

# Survey123 for ArcGIS (Beyond the basics)

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# Esri South East UC 2018, Charlotte

Spelling is

~~diffecolt~~

~~challageng~~

hard.

**Survey 123**

**Survey-123**

**Survey-1-2-3**

**Survey 1,2,3**

**Survey123**

**Survey123**

**for ArcGIS**

# Agenda

- An introduction to XLSForms and Survey123 Connect
- Building surveys on top of existing feature services
- Updating existing features with Survey123
- How do I integrate Survey123 with other apps?
  - Custom URL Scheme
  - Webhooks

# Introduction to XLSForms and Survey123 Connect for ArCGIS



# About XLSForms

- XLSForm is a standard created to help simplify the authoring of forms in Excel
- Many different form-centric tools use XLSForm, including Survey123
- XLSForm's is described at <http://xlsform.org/>
- Notes:
  - Not all (but most) XLSForms features are implemented in Survey123
  - Survey123 extends XLSForms with features that are not implemented in other tools
  - Your reference to using XLSForms in Survey123 is our [Survey123 help](#)





# About Survey123 Connect for ArcGIS

- A desktop tool that will help you author XLSForms and publish them into ArcGIS
- Available for Windows, Mac and Ubuntu Linux



1

Download Survey123  
Connect (Windows |  
Mac | Linux)



2

Design Your Survey  
Watch video tutorials  
Get help with XLSForms

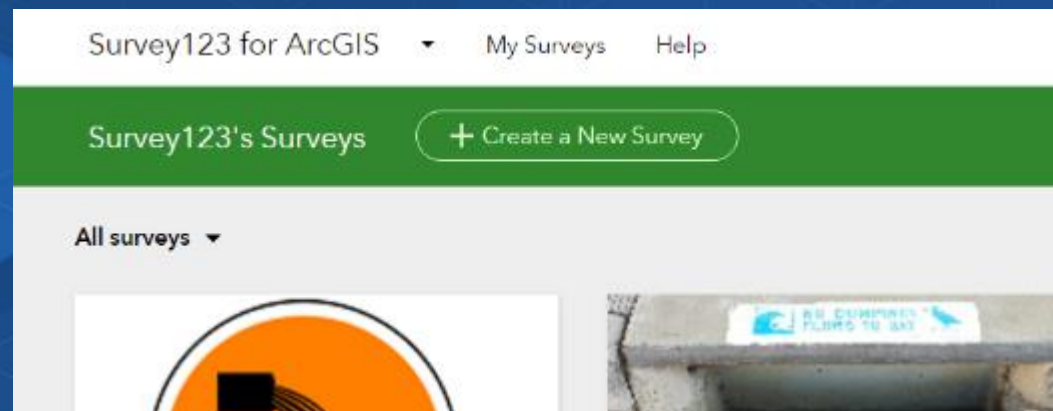


3

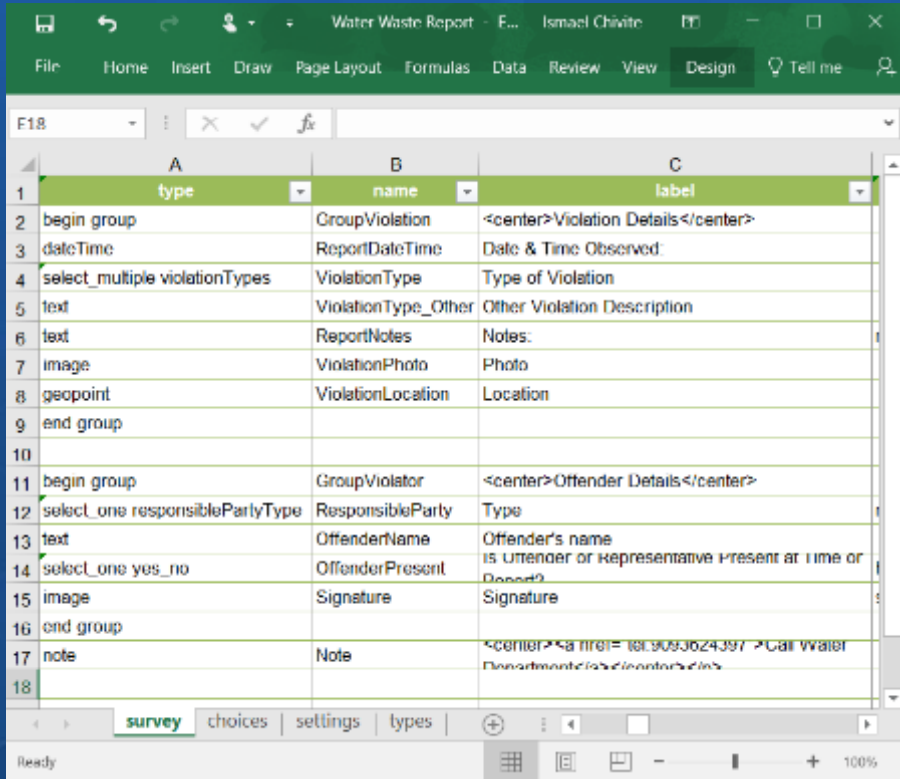
Publish it to Survey123  
for ArcGIS

# Downloading Survey123 Connect

- 1) Log into <https://survey123.arcgis.com>
- 2) Click on Create a New Survey
- 3) Select Survey123 Connect and Download



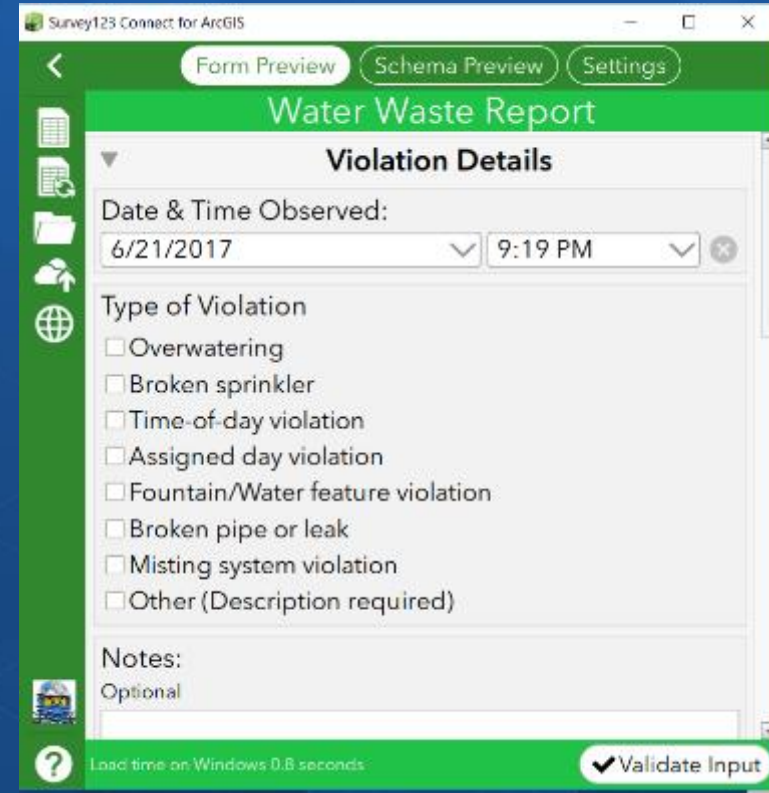
# How does Connect work?



The image shows an Excel spreadsheet titled "Water Waste Report" with columns A, B, and C. The spreadsheet uses XLSForm syntax to define a survey form. The syntax includes commands like "begin group", "select\_multiple", "text", "image", "geopoint", "end group", "select\_one", "note", and "end group". The corresponding field names and labels are listed in columns B and C respectively.

|    | A                               | B                   | C   |
|----|---------------------------------|---------------------|---|
| 1  | type                            | name                | label   |
| 2  | begin group                     | GroupViolation      | <center>Violation Details</center>  |
| 3  | dateTime                        | ReportDateTime      | Date & Time Observed:   |
| 4  | select_multiple violationTypes  | ViolationType       | Type of Violation   |
| 5  | text                            | ViolationType_Other | Other Violation Description   |
| 6  | text                            | ReportNotes         | Notes:  |
| 7  | image                           | ViolationPhoto      | Photo   |
| 8  | geopoint                        | ViolationLocation   | Location  |
| 9  | end group                       |                     |   |
| 10 |                                 |                     |   |
| 11 | begin group                     | GroupViolator       | <center>Offender Details</center>   |
| 12 | select_one responsiblePartyType | ResponsibleParty    | Type  |
| 13 | text                            | OffenderName        | Offender's name   |
| 14 | select_one yes_no               | OffenderPresent     | Is offender or representative present at time of Report?                            |
| 15 | image                           | Signature           | Signature   |
| 16 | end group                       |                     |   |
| 17 | note                            | Note                | <center>Call me! = (619) 936 2439 / Call Water Department if you need help</center> |
| 18 |                                 |                     |   |

Define your form in Excel  
using XLSForms syntax



The image shows the Survey123 Connect for ArcGIS interface. The top bar includes tabs for "Form Preview", "Schema Preview", and "Settings". The main area displays a preview of the "Water Waste Report" form. The form has a green header with the title "Water Waste Report". Below the header, there is a section titled "Violation Details" with fields for "Date & Time Observed" (6/21/2017, 9:19 PM), "Type of Violation" (a list of checkboxes including Overwatering, Broken sprinkler, Time-of-day violation, Assigned day violation, Fountain/Water feature violation, Broken pipe or leak, Misting system violation, and Other (Description required)), and "Notes" (Optional). The bottom bar shows the load time "Load time on Windows 0.8 seconds" and a "Validate Input" button.

Preview your XLSForm in Connect  
when happy... publish

# Demo





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- How do I integrate Survey123 with other apps?
  - Custom URL Scheme
  - Webhooks

# Introduction

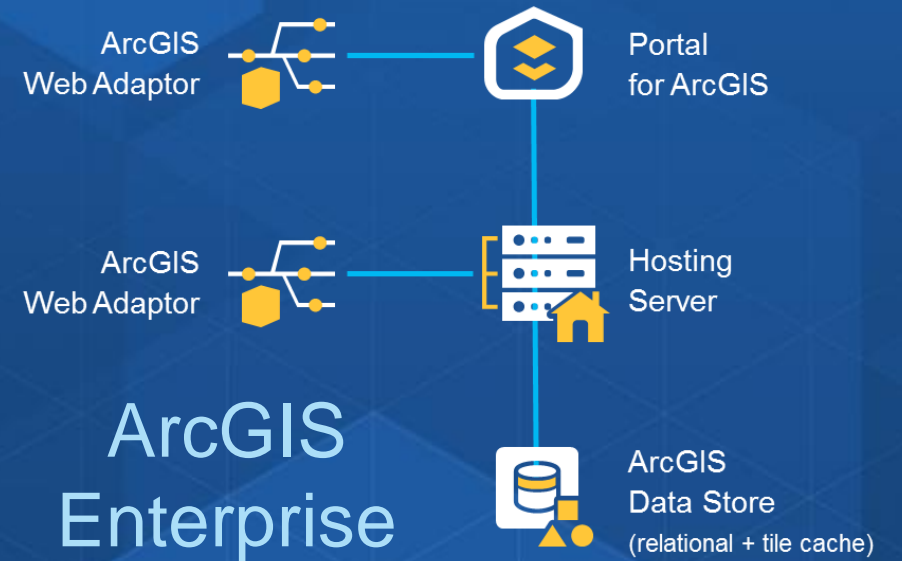
- Generally, Survey123 creates a new feature service when a survey is published
- You can, however, build surveys on top of existing feature services
- Motivations:
  - You may want use Survey123 to capture data on existing features
  - You may want Survey123 to write data on your own database (SQL Server, Oracle...)

# Online and Enterprise

- You can create surveys against hosted and federated services.



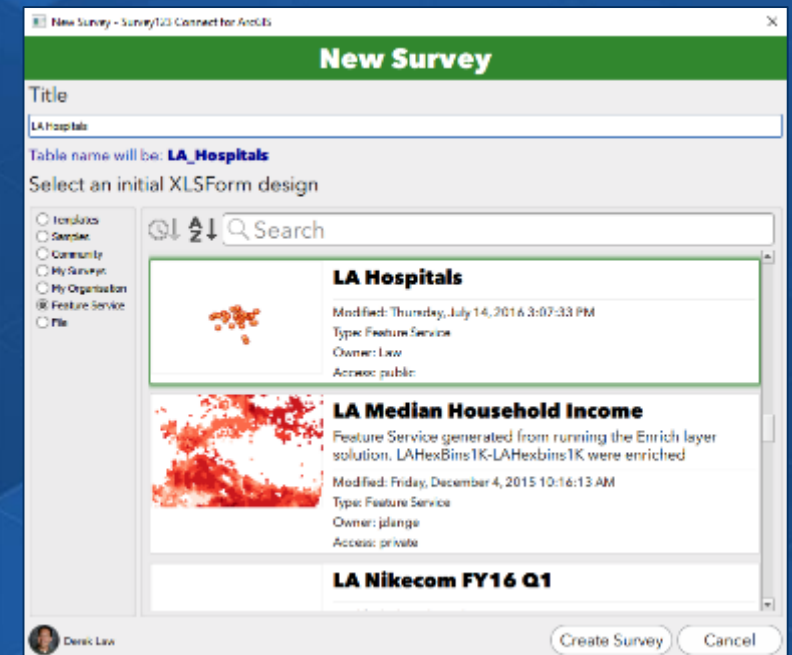
VS





# Create Surveys from Existing Feature Services

- Sign into a portal (ArcGIS Online/Portal for ArcGIS)
- Select a feature service
  - Survey123 Connect scans and creates an XLSForm
- Edit the form to provide additional logic, create a form for just a repeat layer, remove questions
- Publish
- Your XLSFile will be automatically set with:
  - Settings: submission\_url
  - Settings: Form\_ID



# Demo

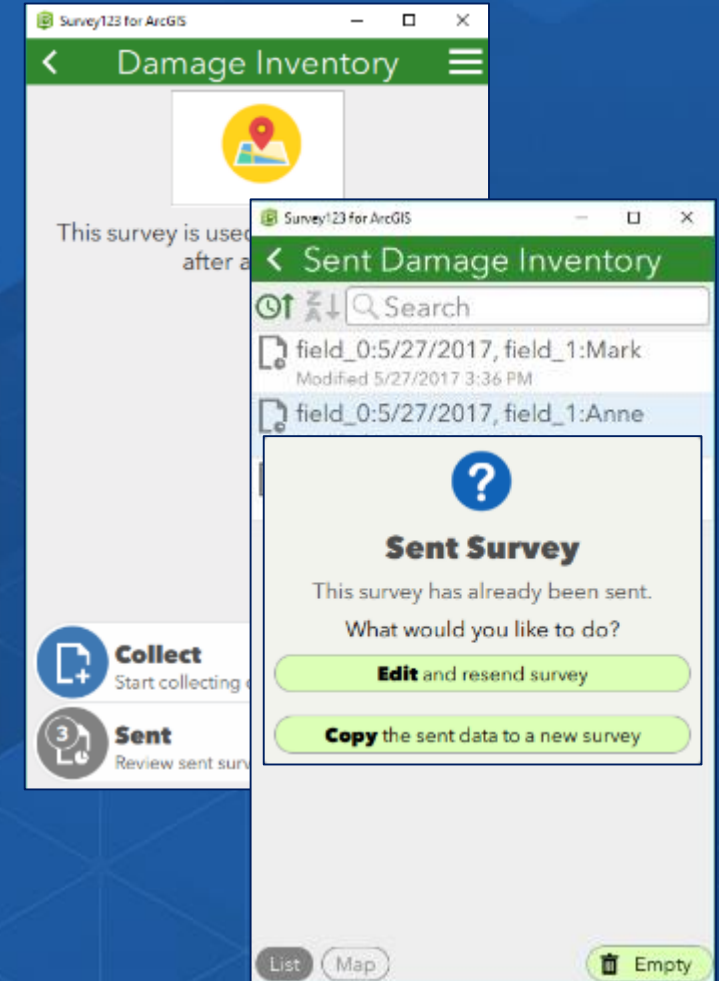


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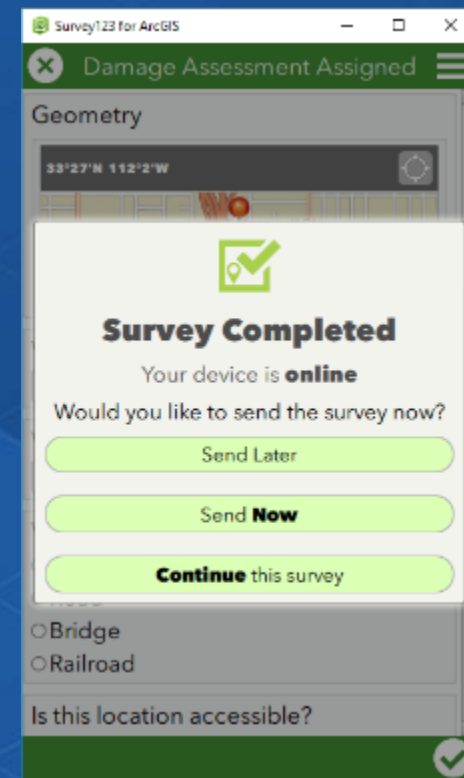
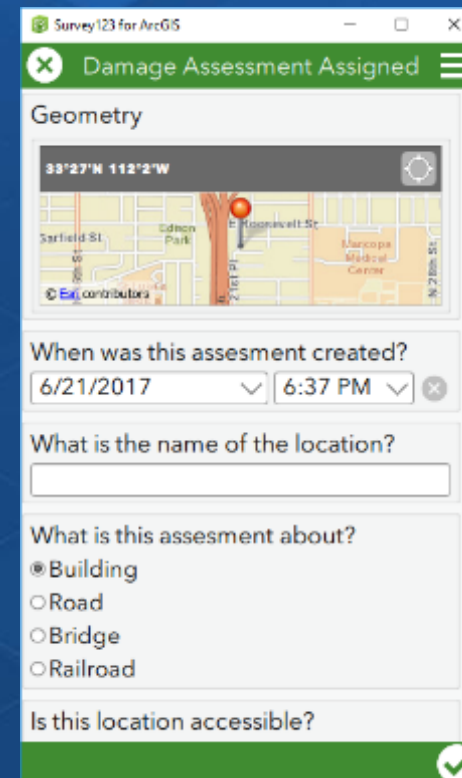
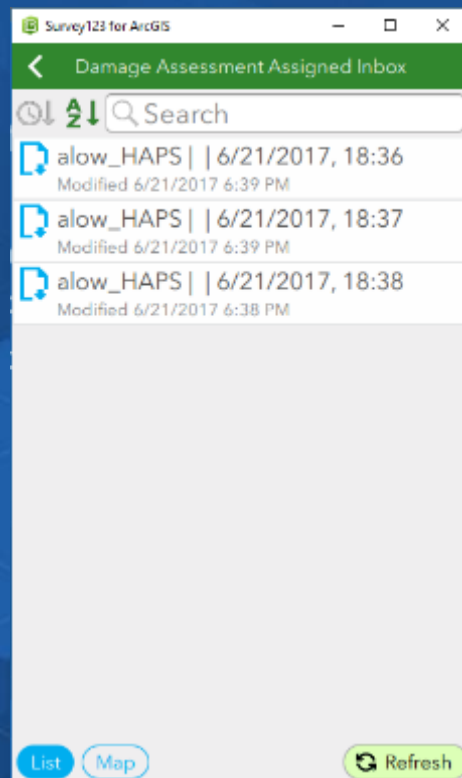
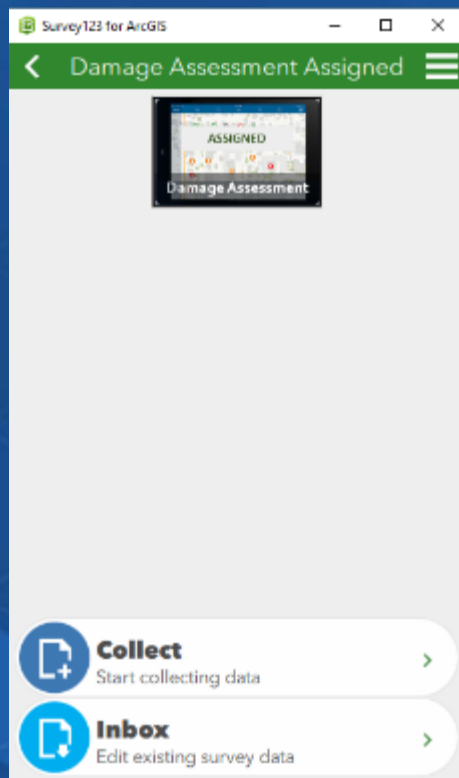
# Editing data through the Sent folder

- A user can amend sent survey responses in the field app
- Review:
  - Open Sent folder
    - Contains previously submitted surveys from device
    - These can be opened, their responses edited
    - Can be re-submitted or re-sent as a new survey
  - [Using the Sent folder to resubmit data video](#)



# Field App Inbox folder

- Submitted surveys retrieved from a list or map view
  - Surveys returned limited by max record count setting of feature service
- Select a survey to edit responses

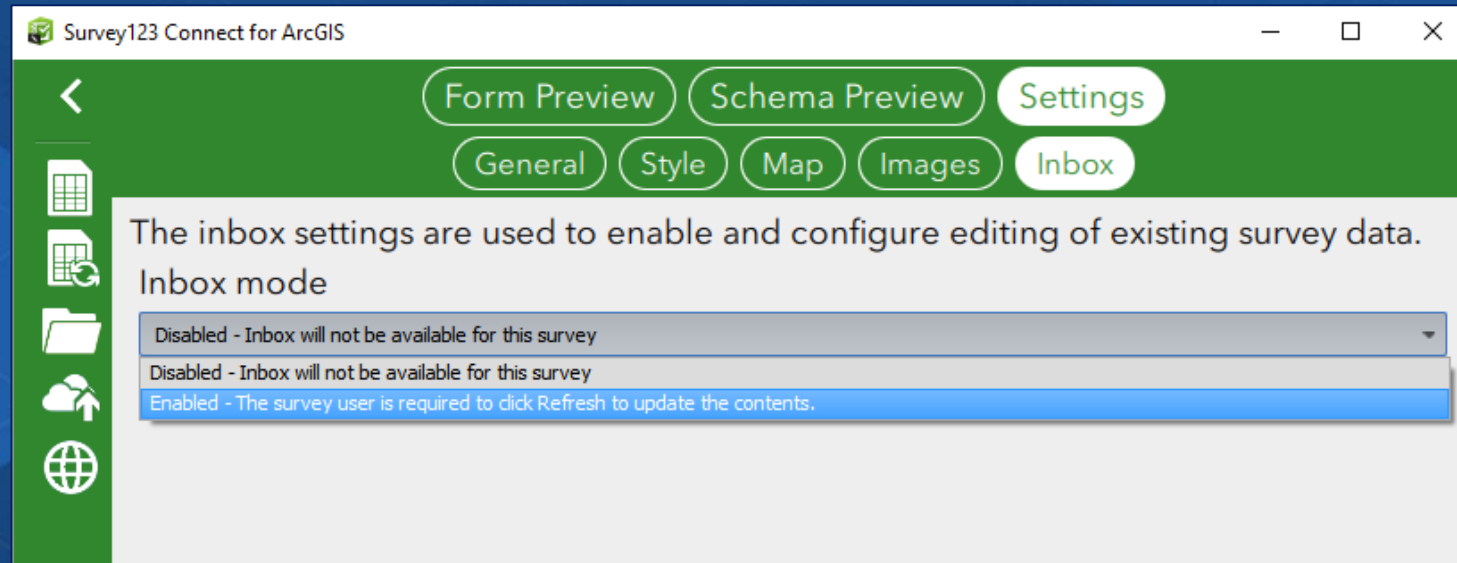




# Enabling the Inbox in Survey123 Connect

## Survey123 Connect

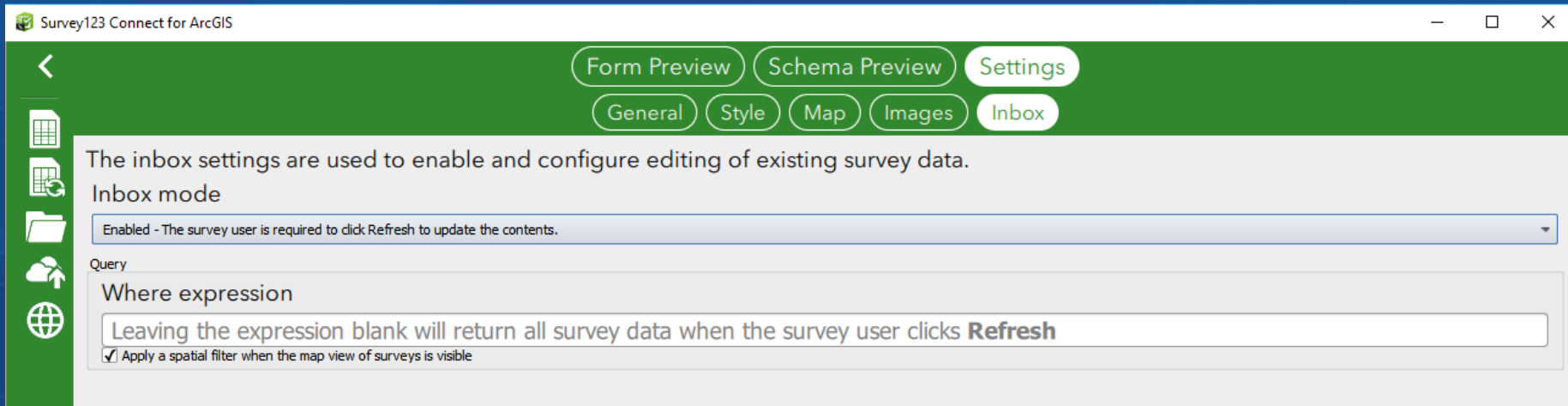
- Add the **Inbox** option to the survey
  - Optional: can apply an expression to filter data
- This capability must be enabled on the survey **BEFORE** it is published
- [Editing Existing Data with Survey123 video](#)



# More on the Inbox

## Survey123 Connect

- You can query on fields and profile information, ex:
  - status='pending'
  - assigned=\${username}



The screenshot shows the 'Survey123 Connect for ArcGIS' application window. The title bar includes standard window controls. The interface has a green header bar with navigation buttons: '<', 'Form Preview', 'Schema Preview', 'Settings' (highlighted), 'General', 'Style', 'Map', 'Images', and 'Inbox'. A left sidebar contains icons for a back arrow, a document, a document with a magnifying glass, a folder, a person, and a globe. The main content area has a light gray background. It starts with a text block: 'The inbox settings are used to enable and configure editing of existing survey data.' Below this is a section titled 'Inbox mode' with a dropdown menu currently set to 'Enabled - The survey user is required to click Refresh to update the contents.' Underneath is a 'Query' section with a 'Where expression' label and a text input field containing the text: 'Leaving the expression blank will return all survey data when the survey user clicks **Refresh**'. At the bottom of the query section is a checkbox labeled 'Apply a spatial filter when the map view of surveys is visible', which is currently checked.

# Demo





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