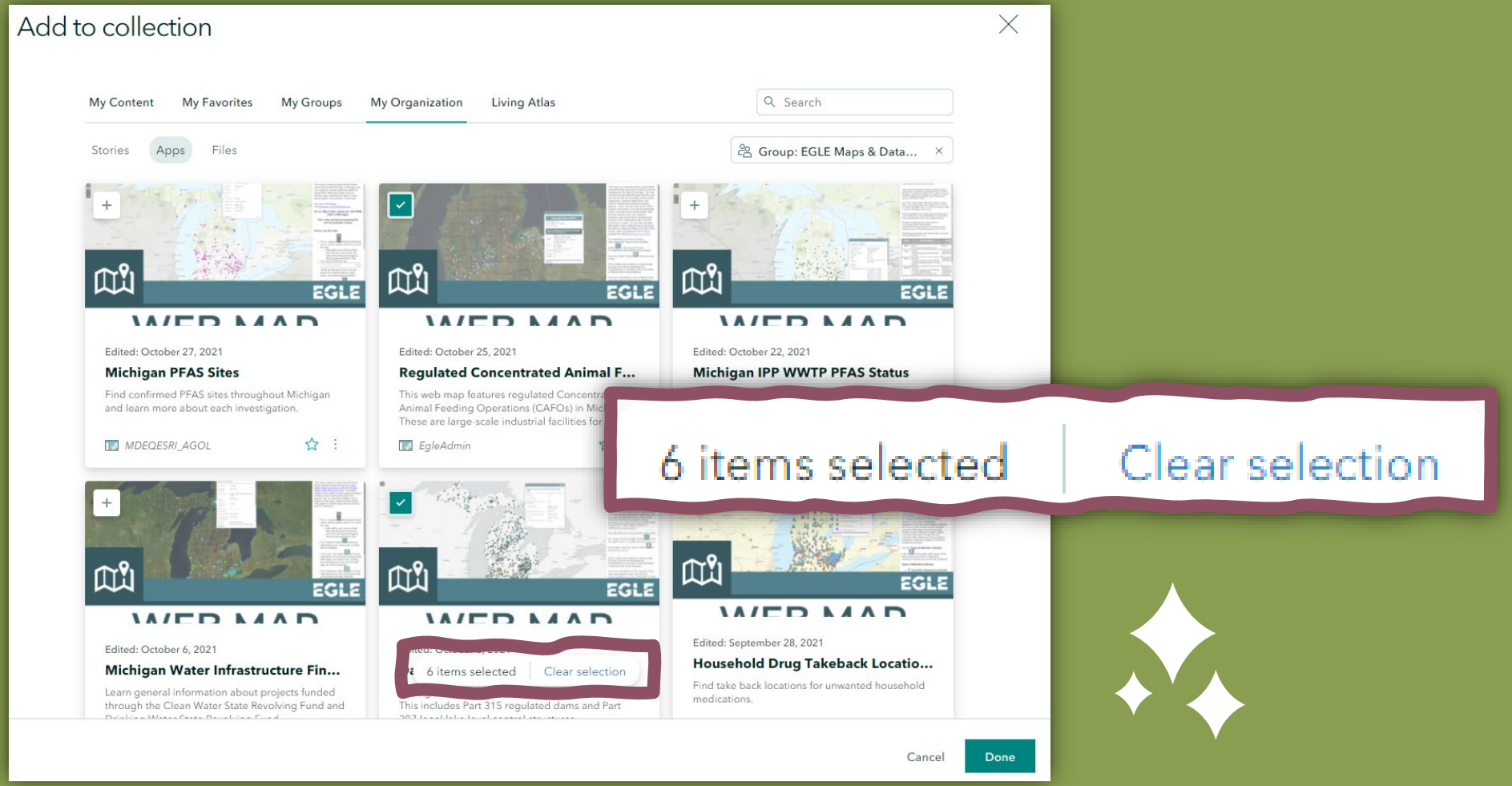
Power Automate

staff address concern and add **case notes** to original concern

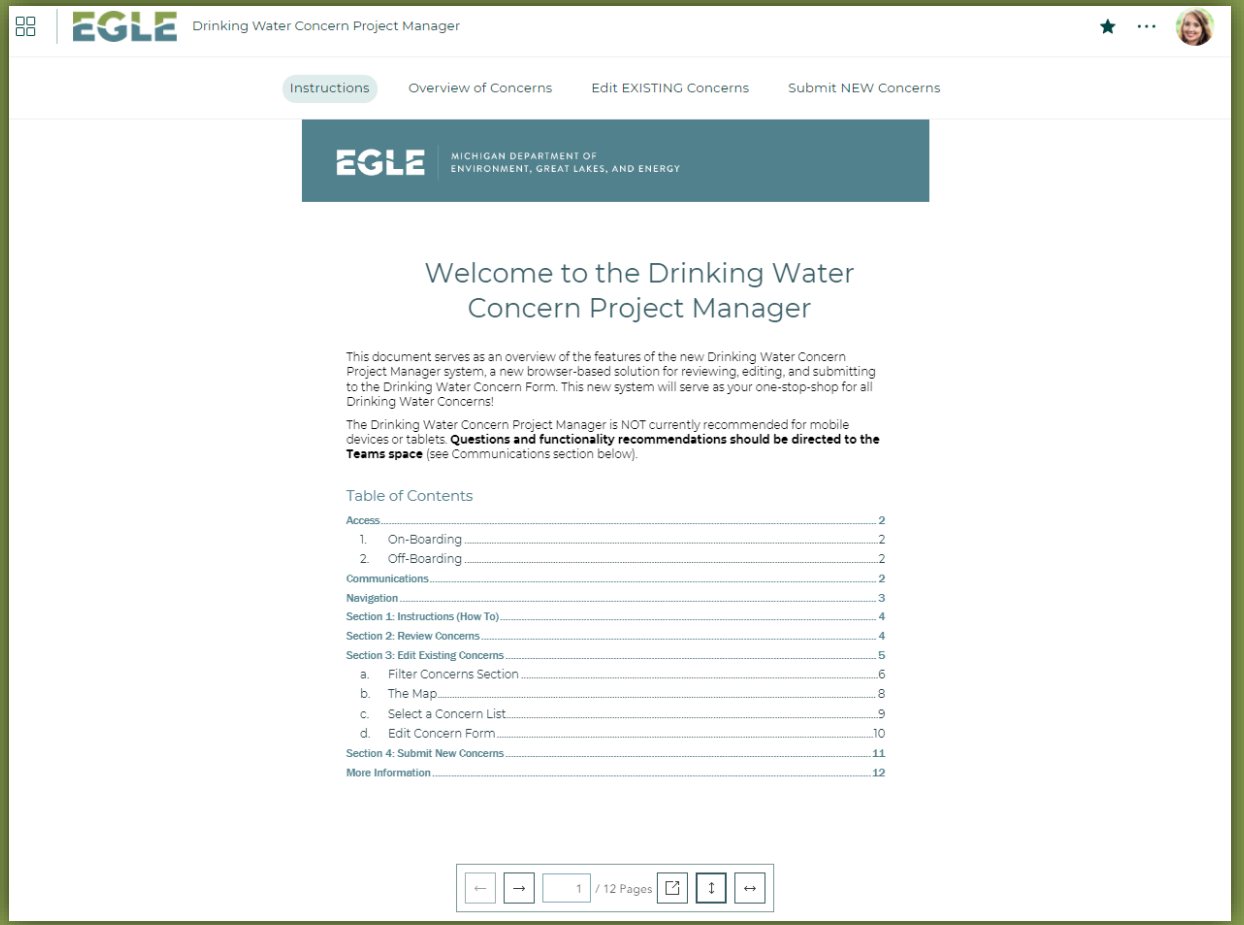
staff **monitor** concerns and patterns

ARCGIS STORYMAP COLLECTIONS

TIPS & TRICKS



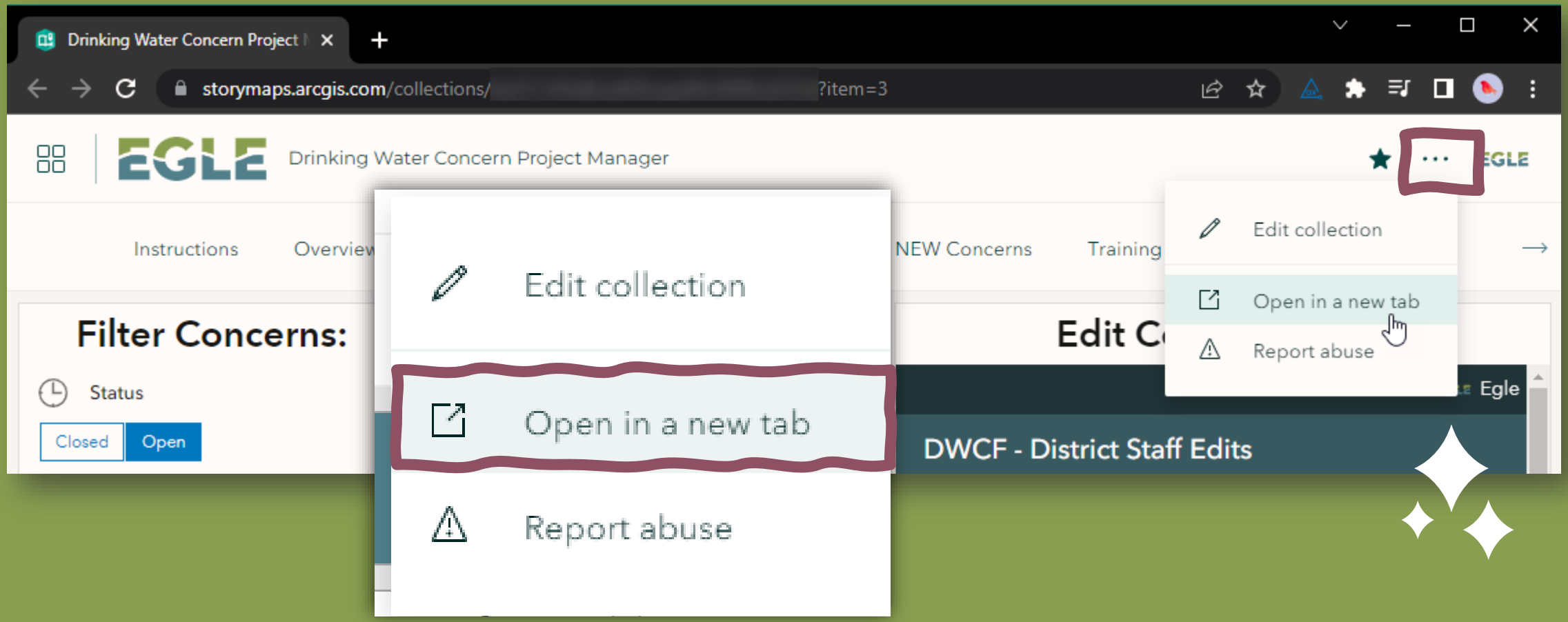
You can add up to 60 items to a Collection



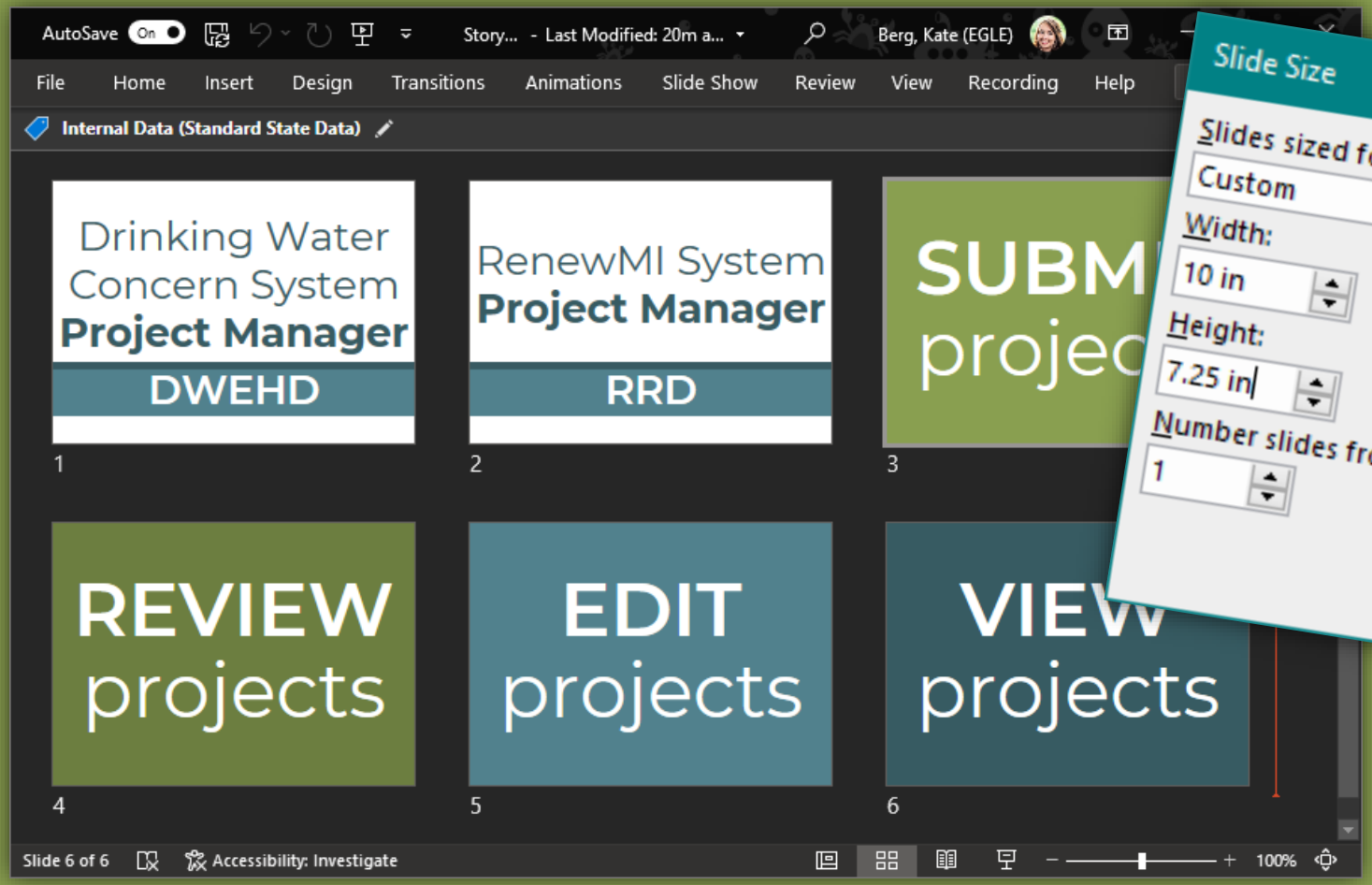
Upload contextual info as the first Collection item

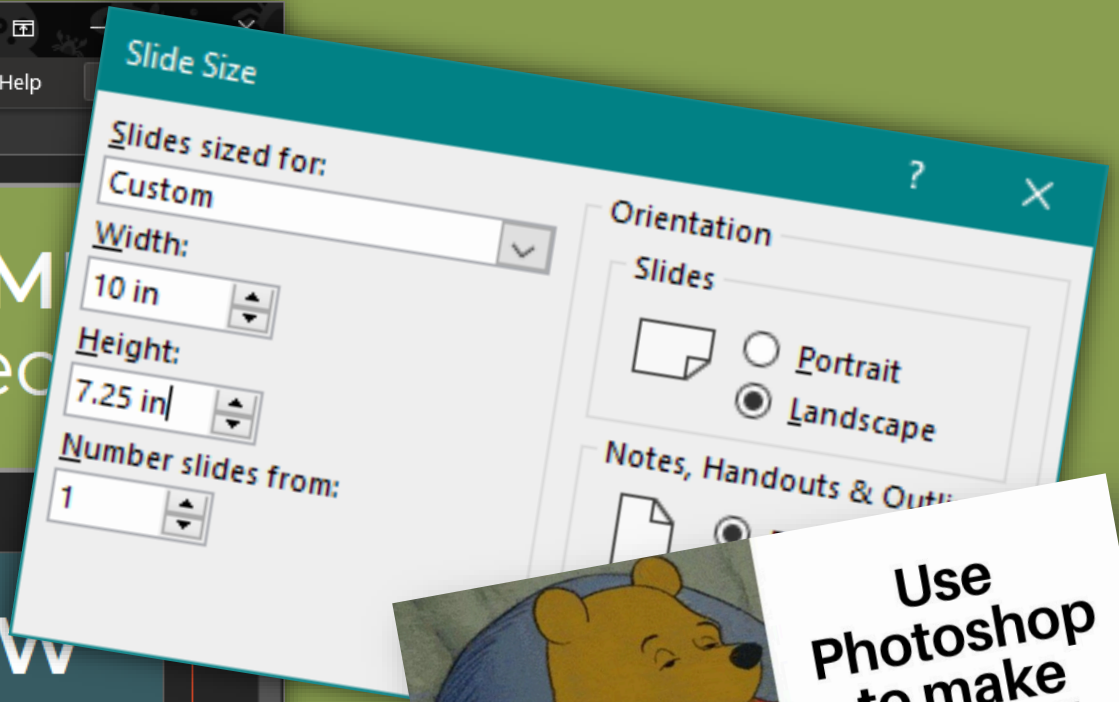
?item=[number]

Link to a specific Collection page



Open Collection content in new tab





Use PowerPoint to make Collection thumbnails

Outline

STREAMLINING PROJECT WORKFLOWS THAT INVOLVE MULTIPLE ESRI APPLICATIONS

1. **Streamlining the Drinking Water Concern System**

2. **What are StoryMap Collections? And how to Create Your Own!**

3. **StoryMap Collections Tips and Tricks!**

EGLE

EGLE Maps & Data Hub Site:

gis-egle.hub.arcgis.com

EGLE

MICHIGAN DEPARTMENT OF
ENVIRONMENT, GREAT LAKES, AND ENERGY

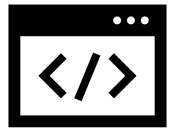
EGLE Maps & Data Updates Newsletter:

bit.ly/39rZaWR

Kate Berg

Lead GIS Analyst

BergK3@Michigan.gov



pokateomaps.com

bergkaten

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@pokateo_maps