



# **WINTER 2023: SE MN GIS USERS GROUP MEETING**

**March 2, 2023**



# Agenda

- 8:30 - 9:00 Meet & Greet/Networking (breakfast sponsor Schneider Geospatial)
- 9:00 - 9:30 A Tour Through Time: City of Rochester GIS Initiatives
- 9:30 - 10:15 NG9-1-1 Update
- 10:15 - 10:30 Break
- 10:30 - 11:00 Watershed Alliance for the Greater Zumbro River: GIS Approach
- 11:00 - 11:45 3D Geologic Modeling Tool for Watershed
- 11:45 - Noon State Updates/other news

## Lunch Gathering at the **Purple Goat Restaurant**

3708 N Broadway Ave Suite 160, Rochester, MN 55906



# A TOUR THROUGH TIME: City of Rochester GIS Initiatives

Christy Shostal  
GIS Coordinator

# Outline

- History of GIS at the City of Rochester
- Current Initiatives
- Future Initiatives
- Demonstration(s)
- Questions

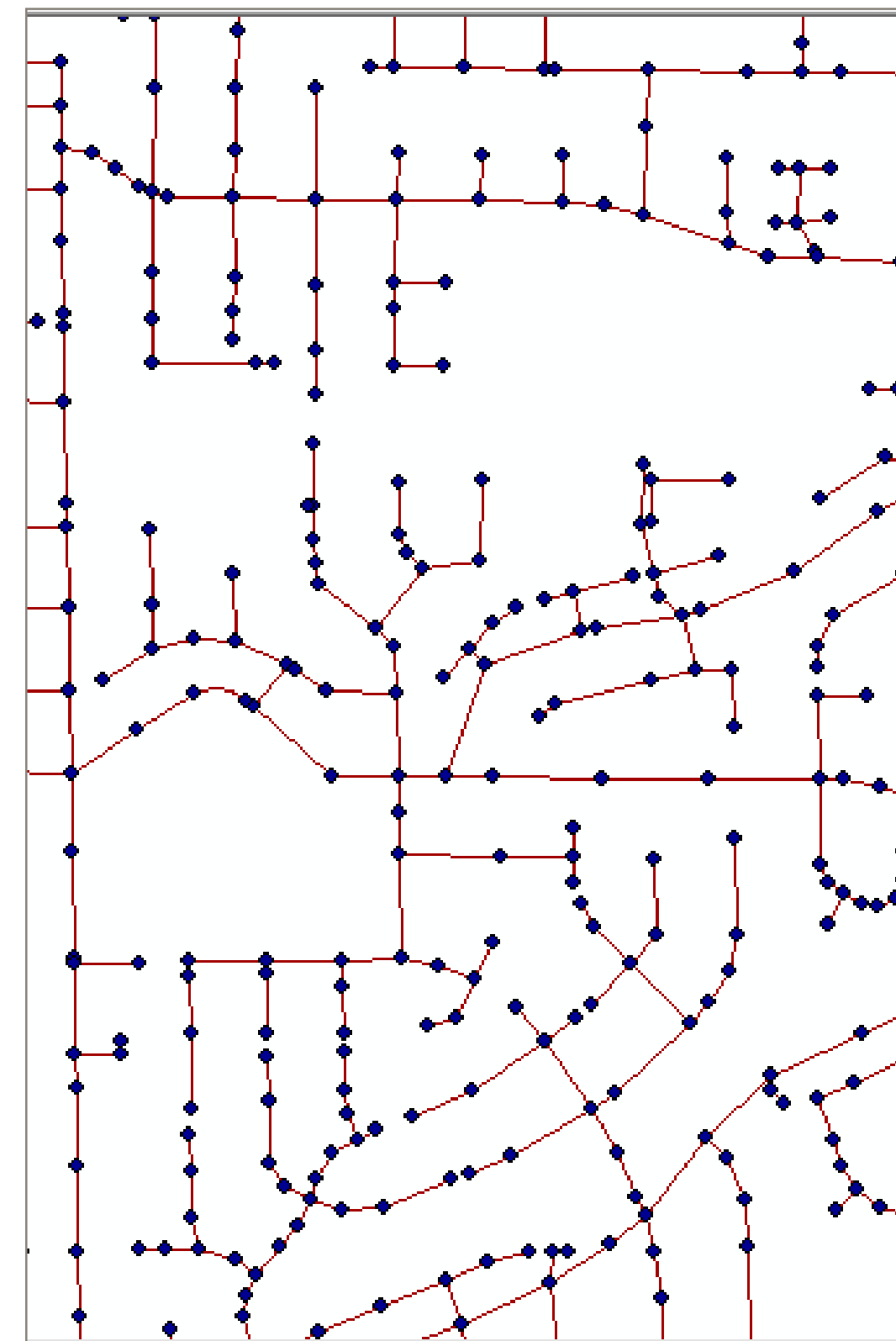


# History – 90s/2000s

- GIS has been in use at the City for >20 years
- Late 90s/early 2000s focus was on early GIS dataset creation (shapefiles)
- Migration of CAD to GIS for sewer: referencing plans for primary attributes
- Digitizing field “markups” into GIS
- Tabular asset management (as400, Cartegraph, etc.)

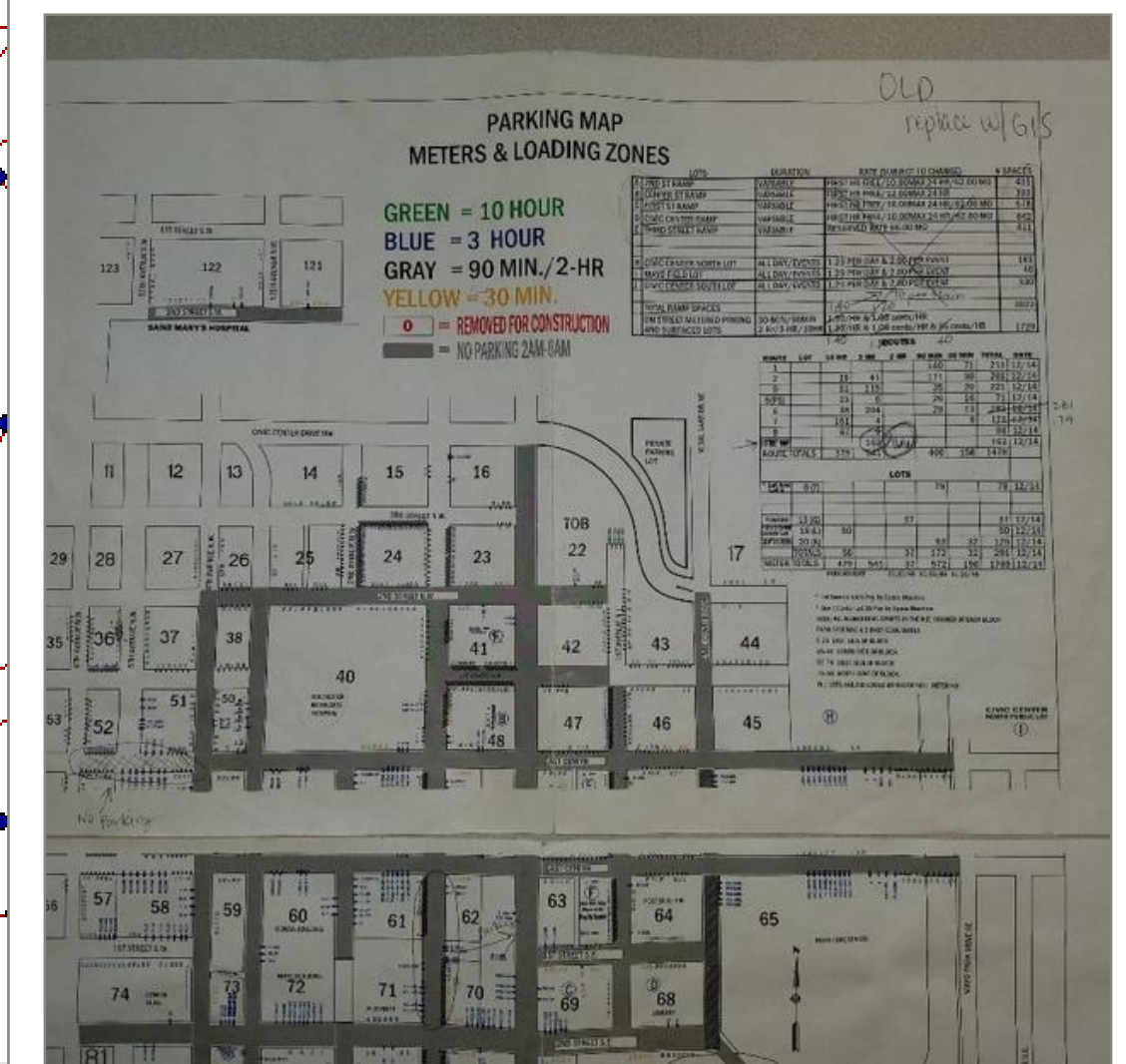
Job/Project: 9370 9209-2-96 Desc/Subdivision: GOLDFVIEW EST. 2  
Project Description: BASIC CONSTRUCTION IN GOLDFVIEW ESTATES 2ND SUB  
Date of Council Approval: 7 17 1996  
Date Invoiced: 7 17 1996 Invoice Number: E001847  
Notes exist: N Other Projects Effected: Y  
Actions/ A=Add C=Change D=Delete

ACT	Type	Units	U/O/M	Rate	Cost
-	S1 INTERSECTION SIGN	2.000	E	100.0000	200.00



TRAFFIC OPERATIONS Sign Form Ver. 6.8

Sign Description: [Field]  
Support Description: [Field]  
Type 1 Sign Info: [Fields]  
Activity and Last Event: [Table]





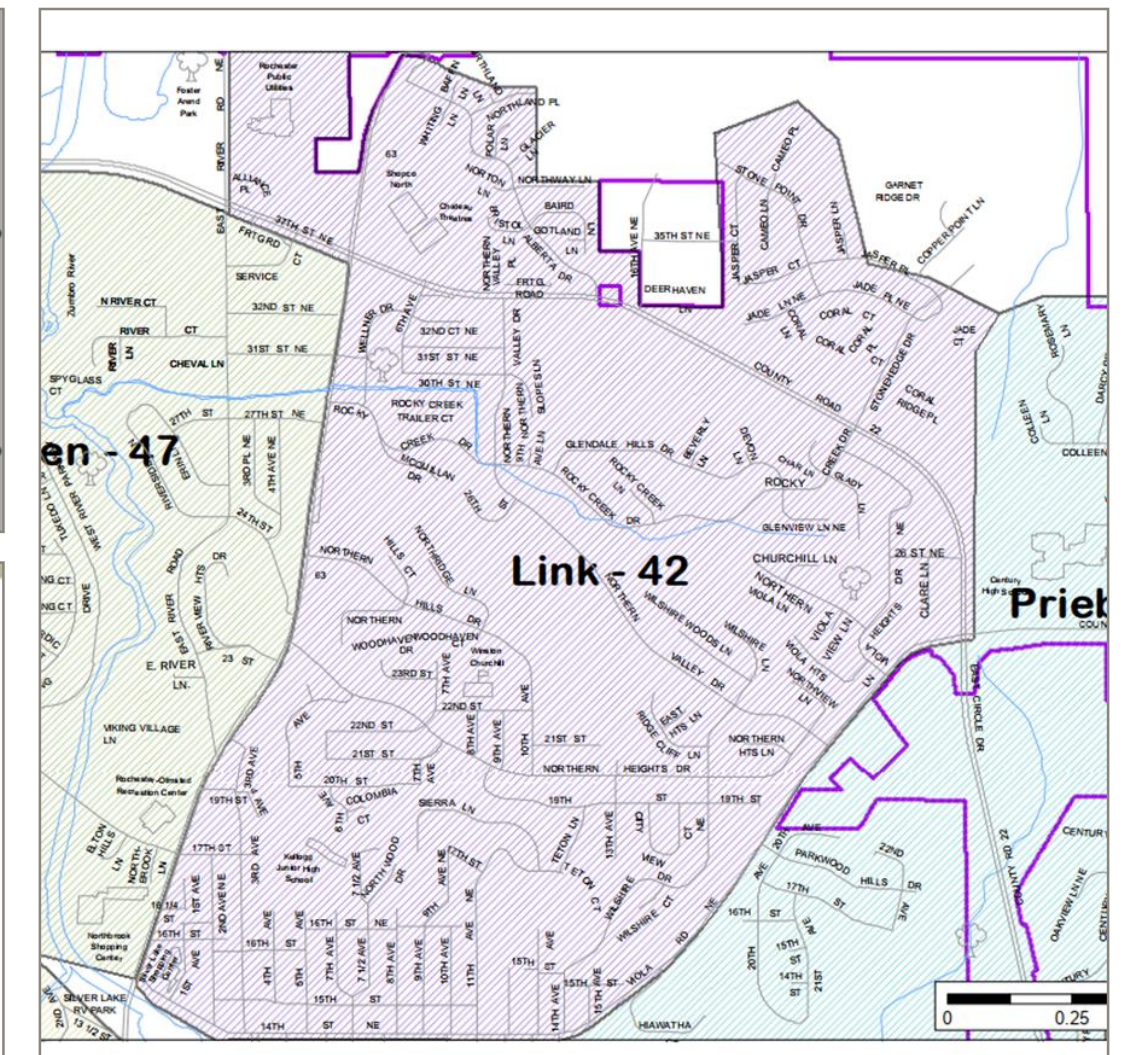
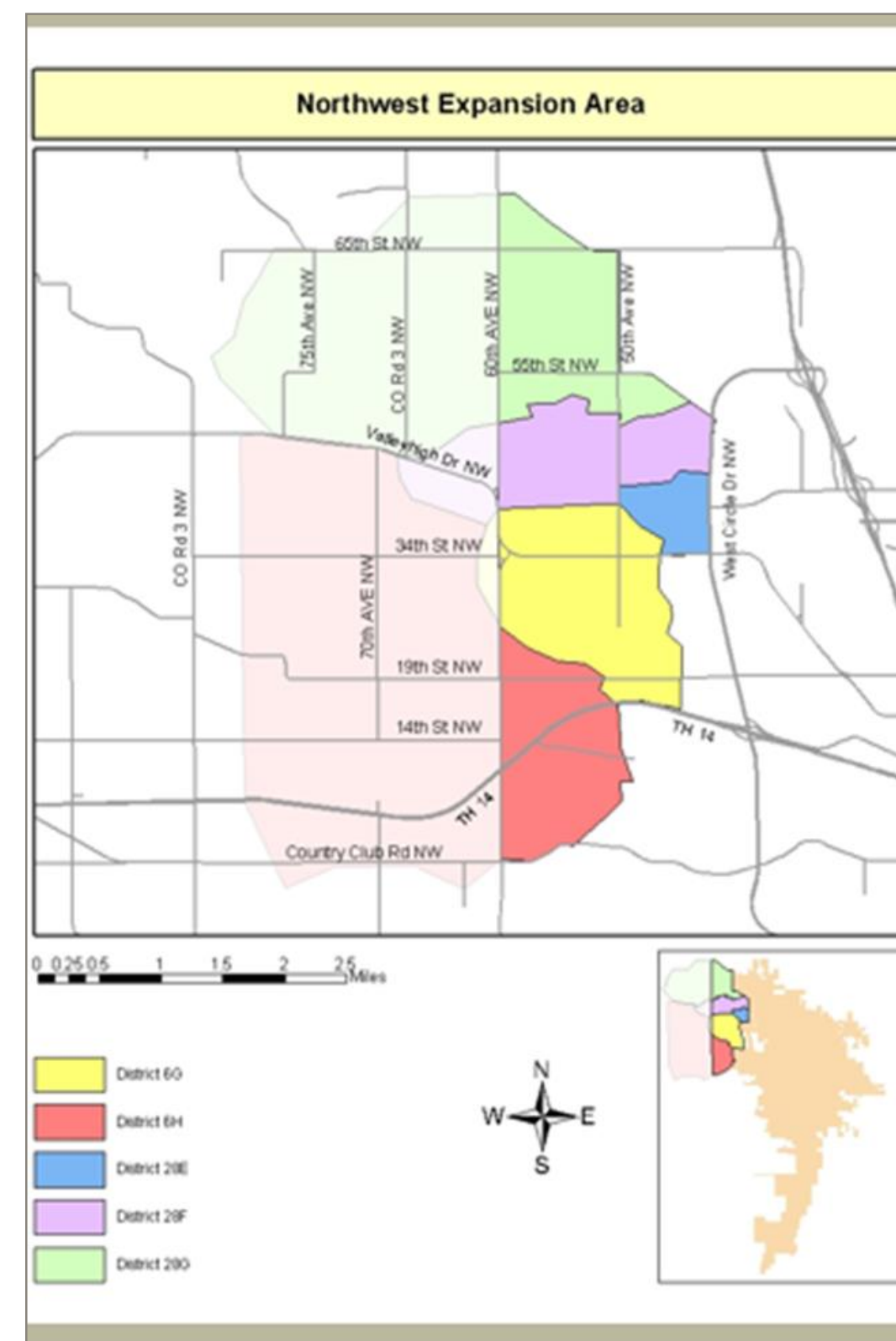
# History – 90s/2000s

- Early 2000s involved a lot of “Wordbases,” spreadsheets & custom databases
- Custom GIS desktop applications (Avenue, ArcObjects, VBA, Python, etc.)
- GPS processing/assistance
- SW Utility Fee impervious mapping & tracking (2004)
- PDF map books for work tracking
- Team consisted of 1-2 GIS positions (2nd vacant ~ few years)

J Number

City Project

Description



Search For Features

Parcel Search  Address Search

**Tax Payer Name**

**Parcel Number**  **Plat Name**

**House #**  **Street**

**City**



City of Rochester - Grading Plan Review

Open Grading Plan Site Information Form | Open Grading Plan Record for Review/Editing | Open Grading Plan Queries Form

Grading Plans Requiring Review (double-click a record below to open the site information form):

ID	GP ID	Review Status	Number	Name	Additional Name	Event	Date Receive	Review By D
180	GP180_2016	Requiring Review	J5426	Forest Knoll Drive SE Extension		Received	2/25/2016	3/3/2016
188	GP188_2016	Requiring Review		Peace United Church of Christ		Received	6/23/2016	6/30/2016
191	GP191_2016	Requiring Review		19 North Subdivision		Received	6/14/2016	6/21/2016
197	GP197_2016	Requiring Review		Tyrol Hills Lots 10-11, Block 1		Received	4/8/2016	4/15/2016
200	GP200_2016	Requiring Review		NorthSummit Subdivision		Received	6/21/2016	6/28/2016
204	GP204_2016	Requiring Review	R2016-010Plat	Morris Memorial		Received	5/26/2016	6/2/2016
212	GP212_2016	Requiring Review		Valley High Senior Housing		Received	6/14/2016	6/21/2016

Grading Plans with Complete Review and Awaiting Resubmittal (double-click a record below to open the site information form):

ID	GP ID	Review Status	Number	Name	Additional Name	Last Event Date
206	GP206_2016	Awaiting Resubmittal		Thrifty White Distribution Center		6/23/2016
196	GP196_2016	Awaiting Resubmittal	R2016-008SDP	Maine Heights Apartments		6/22/2016
201	GP201_2016	Awaiting Resubmittal		Reflections on Mayo Lake 2nd		6/14/2016
208	GP208_2016	Awaiting Resubmittal	R2016-019SDP	Molly Maid Business Center		6/7/2016
156	GP156_2015	Awaiting Resubmittal	R2016-004CUP	Coyote Creek Gun Range		6/2/2016
203	GP203_2016	Awaiting Resubmittal		Cassidy Ridge 2nd Subdivision		5/31/2016
211	GP211_2016	Awaiting Resubmittal		Windamere Woods Subdivision		5/23/2016
193	GP193_2016	Awaiting Resubmittal		Stonehedge Townhomes 6th		5/20/2016
194	GP194_2016	Awaiting Resubmittal		Shannon Oaks 6th		5/18/2016
173	GP173_2015	Awaiting Resubmittal		Bandel Road Site Access	off of Bandel Road NW	4/21/2016
198	GP198_2016	Awaiting Resubmittal		Fox Hill Villas Lots 1-2, Block 1		4/15/2016
179	GP179_2016	Awaiting Resubmittal		Ronald McDonald House Expansion		3/22/2016

Grading Plans Approved in the Last Year\* (double-click a record below to open the site information form):

ID	GP ID	Number	Name	Additional Name	Event	Approval Date
205	GP205_2016		Wildwood Meadows 2nd Subdivision		Approved	6/22/2016
210	GP210_2016		Mayo SOSC Parking Lot Expansion		Approved	6/21/2016
192	GP192_2016	R2016-005SDP	RPV - 4710 Technology Park		Approved	6/14/2016
199	GP199_2016		Northern Heights North 4th Subdivision Revisions		Appr.	
190	GP190_2016	R2016-002CUP	Vet Clinic (Century Hills Commercial Park)	Lot 6, Block 1	Appr.	
209	GP209_2016		Coulee Bank 1110 6th Street NW		Appr.	
195	GP195_2016	R2016-005CUP	Meadow Lake Preserve - Interim Grading		Appr.	
187	GP187_2016		1st Avenue Flats Apartments		Appr.	
202	GP202_2016	R2016-003SDP	Think Mutual Bank		Appr.	

Search Grading Plans by Event Type and Date:

Select Event Type(s): Incomplete Submittal, Received, Reviewed, Conditionally Approved, Approved, Approved Revision

Start Date: 1/1/2014 | End Date: 12/31/14

Event Type(s) Count | Search Records

Dashboard Queries: Query Grading Plans Approved this Year\*, Query Grading Plans Approved within the Last Year\*, Query Grading Plans with Completed Reviews Awaiting Resubmittal, Query Grading Plans Requiring Review

\*If the initial approval occurred in the previous year then the revised approval should not counted as an approval in the current year for MS4 reporting.

# Focus Item: Custom Access Databases (many!!)

- **Goal(s):** streamline work processes (field/office), collect normalized data, generate summaries, produce efficient reports/data queries
- **Collaborators:** GIS, Public Works (many divisions/groups) 👤
- **Processes:** sidewalk snow removal, ROW permitting, MS4 education tracking, project search, grading plan review, City-Owner tracking, SW Utility Fee tracking/history, etc.

Education Tracking - MS4 Permit

Add New Event | Search Entered Events | Administrative Tools

Reporting

## MS4 Permit - Education Tracking Annual Reporting

Totals | 2018 | Select Year

Reports	Tables	ALBB
Participation Totals	Participation Totals*	ALBB Report
Viewership Totals	Viewership Totals*	ALBB Table*
Training Totals	Training Totals*	
	MCM Totals	
	Handouts Totals	
		MPCA
		MPCA Classified Report
		MPCA Classified Table*
		MPCA Details Table*

Close

frmSearch | fCandidates

Confirm Job and City Project Number using Below Information. Double Click on Project Record to Search for Project...

...search criteria shown in red...

J Number	City Project	Description	Src
9288		Northern Hghts Water Tower	RWCO
9288		Series 7019	JDE
9288	9308	Construction of a High Level Water Tower and Connection Truckline Watermain in the Northern	ROWBO...

Back to Search

frmSearch

J Number: 9288


City Project: [ ]

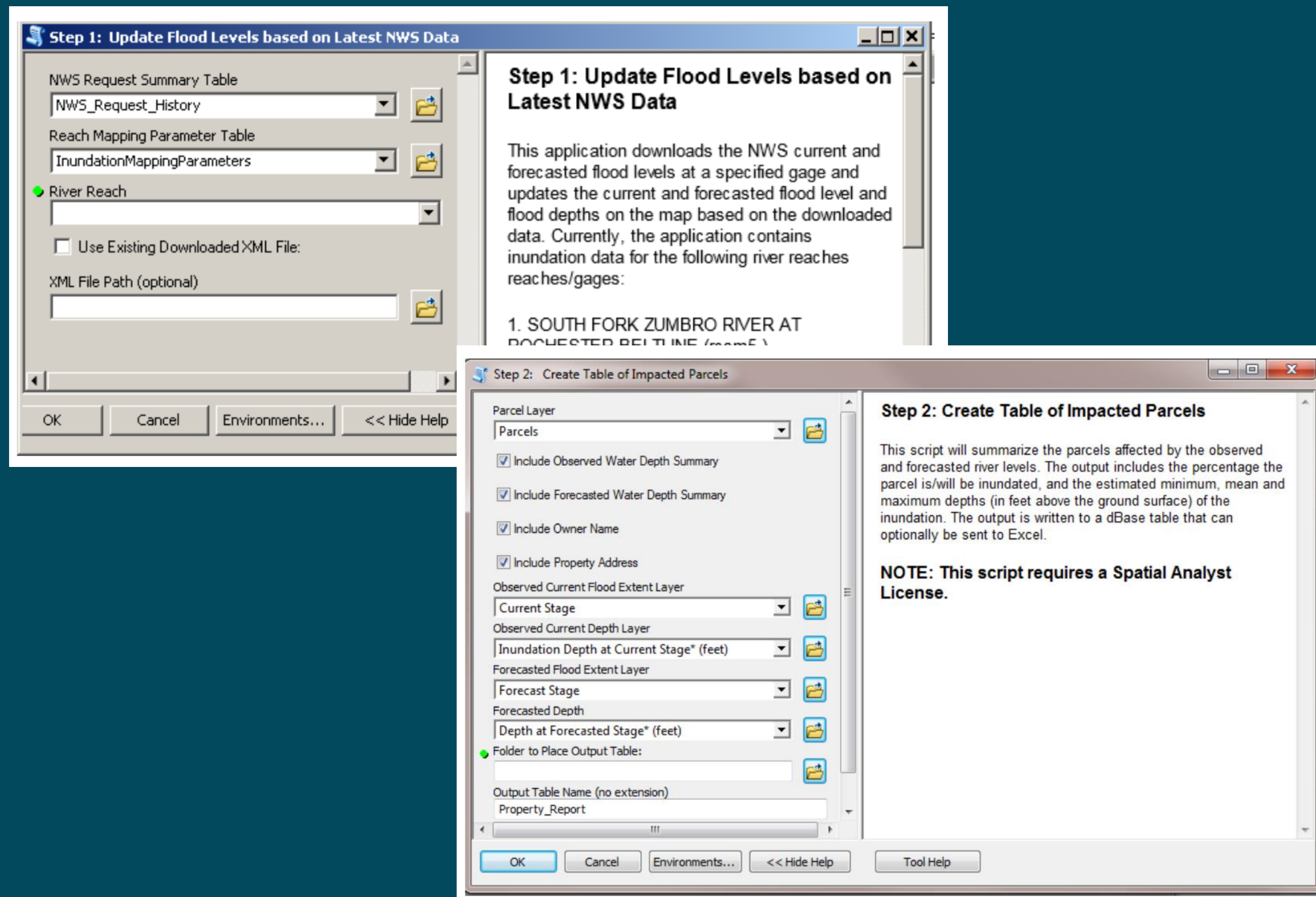
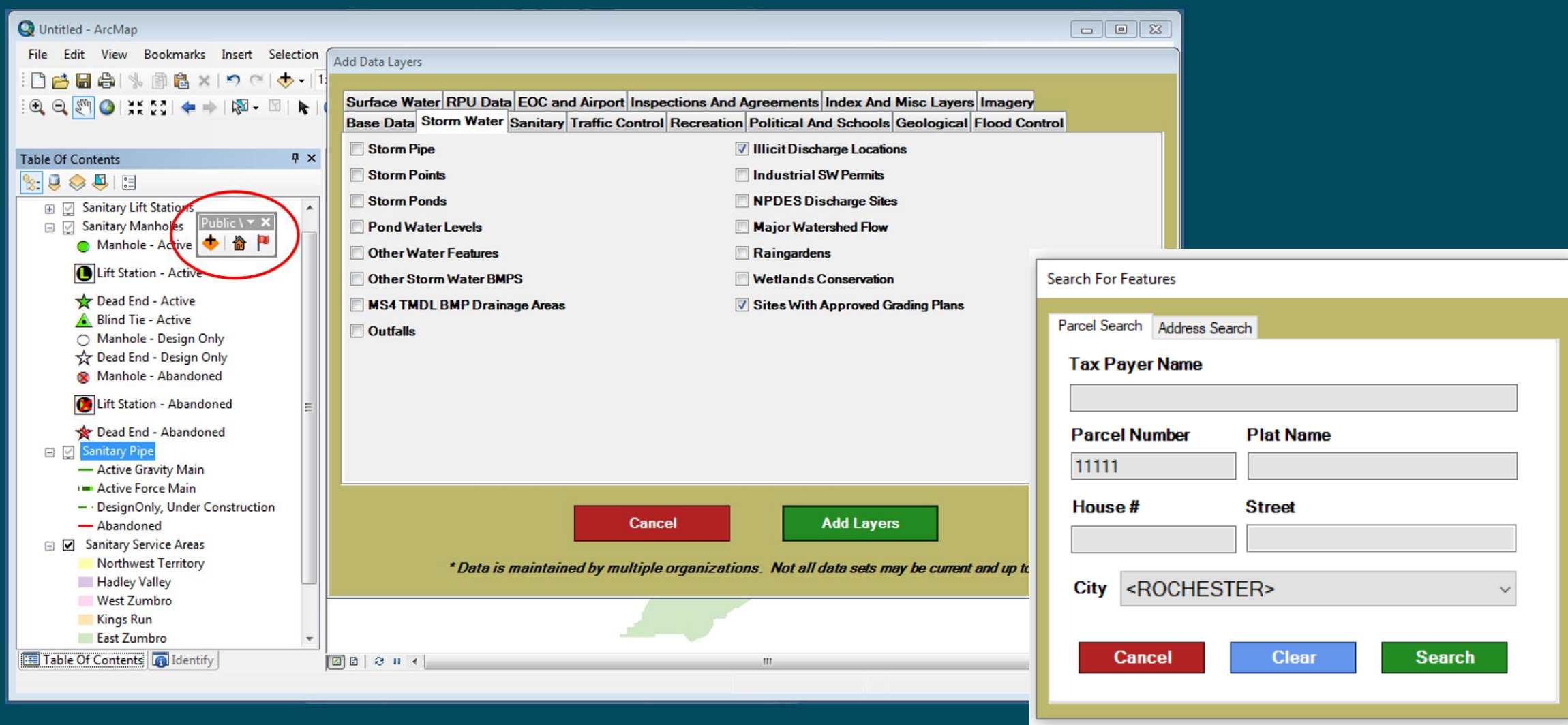
Description: [ ]

Begin Search | Clear Search Boxes



# Focus Item: Custom Desktop Tools

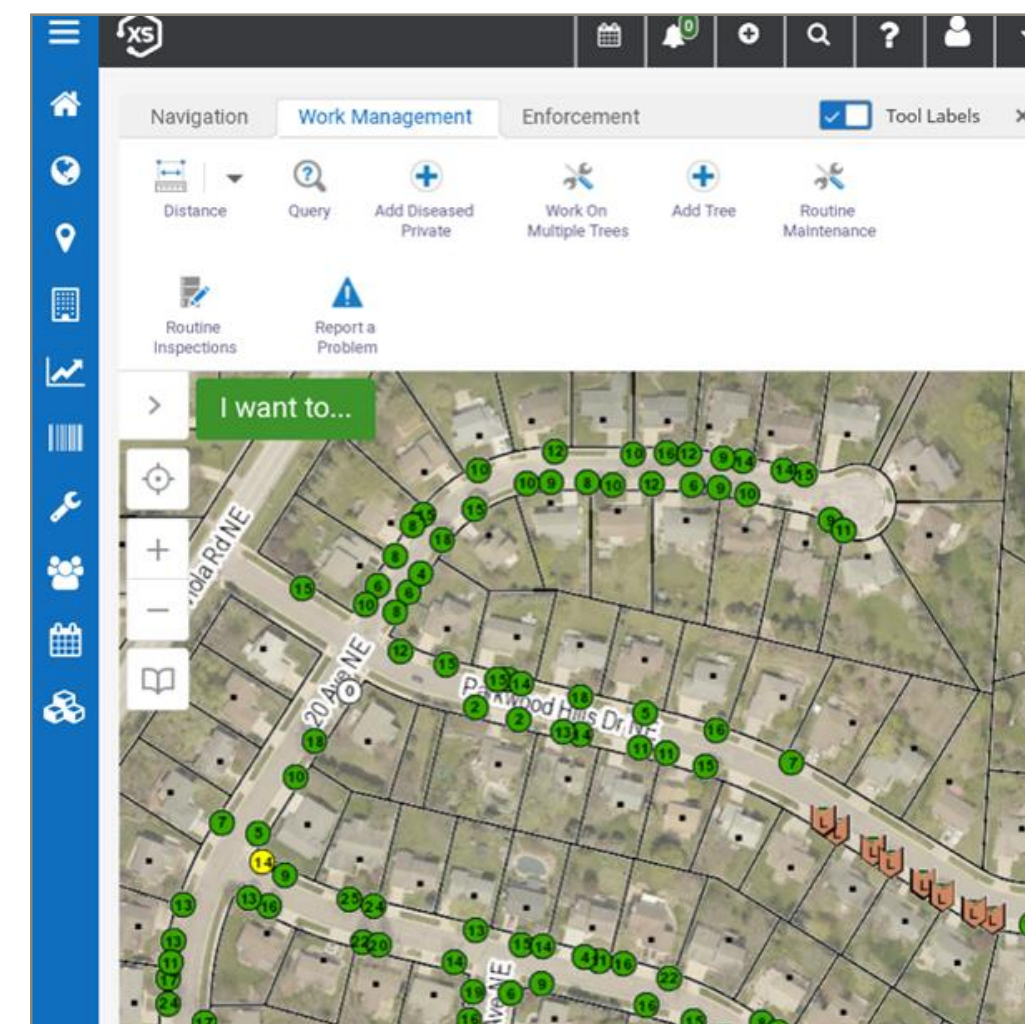
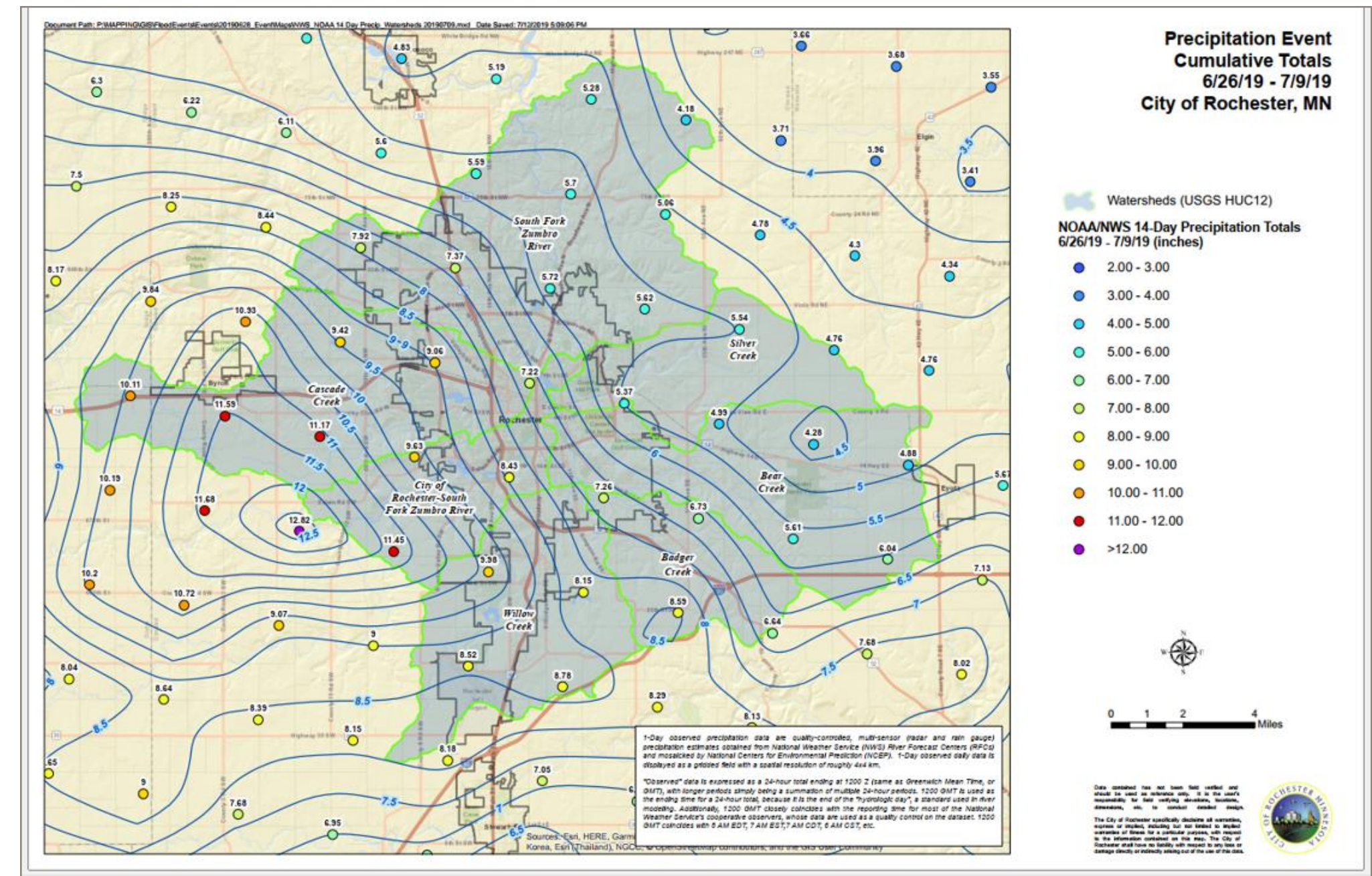
- **Goal(s):** automate common tasks, improve simplify access to data, generate data, process data
- **Collaborators:** GIS, all GIS users 
- **Processes:** add data layers tool, search tools, flood inundation mapping, custom layer creation, etc.





# History – 2010s


- 2010s introduced many big changes and numerous new GIS requests!
- 2013 started development of “ElementsXS” W&AMS, MS4Front AMS in 2017
- Migrating processes from spreadsheets and databases to Elements and MS4Front
- Field collection via first City mobile devices
- New routing, analyses and modeling efforts

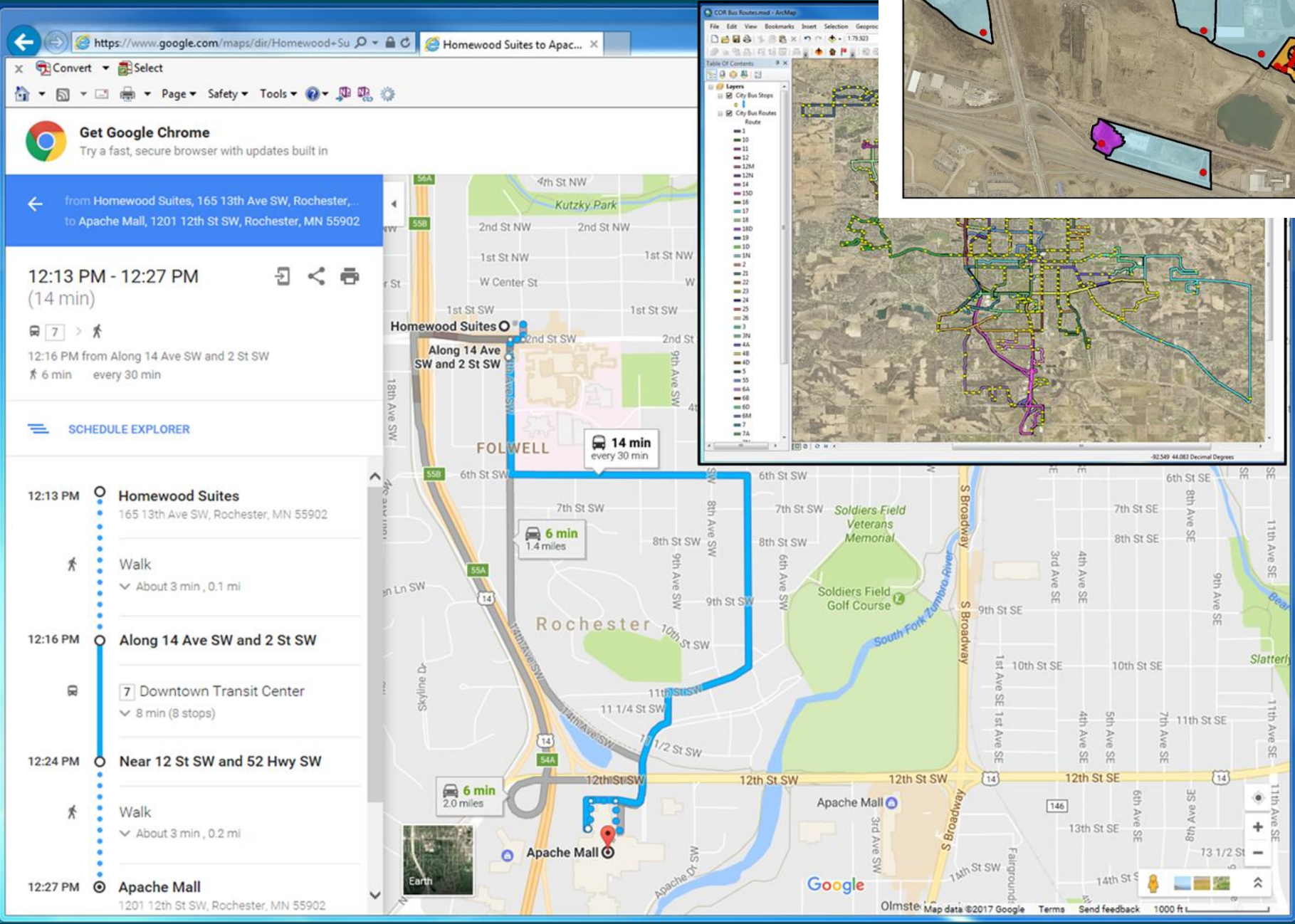
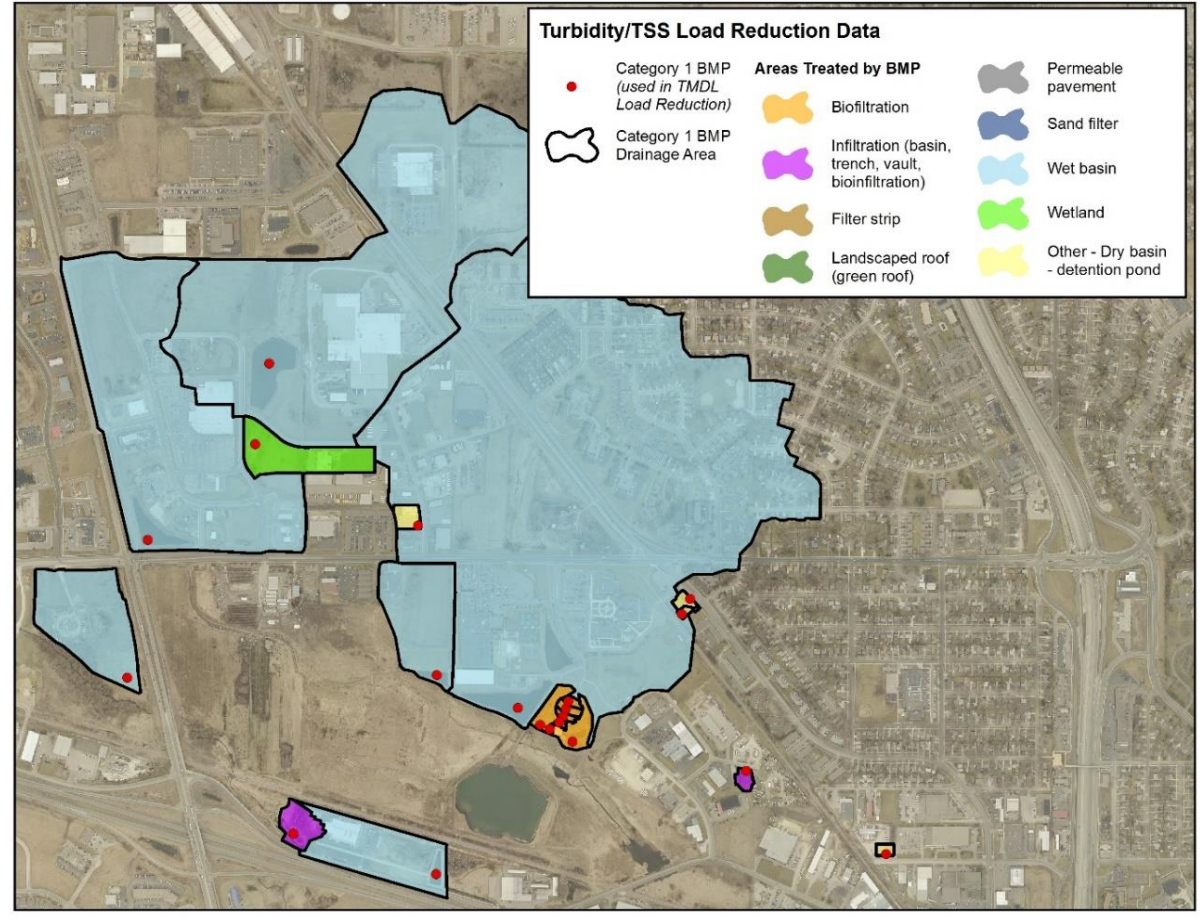
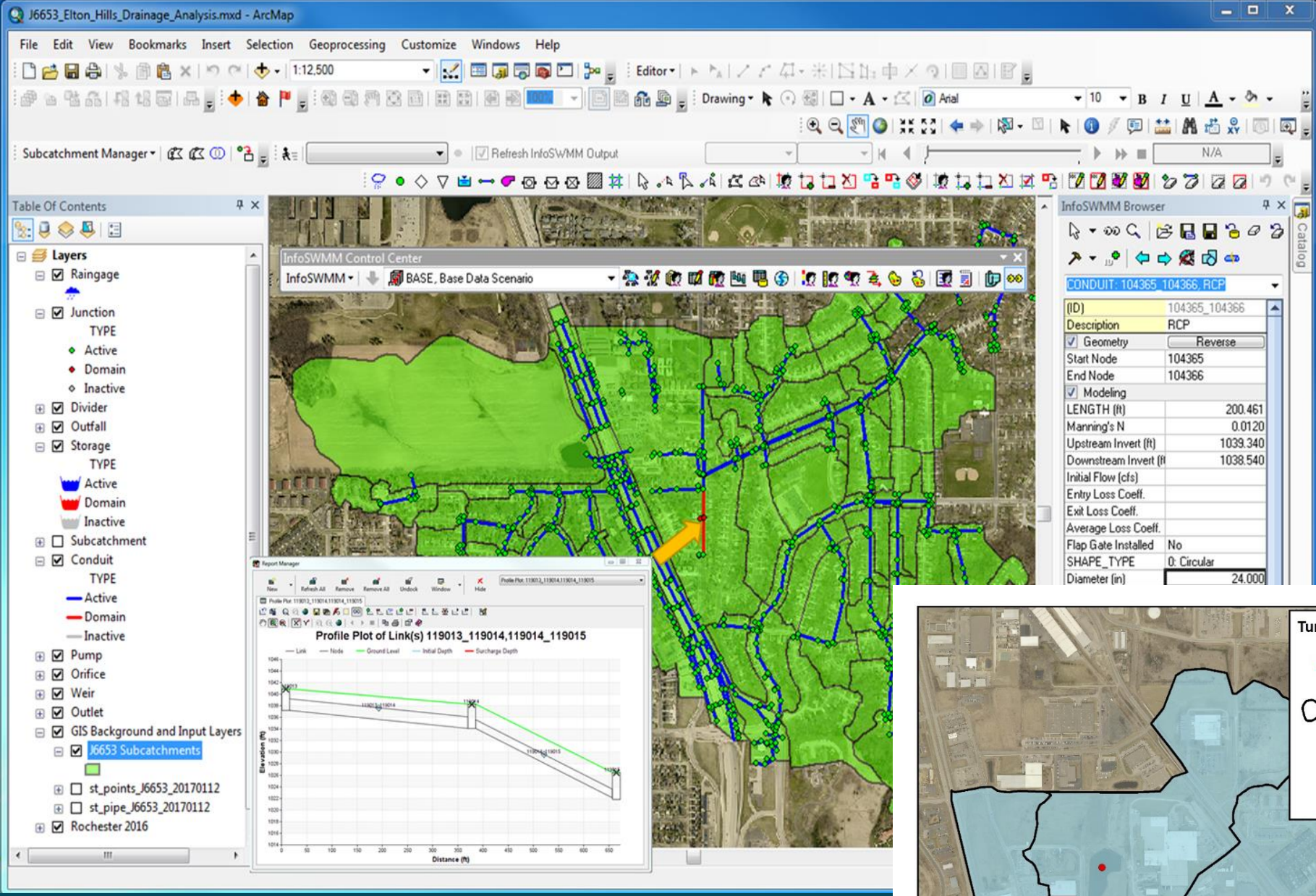


85 bad.xlsx	223 bad.xlsx
86 fair.xlsx	224 bad.xlsx
87 fair.xlsx	226 fair.xlsx
93 fair.xlsx	227 bad.xlsx
94 fair.xlsx	239 fair.xlsx
103 fair.xlsx	240 fair.xlsx
104 bad.xlsx	240B bad.xlsx
118 fair.xlsx	241 bad.xlsx
122 bad.xlsx	243 fair.xlsx
123.xlsx	244 bad.xlsx
135 bad.xlsx	252 bad.xlsx
137 bad.xlsx	261 bad.xlsx
154 bad.xlsx	263 bad.xlsx
155 bad.xlsx	264 bad.xlsx
166 fair.xlsx	271 bad.xlsx



# Focus Item: Modeling/Analyses/Routing

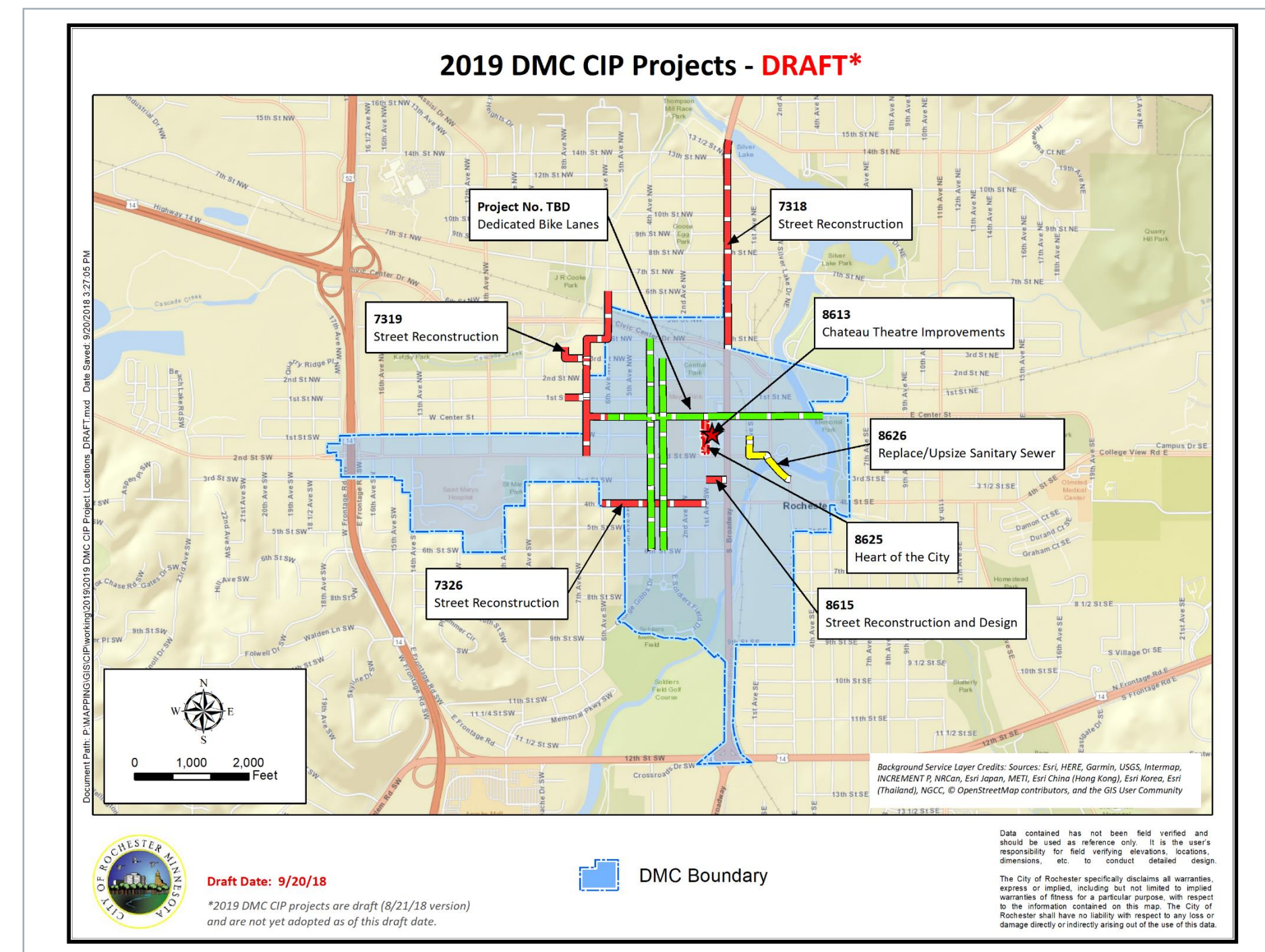
- **Tasks:** modeling, analyses & routing for reporting, studies, planning, budgeting, etc.
- **Collaborators:** GIS, Public Works (many divisions/groups), Community Development, Emergency Management 
- **Processes:** MS4 TMDL pollutant reduction modeling, precipitation grids/interpolations, InfoSWMM stormwater modeling, flood inundation, school siting, sanitary sewer capacity analyses, bus routing/GTFS, etc.





# History – 2010s

- First, public-facing ArcGIS Online web applications rolled out
- Major DMC transportation studies & DMC Project Managers team setup in-house
- **Growth** 3<sup>rd</sup> GIS position approved 2017 😊
- Community Development Department set up in 2018
- Collaboration w/Olmsted Co. GIS to access replica database (no more ftp copies!!😊)



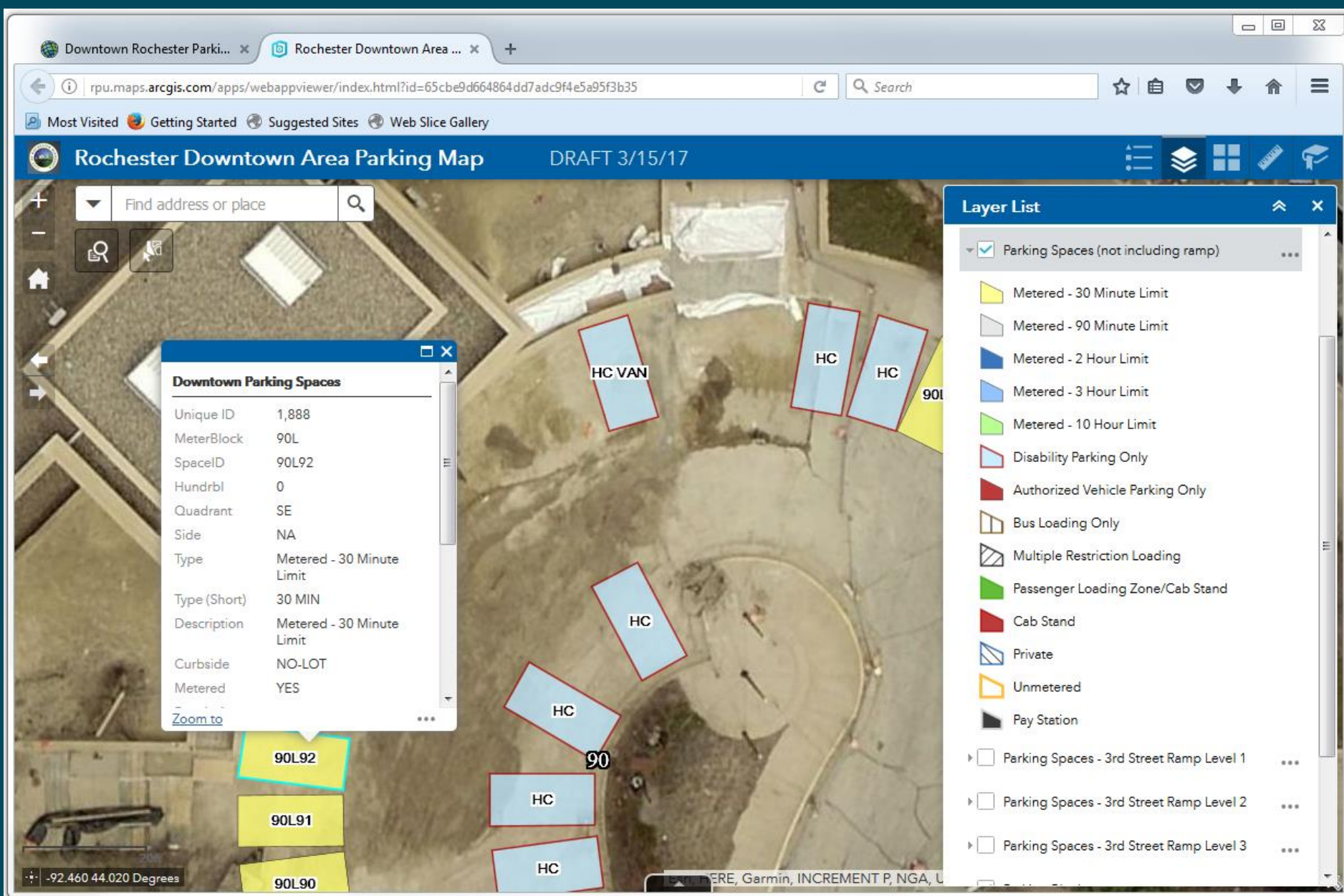
GEODB\_corgisdata\_oc\_gis\_publication.sde

- OC\_GIS\_Publication.DBO.ADDRESS\_ONE
- OC\_GIS\_PUBLICATION.DBO.Basemap
- OC\_GIS\_PUBLICATION.DBO.Boundaries
  - OC\_GIS\_PUBLICATION.DBO.Administrative\_Jurisdictions
  - OC\_GIS\_PUBLICATION.DBO.Annexations
  - OC\_GIS\_PUBLICATION.DBO.Appraisers
  - OC\_GIS\_PUBLICATION.DBO.CtyLmts
  - OC\_GIS\_PUBLICATION.DBO.DMC\_Boundary
  - OC\_GIS\_PUBLICATION.DBO.Olmsted\_County\_Boundary
  - OC\_GIS\_PUBLICATION.DBO.Orderly\_Annex\_Agreement
- OC\_GIS\_PUBLICATION.DBO.Decorah\_Edge
- OC\_GIS\_PUBLICATION.DBO.Demographics
- OC\_GIS\_PUBLICATION.DBO.E911\_Addresssing
- OC\_GIS\_PUBLICATION.DBO.Education

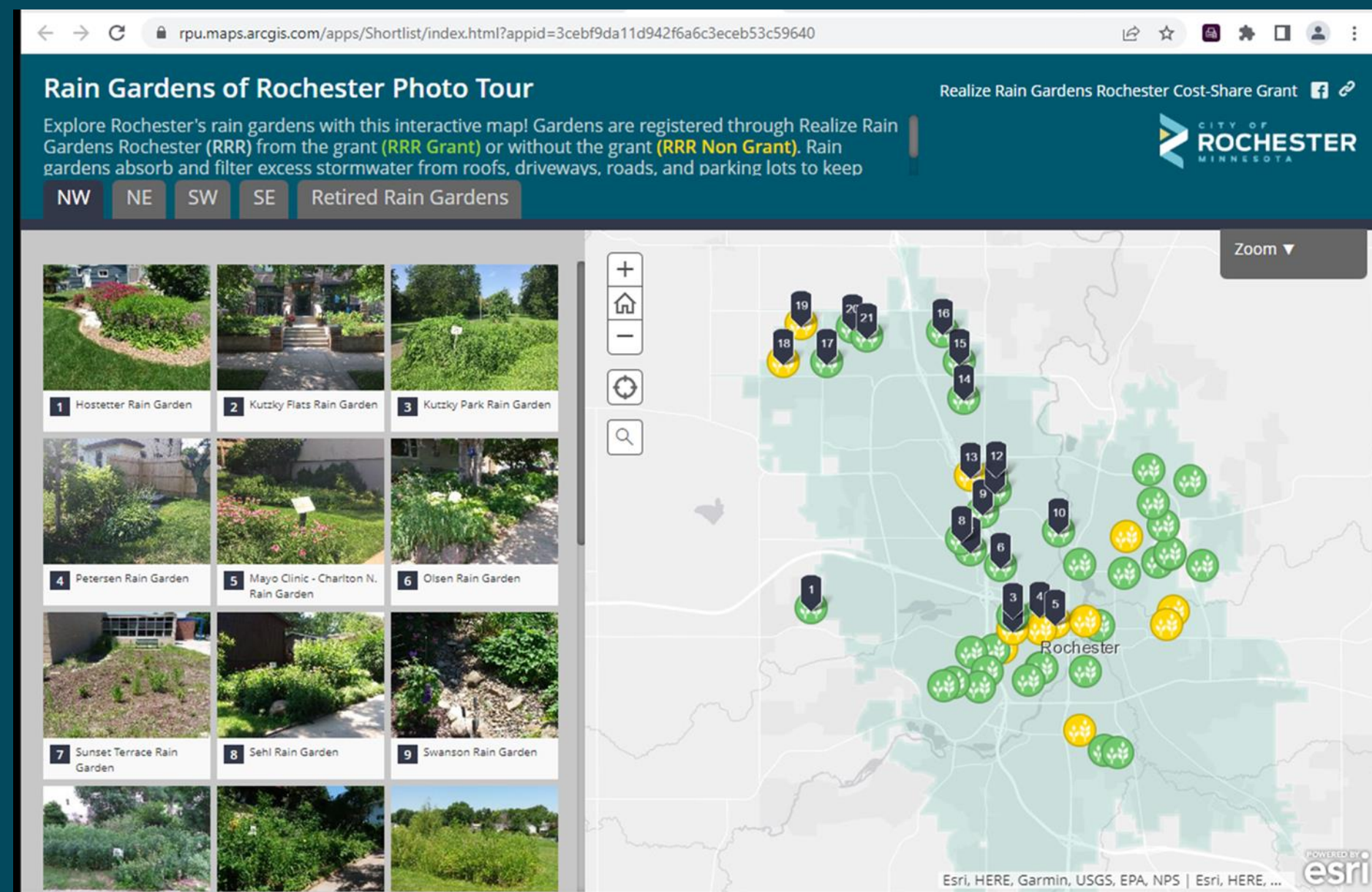


# Focus Item: Early Public Web Apps

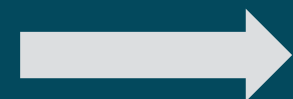
- **Goal(s):** one-way (and a bit of two-way) engagement for message dissemination, information transfer
- **Collaborators:** GIS, Communications, Public Works, RNeighbors 
- **Applications:** Metered Downtown Parking, A Litter Bit Better Registration, Realize Rochester Raingardens Tour, Capital Improvement Project (CIP), etc.



Downtown Metered Parking: GIS, Public Works (ROW & Transit)



Thank you  
Teresa Blader!!



RRR Tour: GIS, Public Works (Water Resources)



# History – 2020

- Already really busy and then **BOOM** along came covid!
  - ◆ business model changed to “everything virtual”
  - ◆ virtual open house apps, dashboards, surveys, etc.
  - ◆ virtual/remote support to City GIS users
- Significant support to EOC Covid-19 Planning Section

## Important Messages

- **March 16, 2020: Accessing GIS Data During COVID-19.** To keep essential functions moving please use these instructions to access spatial data over the duration of the COVID-19 pandemic:
  - If you need to access base data (i.e. address information, parcel information, road centerline data, etc.) the public Olmsted County GIS web map application page is the preferable tool  
<https://gweb01.co.olmsted.mn.us/WebApps/OlmstedCountyGISMap/>
  - If you need further access to ArcGIS to perform essential functions in the field/while disconnected from the network, please view the [“ArcGIS Desktop - Downloading Data onto a Local Drive for Field Use”](#) SOP for transferring data onto a local drive.

This screenshot shows a web portal for the 'Elton Hills Drive Bridge Replacement' project. The header includes the City of Rochester logo and navigation icons. The main content area features a 'Collection' section with the project title and a 'Virtual Open House and Public Engagement Portal' button. Below this, there are five numbered tiles: 1. Part 1: Introduction (with a photo of the bridge), 2. Part 2: Project Details (with a photo of the bridge), 3. Part 3: Interactive Location Map J7918 (with a map thumbnail), 4. Part 4: Resources & Links (with a document icon), and 5. Part 5: Public Feedback (with a green checkmark icon).

This screenshot shows a web portal for the 'East Center St and 11th Ave NE/SE Intersection Improvements' project. The header includes the City of Rochester logo and navigation icons. The main content area features a 'Collection' section with the project title and a 'Virtual Open House and Public Engagement Portal' button. Below this, there are four numbered tiles: 1. Part 1: Project Details (with a photo of the intersection), 2. Part 2: Interactive Location Map J6063 (with a map thumbnail), 3. Part 3: Resources & Links (with a document icon), and 4. Part 4: Public Feedback (with a green checkmark icon).



City of Rochester COVID-19 Situational Awareness ... Internal Use ... Select Report Date or Range 3/27/2020 3/27/2020

### COVID-19 Situational Awareness Map

<b>Confirmed COVID-19</b> No Data <small>Last update: a few seconds ago</small>	<b>Self-Monitor/Quarantine</b> <b>14</b> # of Employees <small>Last update: a few seconds ago</small>	<b>"COVID-19-Like" Symptoms</b> <b>3</b> # of Employees <small>Last update: a few seconds ago</small>	<b>Sick Non-COVID-19</b> <b>11</b> # of Employees <small>Last update: a few seconds ago</small>
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#### Daily Department/Group Updates

remote options when media requests interviews.

**3/27/2020 Public Works:**  
Nothing new to report.

**3/27/2020 EOC Logistics:**  
Nothing new to report.

**3/27/2020 Music:**  
Nothing new to report.

**3/27/2020 EOC Finance:**  
Nothing new to report. -

**3/27/2020 Fire:**  
Nothing new to report.

**3/27/2020 Human Resources:**  
Working on drafting employee communication today regarding Families First legislation; also tentatively planning to send out updated employee Q&A.

**3/27/2020 City Clerk:**  
1. At least two City Clerk employees will be on site at City Hall during business hours to assist teammates across the organization with functions including mail and receiving items. Yesterday we worked with Olmsted County PRL on how to file documents as required and will be continuing those functions as well. 2. Yesterday was the first meeting of a work group convened by the Secretary of State  
Last update: a few seconds ago

Dept/Group Updates

**COVID Planning & Monitoring: GIS, EOC, City Departments (all), external stakeholders (community lifeline reporting)**

**Applications Used: Survey123, Survey123 Connect, Dashboards**

### COR COVID-19 Department Updates

Designated department or group representatives are to use this survey to log daily updates for the internal COVID-19 situation report.

**Name (First Last):\***  
Please submit your name so that you can be contacted with any follow up questions based on the answers provided in the following survey. Response is required.

Example

**Departmental Update Item(s)**  
Add applicable daily update details for your department or group.

**Item Date:\***  
Add applicable date pertaining to item update. This is a required question.

2/6/2023

**Department or Group:\***  
Select applicable department or group. This is a required question.

Public Works

**Item Description:\***  
Please add new updates for your department. If no changes, leave default answer.

Nothing new to report. Example only

### COR COVID-19 Illness Survey

This survey is for internal use only. Each department must report on the types of illnesses employees are experiencing during the COVID-19 pandemic. The survey results are confidential and will only be shared with the City of Rochester Human Resources Department and the EOC Planning Section Chiefs. Results may also be shared in EOC Situation Reports and with department leaders.

Do not report the names of any ill individuals. Human Resources will contact you directly if they need more detailed information based on the survey results for your department.

City of Rochester COVID-19 internal employee illness survey. Updated on 11/18/2020.

**Department:\***  
Please select the department you are reporting for. This is a required question.

Human Resources

**Your Name (First Last):\***  
Please submit your name so that Human Resources can contact you with any follow up questions based on the answers to the following survey. Response is required.

Test Example

**Illness Report Date:\***  
If reporting for a date other than today's date, please manually change the date. Response required.

2/6/2023

**Number of employees with confirmed COVID-19 working remotely:**  
Please report the number (integer) of employees with confirmed COVID-19 that are still working remotely.

5

### COR COVID-19 EOC Community Lifeline Tracking

The City of Rochester Emergency Operations Center (EOC) is requesting your response in this survey to identify and track the status of Community Lifelines during the COVID-19 pandemic.

Please reference the FEMA Community Lifelines Toolkit for a description of each lifeline: <https://www.fema.gov/media-library-data/1572720132672-87-136e43d09163191a967d47859c/CommunityLifelinesToolkit2.pdf>

**Name (First Last):\***  
This is a required question.

Example

**Department, Organization, Group, or Business:\***  
This is a required question.

External Organization (example)

**Community Lifeline:\***  
Select a community lifeline. This is a required question. See linked document above for clarification of lifelines and their subcategories.

Food, Water, Shelter

**Food, Water, Shelter Subcategory:\***  
Select the corresponding subcategory. This is a required question.

Food and Water

**Community Lifeline Service Disruption Level:\***  
Identify the service disruption level of the lifeline. This is a required question.

1 - Normal service  
2 - Threat of service disruption  
3 - Service disruption imminent  
4 - Significant service disruption

1 2 3 4

**Disruption Level Explanation:\***  
Please briefly tell us why you ranked the Community Lifeline at the selected level. This is a required question.

Example only

**EOC Assistance?\***  
Does your department, organization, group, or business need assistance from the EOC to preserve the lifeline, or to prevent service level disruption to the lifeline?

No

Yes

**Contact Information:\***  
Please identify contact information if you are not the correct contact. This is a required question.

No change necessary.

Submit



ArcGIS Survey123 My surveys Organization Help RPW GIS

COR COVID-19 EOC Action Plan - Section Updates Overview Design Collaborate Analyze Data Settings

4/12/20 - 4/13/20 Filter 19.4% Report Export Open in Map Viewer Form view 7/36

**Report**

1. Choose records to include  
 Selected records only (0)  
 All records in the table (7)

2. Select a template [Manage templates](#)  
 COVID19\_EOC\_Sections\_AP\_S123\_Template\_Final.docx

3. Output settings  
 File options [?](#)  
 Split

Report name [?](#) \*  
 COR COVID-19 EOC Action Plan - Section Updates\_OID\${objectid}

Save to my ArcGIS account [?](#)  
 Survey-COR COVID-19 EOC Action Plan - Section Updates

Format  
 Microsoft Word (.docx)

[Show credits](#)  
[Preview sample report](#) [?](#)  
 Generate

Recent tasks >

Report Submittal Date	EOC Section	Other	Operational Period Section Chief Name (First Last):	Section Chief Name (First Last):	List Issues, Concerns, Problems, Desires:	Actions Completed	Deputy Name(s) (First Last):
Apr 13, 2020	EOC Continuity of Operations		Linda Hillenbrand	Linda Hillenbrand	None noted.	finalized and shared on social media, looking into PEG options. Welcoming messaging for all Rochester residents: coloring page created and shared, color "live" with RPL happening on 4/13. Communication sent out to Day Center management team advising them of initial steps taken; communicated with Paul Widman on contacts to be made within his department. Reviewed illness report for last week; no opportunities existed to reassign employees. Two City Attorney employees have been reassigned to Day Center.	Tim Comstock, Jennit Simpson
Apr 13, 2020	EOC Finance		Dale Martinson	Dale Martinson	Full cost recovery. Will teammates actually cost their time / purchases / equipment use.	*Joe Bertram from finance costing section submitted registration for FEMA Grants Portal * Registration to FEMA Grants Portal Complete. Login obtained.  *Time costing instructions send to all personnel. *Special instructions for a/p and payroll liaisons to assist in working with teammates.	Rachel Houdek
Apr 13, 2020	EOC Operations		Kris Jungels	Kris Jungels	None noted.	Consulted with HHS and COOP on staffing plan for Day Center.  Delivered additional thermometers to Day Center. Sent Fire Department personnel to Day Center to troubleshoot thermometers that are not working properly. Verified that Fire Department is looking for Infrared thermometers to purchase through Logistics.	

0 of 7 selected

### COVID-19 EOC Action Plan: Section Update Section: EOC Logistics

Operational Period Details		
Report Submittal Date: April 13, 2020 Operational Period Section Chief: Jenny King Section Chief: Jenny King Deputies: Curt Pronk, Andy Bianco		
Issues, Concerns, Problems, Desires		
Not enough notice given to Logistics to fill supply requests. Need more lead time to fill requests. All supply requests, including PPE requests, need to be made through DLAN going forward.		
Planned Actions		
Operational Objectives/ DESIRED OUTCOME	Strategies HOW	Tactics/Work Assignments WHO, WHAT, WHERE, WHEN
Finalize homemade mask donation program	Final Directives Given.	Call Center, PIO, EOC Manager, and Logistics to develop final operation when all details are known and worked out. Determine receipt and inventory of completed homemade masks as well as distribution process. Assign tasks to support this effort.
Continue to monitor City Departments PPE usage.	Compile/track information.	Procurement and Supply Units utilize spreadsheets to monitor supply orders received and usage. Procurement and Supply Units contacting known resources and investigate / sources.
proved by Unified assist with		

### COVID-19 EOC Action Plan: Section Update Section: EOC Public Information

Operational Period Details		
Report Submittal Date: April 13, 2020 Operational Period Section Chief: Megan Moeller Section Chief: Megan Moeller Deputies: Sarah Oslund		
Issues, Concerns, Problems, Desires		
Teammates need information updates. General public need information updates. Olmsted County PIO will require assistance to create consistent messages.		
Planned Actions		
Operational Objectives/ DESIRED OUTCOME	Strategies HOW	Tactics/Work Assignments WHO, WHAT, WHERE, WHEN
Assist with how to proceed with Mayor's "Morning with the Mayor" monthly event.	Social media/online is the only option due to distancing requirements.	PIO Team assisting Mayor/Mayor's assistant with vetting technology options, procuring platforms if needed, collecting questions and facilitation of the event.
Thank you video for mask donation.	County JIC initiative.	County JIC teammates are leading this effort. PIO Team will help with messaging and arranging for teammates to be the face/voice of COR's homemade mask recipients.
Completed Actions		
Joint messaging regarding homemade face masks has been sent out. Newsletter moving to twice weekly (Mondays and Thursdays). Messaging about youth needing to distance has been pushed onto social, radio and news release. Messaging about distancing in parks has been communicated via news release and social (signage coming to parks/trails soon). One-pager from non-profit consortium has been finalized and shared on social media, looking into PEG options. Welcoming messaging for all Rochester residents: coloring page created and shared, color "live" with RPL happening on 4/13.		

**Custom Reports:** built required format in s123/Word for automated reporting of weekly Departmental Action Plan reports and Unified Command

# Current Initiatives

- GIS requests and applications/uses are growing rapidly
  - ◆ still doing all of the “old stuff” but web and asset management a focus
- New AGOL applications: hubs, surveys, Experience Builder (and migration of existing apps to EB)
- Collaborations with consultants to build apps together
  - ◆ add value and increase efficiencies
- Continued module development in Elements and MS4Front
- Existing program support and work on new programs/initiatives (e.g. project management, analyses, policy & process improvements, etc.)



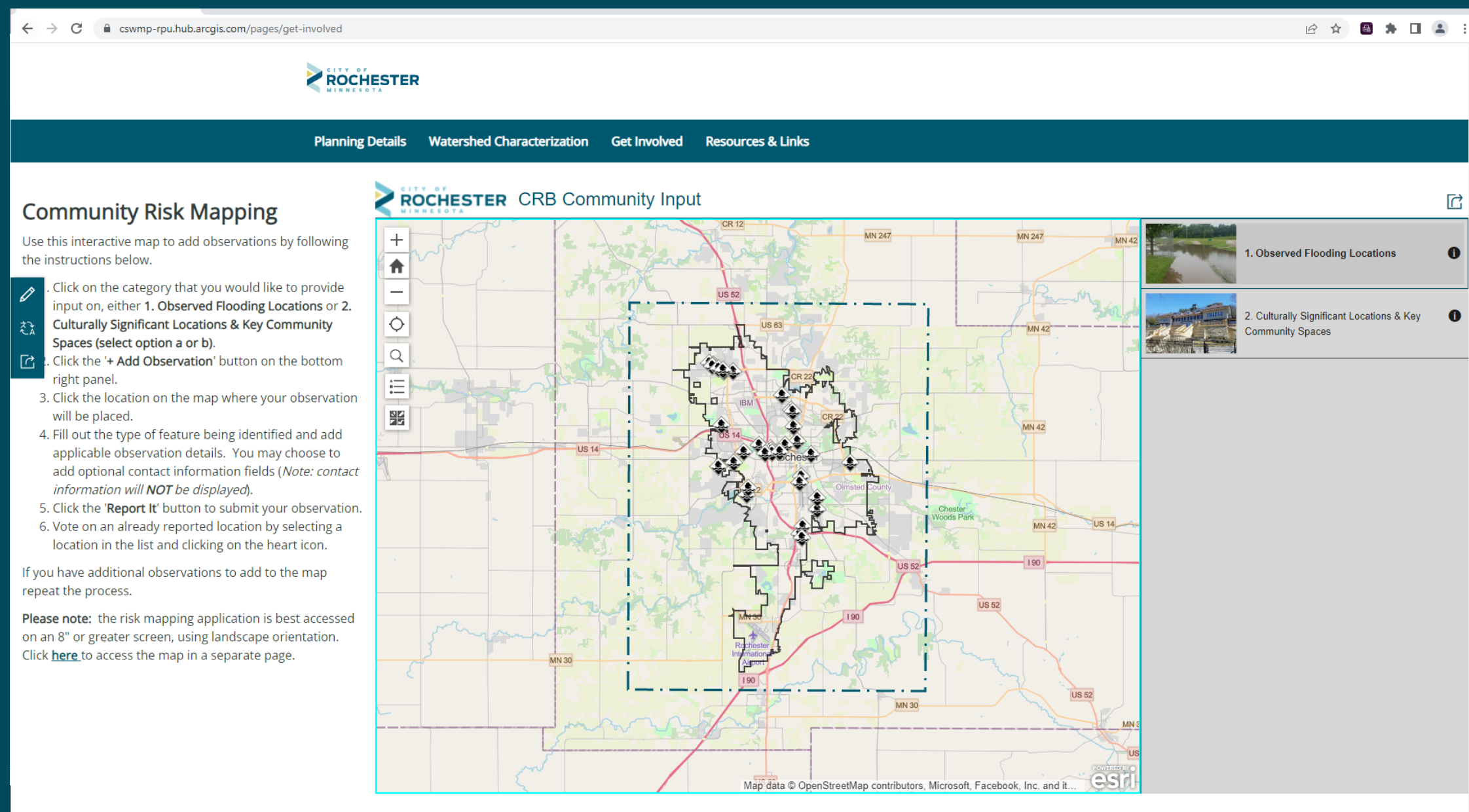
# Current Initiatives

- Annual work & action planning to prioritize tasks
  - ◆ align initiatives with City’s foundational goals & strategic priorities
  - ◆ working to fulfill existing tasks and also accommodate new needs
- Continuing to build the “GIS brand” via templates, SOPs, etc.
  - ◆ expand “best practice” and “data transmittal” documents built several year ago, build on that

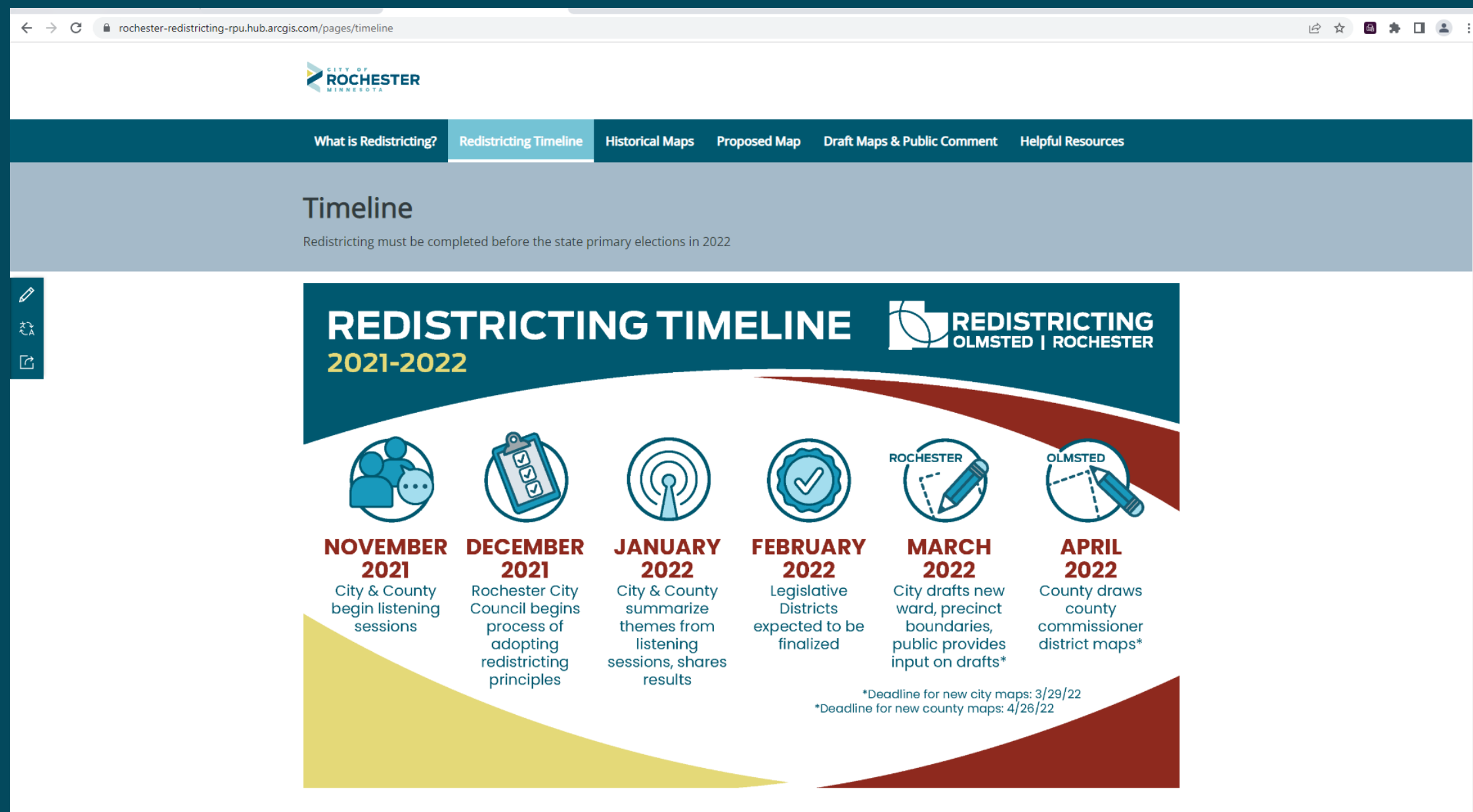
- New teammates: this week added the 4<sup>th</sup> GIS position

**WELCOME** to Jay Forstner, the new GIS Manager!!!!

Development Services Infrastructure: Public Works					
Tactics (T)/Key Performance Indicators (KPI)	Foundational Principle(s) Supported	Strategic Priorities Supported	Lead Teammate(s)	Support Teammates	Completion Date
<b>Goal 1: Efficient Asset Management Systems (CONNECTING GOAL)</b>					
Tactic 1: Continue to implement modules within centralized systems: MCM4From (MCM3 Outfalls Module, MCM 4/S ESC Inspections Component - single lot, MCM5 SW Pond & Str. BMP Modules)	Fiscal Responsibility and Sustainability	Quality Services for Quality Living & Economic Vibrancy and Growth Management	Christy Shostal	Mike K, Ryan T, Aaron C	12/31/2022
Tactic 2: Continue to implement modules within centralized systems: Elements (Pavement Maintenance, Traffic Group)			Kevin Morrissey	Infra. Maintenance	12/31/2022
Tactic 3: Standardize processes and reporting (permitting, sidewalk inspections, MS4 outfall inspections, flood event inspections)			Christy Shostal, Kevin Morrissey	Water Resources	12/31/2022
Tactic 4: Engage/train users with new systems, continue collaboration with PW Subject Matter Experts (SMEs), identify additional PW SMEs			Christy Shostal, Kevin Morrissey, Carolyn Enright	Dan Piliga, Josh DeFrang, Tyler Spies	ongoing
Key Performance Indicator 1: Decreased time spent to produce quality reports					
Key Performance Indicator 2: Software cost savings					
Key Performance Indicator 3: Number of system and users					
Key Performance Indicator 4: Number of processes migrated/Improved					
<b>Goal 2: Quality Data Updates</b>					
Tactic 1: Update/archive old data (other org. sources)	Fiscal Responsibility and Sustainability	Quality Services for Quality Living	Christy Shostal	Carolyn Enright	12/31/2022
Tactic 2: Update/archive old data (COR sources)			Christy Shostal	Carolyn Enright	12/31/2022
Tactic 3: Retrieve best data (collaborate with Olmsted Co. & RPU)			Kevin Morrissey		6/30/2022
Tactic 4: Reorganize data servers			Kevin Morrissey		6/30/2022
Tactic 5: Define processes (internal tips and tricks/SOPs hosted on GIS page on Rochester@Work)			Christy Shostal, Carolyn Enright	Kevin Morrissey	ongoing
Tactic 6: Identify data stewards			Kevin Morrissey	Christy Shostal, Carolyn Enright	12/31/2022
Key Performance Indicator 1: % of data sources audited, archived, and updated (all sources - other org. and COR)					
Key Performance Indicator 2: Data server reorganized (Y/N)					
Key Performance Indicator 3: Number of processes identified/documentated					
Key Performance Indicator 4: Number of data stewards assigned (handoff)					
<b>Goal 3: Improved Internal and External Customer Experience &amp; Engagement</b>					
Tactic 1: System update and expansion (internal)	Compassion, Fiscal Responsibility & Sustainability, Public Safety, Social Equity	Quality Services for Quality Living	Kevin Morrissey		1/31/2023
Tactic 2: Grow the internal self-service opportunity (i.e. via ESRI online training courses for teammates, COR GIS SOPs/instructions)			Christy Shostal, Carolyn Enright		6/30/2022
Tactic 3: Grow the external/public experience (interactive web maps, feedback surveys, virtual open house/story maps)			Christy Shostal, Carolyn Enright		12/31/2022
Tactic 4: Maintain twice-weekly 15 min team meetings to share knowledge, work order status, and coordination on projects			GIS Team		ongoing
Tactic 5: Provide core Cor datasets to consultants/outside agencies in efficient manner.			Christy Shostal, Kevin Morrissey		12/31/2022
Key Performance Indicator 1: Support for 100% of requests					



**CSWMP Update Public Hub:** crowdsource maps, surveys, story maps, document access, etc.

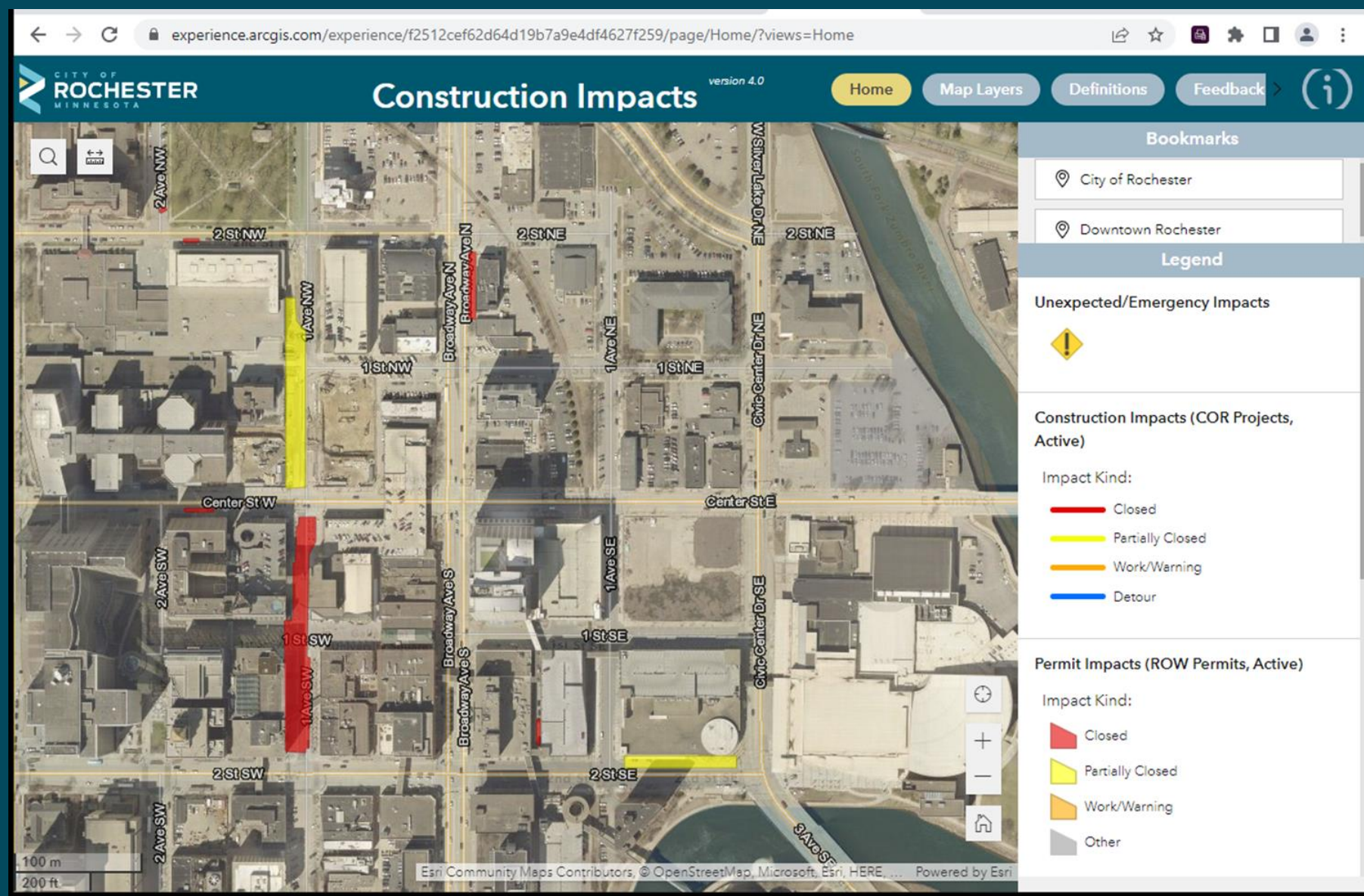


**Redistricting Public Hub:** crowdsource maps, surveys, information sharing

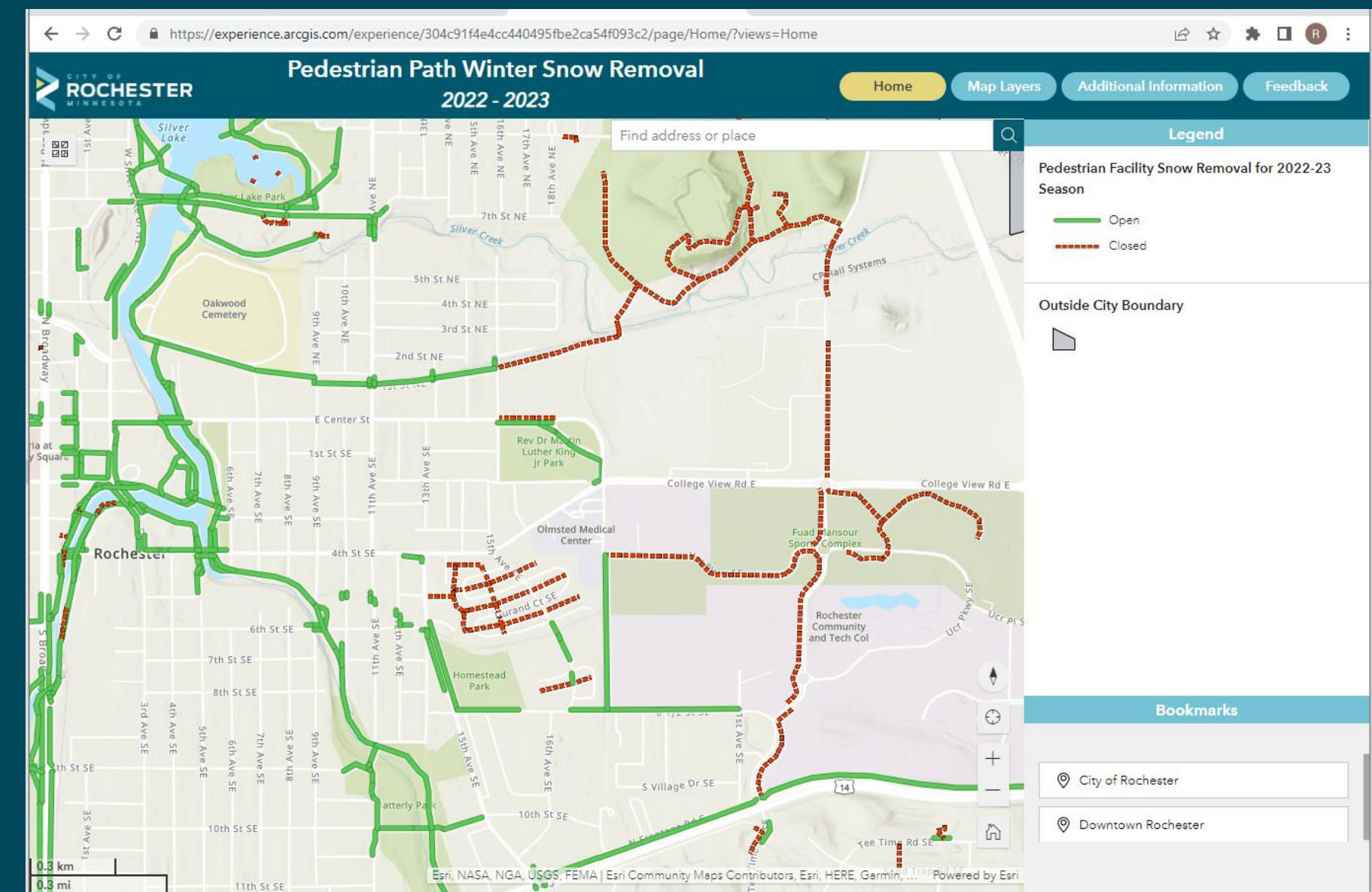
# Focus Item: Public Engagement Applications

- **Goal(s):** two-way engagement (crowdsource web maps, surveys, live meeting access, graphics, videos, project details, virtual tours, etc.), information sharing for situational awareness
- **Collaborators:** GIS, Communications, Public Works, Community Development, Parks & Rec, Administration, Consultants, other organizations, community 
- **Topics:** construction impacts, redistricting, plan updates, City projects & programs, etc.

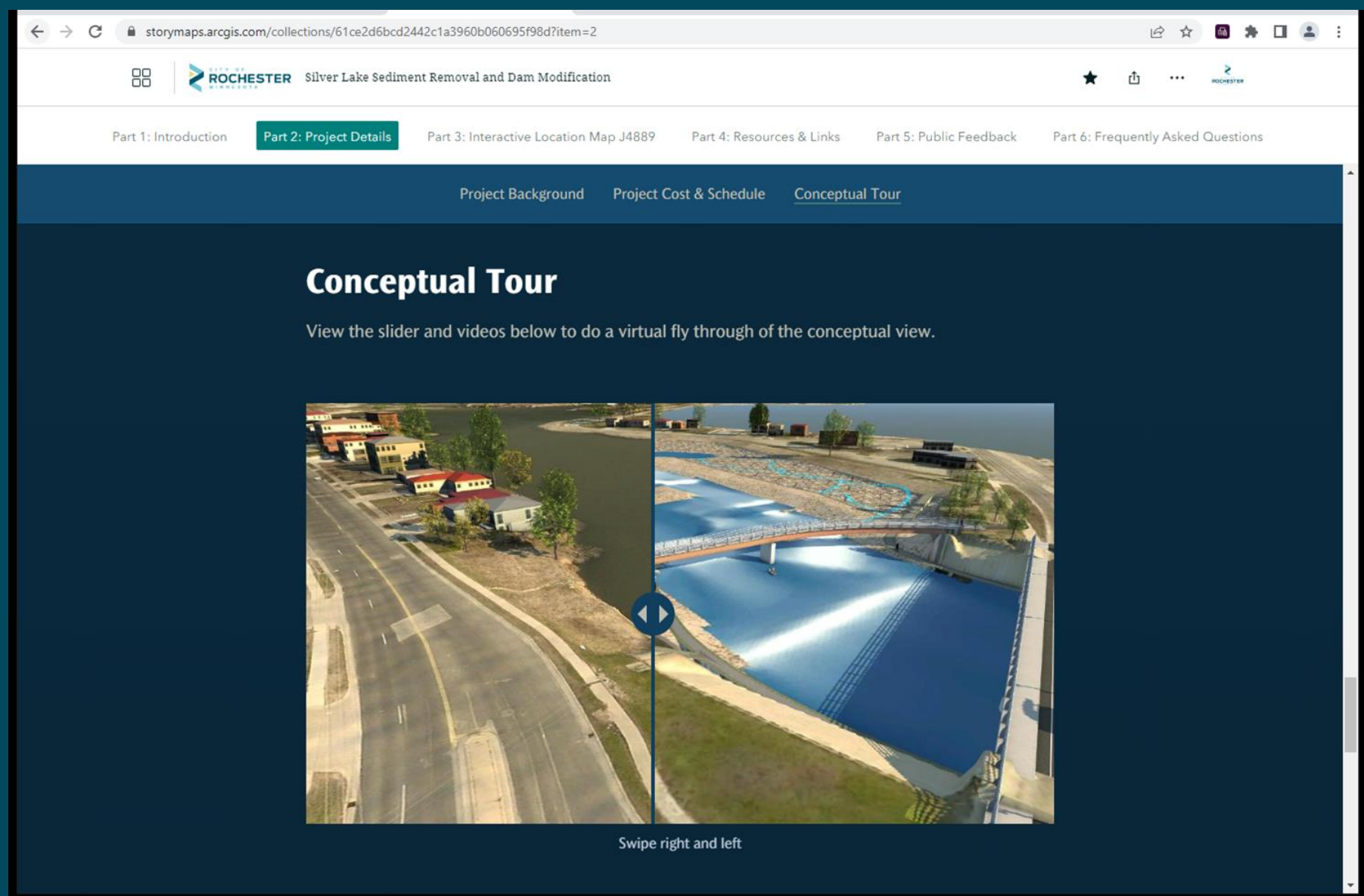




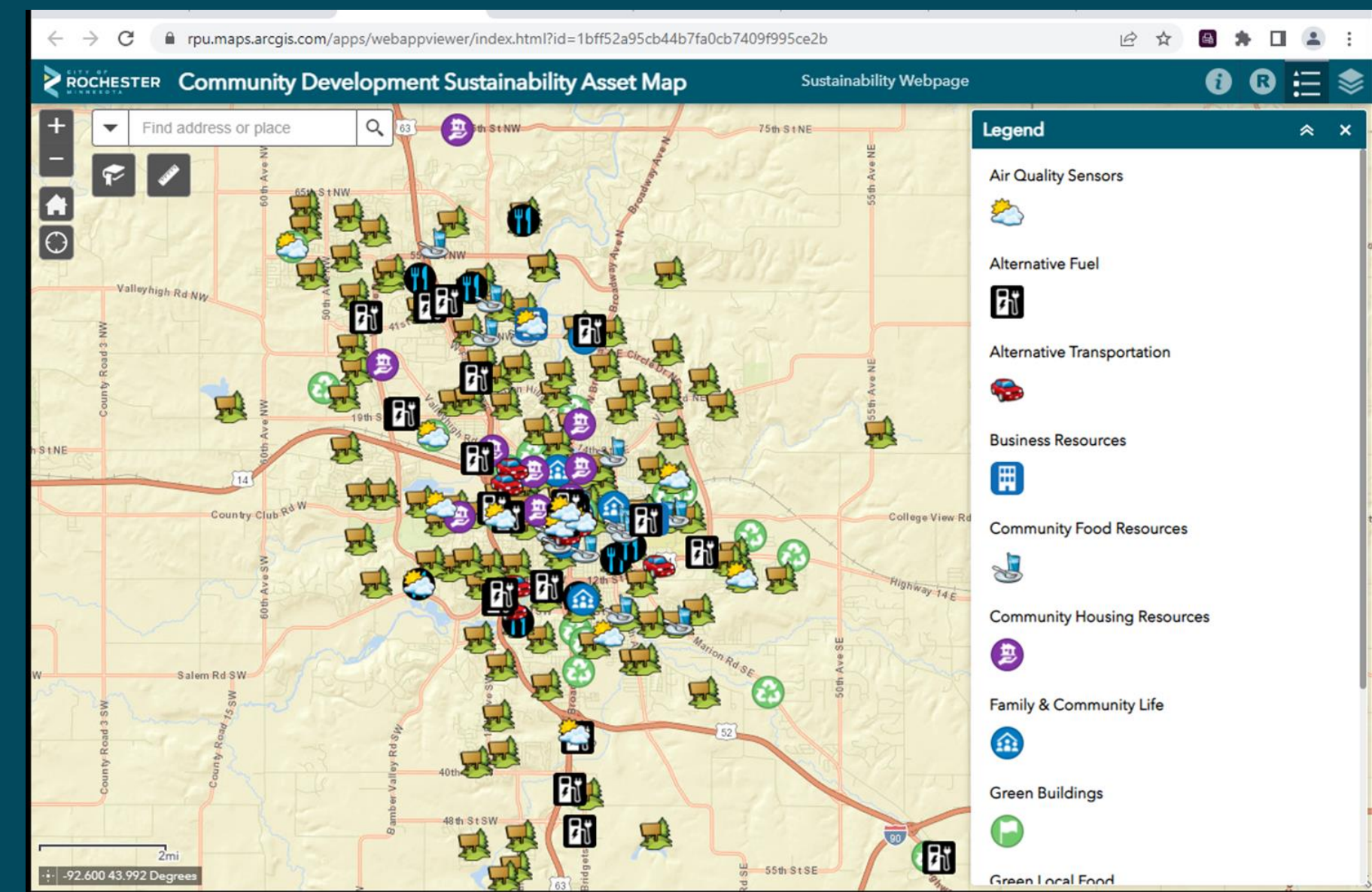
**Construction Impacts:** GIS, Public Works, Administration, Communications, RPU, Olmsted County



**Winter Snow Removal:** GIS, Public Works, Parks & Rec

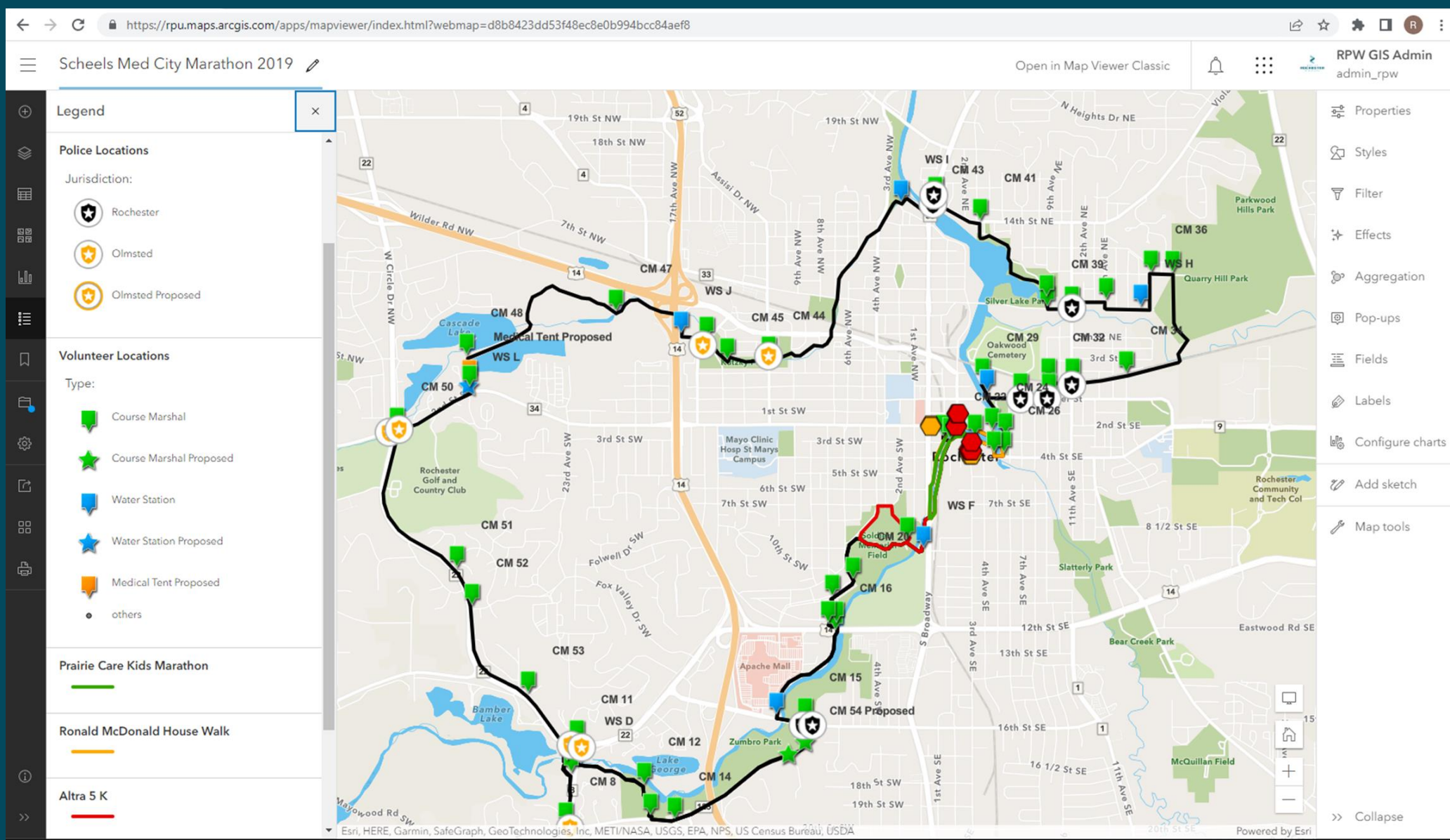


**Virtual Open House Apps:** GIS, Communications, Engineering, Parks & Rec



**Basic Web Apps:** GIS, Communications, Administration, Community Development

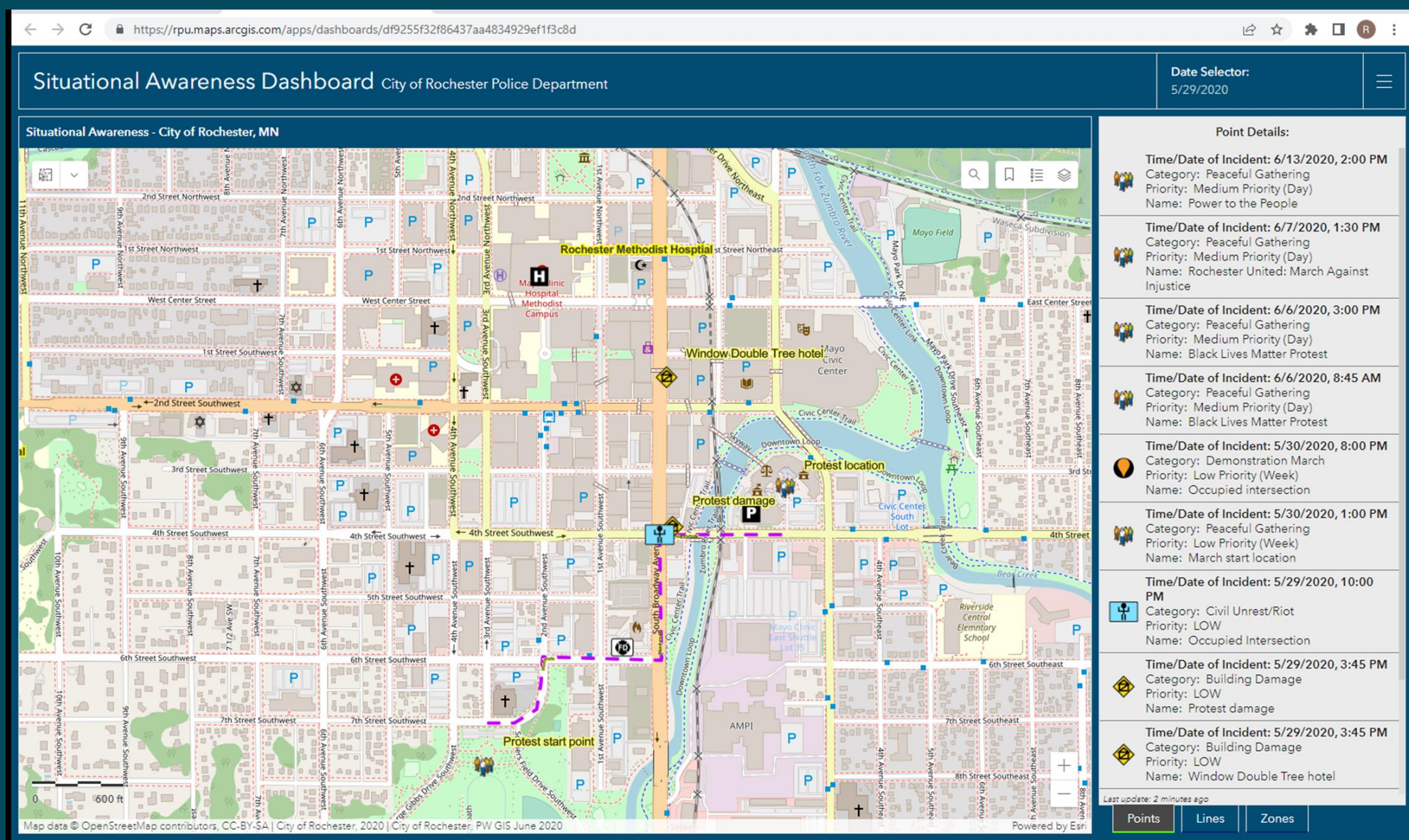




Internal Maps: GIS, Public Works, RPD, Olmsted Sheriff's Office

# Focus Item: Emergency Response Applications

- **Goal(s):** collect information to allow for real-time situational awareness, efficient production of reports, data collection
- **Collaborators:** GIS, Public Works, Emergency Response (EOC, RFD, RPD), outside organizations (FEMA – NSARGC, Olmsted County, RPS, Mayo, etc.) 🧑🏻‍🤝‍🧑🏻
- **Topics:** covid-19 response, civil unrest, large event planning, flood event response, MN Task Force 1 Urban Search & Rescue, etc.



Internal Dashboards: GIS, Public Works, RPD



USNG  
15T WJ 4275 7360

Waypoint \*  
Structure, damaged

Overall Comments  
Optional  
Test point

Please add up to 3 photos if appropriate.  
Use the icons below to capture a new photo or browse and select a photo from your device. Please take/use photos in landscape orientation.


Photo 1  
  
image0-20230207-100624.jpg

Photo 2

Event Details: **Complete event details and use "Set as favorite answers" to streamline data entry (using instructions above) to pre-populate future forms. Be sure to reset favorite answers at the beginning of each search operation.**

Survey instructions, tips, and sharable QR code. Click arrow to left to open.

Event Name  
Test

Squad Name  
Test

Squad Leader  
Christy Shostal

Your Name  
Bob

Search Type  
Rapid/Hasty Search

LOCATION \*  
Select the map to improve location accuracy: address / place / USNG. For damage survey, "drag" the pin to the building footprint when available.

15T WJ 4275 7360

6th St SW  
7th St SW  
10th St SW  
Soldiers Memorial Field

10:38

Search & R...e Tracking

Your Name: Test Searcher

Recon-line

Recon Recon Alpha  
Recon Bravo Recon Charlie  
Recon Delta

Primary-line

Primary Primary Alpha  
Primary Bravo Primary Charlie  
Primary Delta

Secondary-line

Secondary Secondary Alpha  
Secondary Bravo Secondary Charlie

GPS accuracy 12 ft

### MN Task Force 1 Search and Rescue Dashboard

Waypoints: Victim Detected

- Type: Victim, detected  
Start Time: 4/28/2022, 1:39 PM  
Team Name: Alpha  
Victim Count: 1
- Type: Victim, detected  
Start Time: 4/28/2022, 12:34 PM  
Team Name: Squad 1  
Victim Count: 1
- Type: Victim, detected  
Start Time: 4/27/2022, 1:27 PM  
Team Name: Cunnies Angels  
Victim Count: 1
- Type: Victim, detected  
Start Time: 4/27/2022, 1:23 PM  
Team Name: Cunnies Angels  
Victim Count: 1
- Type: Victim, detected  
Start Time: 4/27/2022, 12:29 PM  
Team Name: Search 1  
Victim Count: 1

Last update: 15 seconds ago

Waypoints: Structures

- Type: Structure, damaged  
Start Time: 4/30/2022, 11:58 AM  
Team Name: Ben
- Type: Structure, damaged  
Start Time: 4/28/2022, 1:20 PM  
Team Name: Squad 1
- Type: Structure, destroyed  
Start Time: 4/28/2022, 12:43 PM  
Team Name: Squad 1
- Type: Structure, no damage  
Start Time: 4/28/2022, 12:43 PM  
Team Name: Alpha
- Type: Structure, destroyed  
Start Time: 4/27/2022, 11:51 AM  
Team Name: 1
- Type: Structure, no damage  
Start Time: 3/2/2022, 2:59 PM  
Team Name: 2
- Type: Structure, failed  
Start Time: 3/2/2022 2:57 PM

Last update: 16 seconds ago

MNTF-1 Search & Rescue Field Collection Map

6/6/2021, 9:11 PM:  
Structure, failed



Last edited by mntf1\_rfd on 6/6/2021, 9:13 PM.

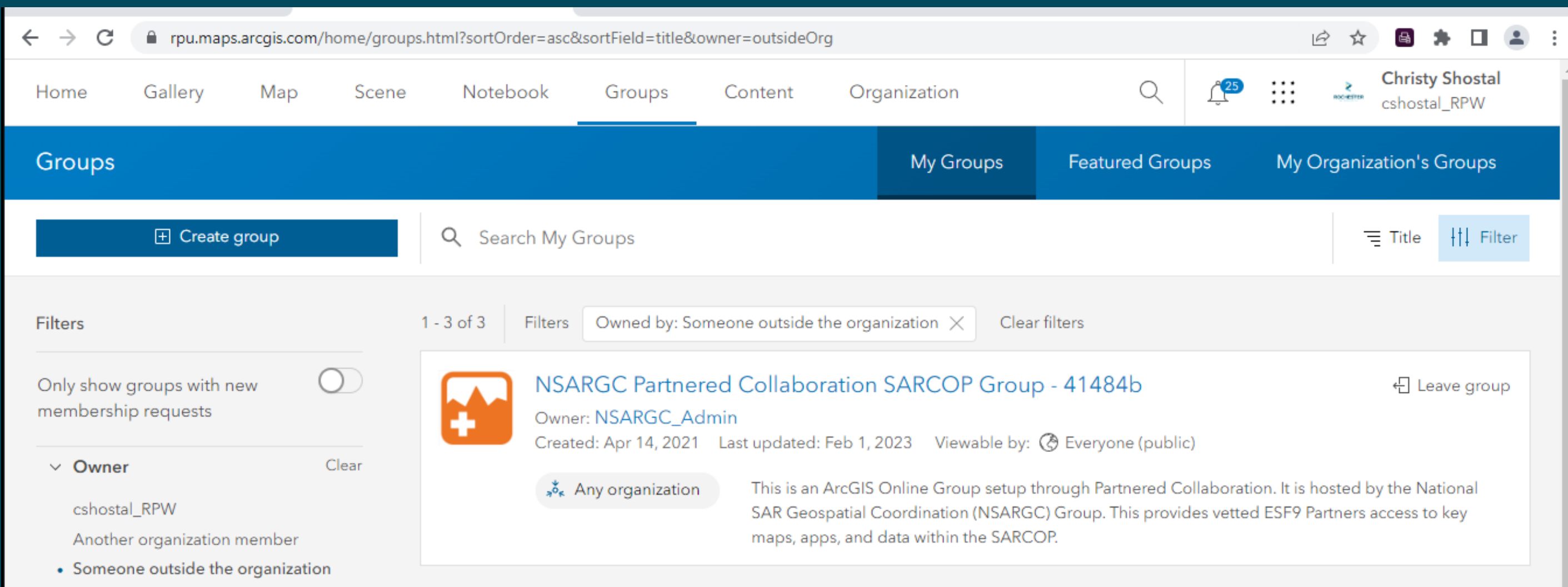
Detected Victims	Confirmed Victims
36	70
Shelter in Place	Human Remains
10	24

Destroyed Structures	Failed Structures
14	8
Damaged Structures	Not Damaged Structures
4	6

Maxar, Microsoft | Olmsted County, MN GIS Division | City of Rochester, MN Public Works GIS & City of Rochester... Powered by Esri

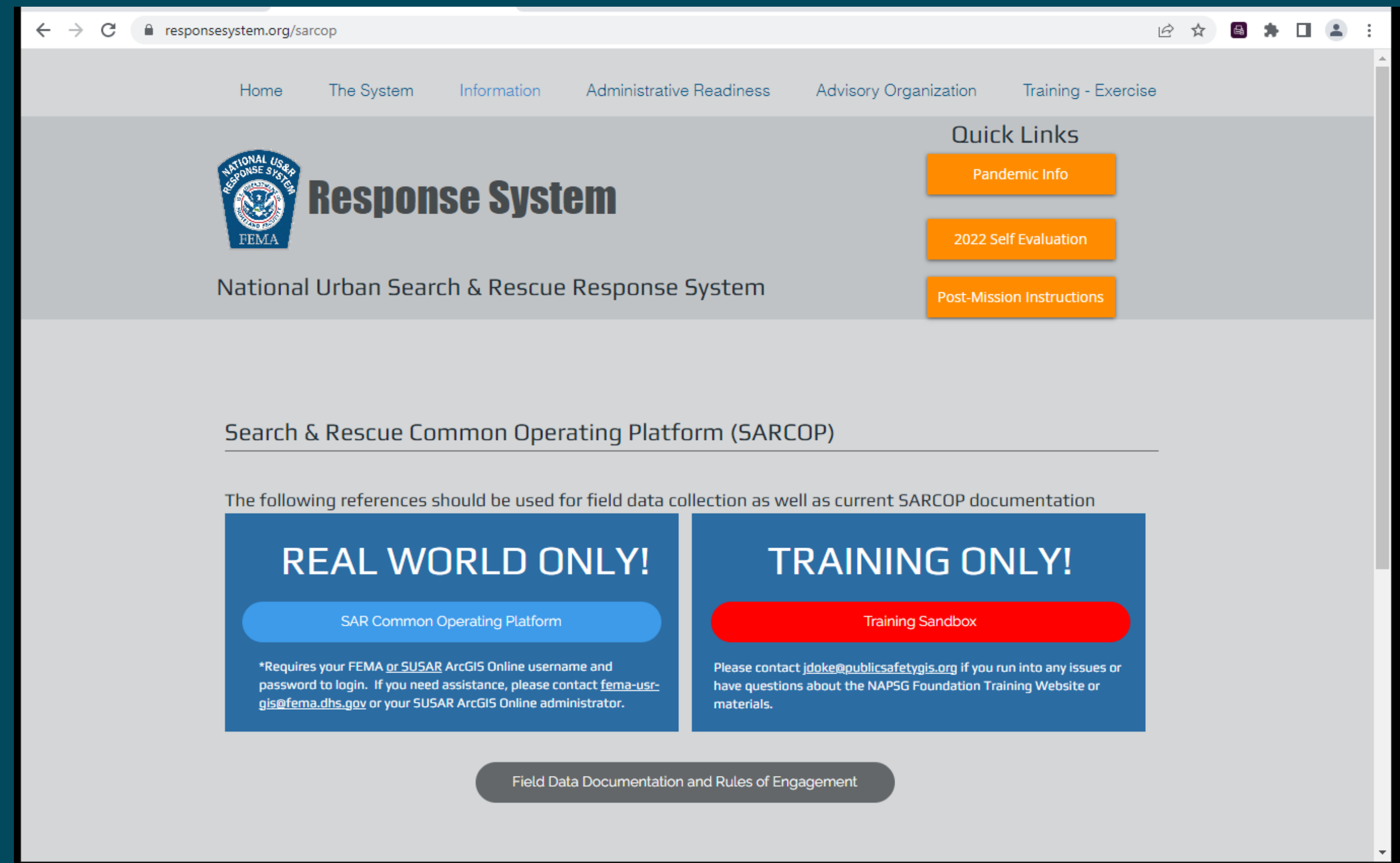
Urban Search & Rescue Apps: GIS, RFD, EOC, MN Task force 1  
Applications Used: Survey123, QuickCapture, Tracker/Location Tracking & Dashboards



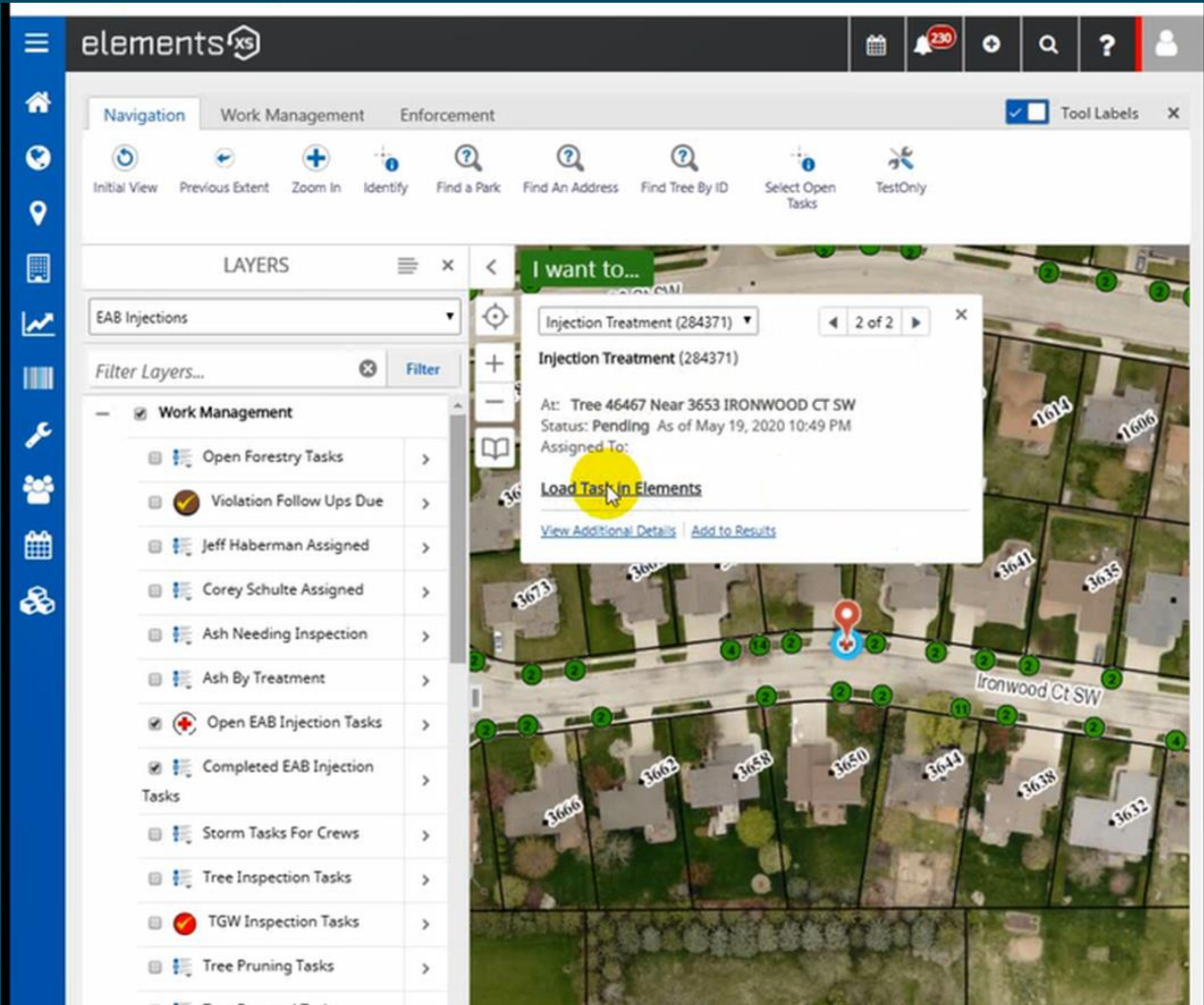


- **FEMA-NSARGC** – provides access to emergency response leaders (~5,000 in the group) & toolbox full of cloud-based, FEMA-supported emergency response apps
- Group is doing updates, additions, enhancements, hosting meetings, and providing training continuously

*Various levels of collaboration adding continuous value to all that we do!!*






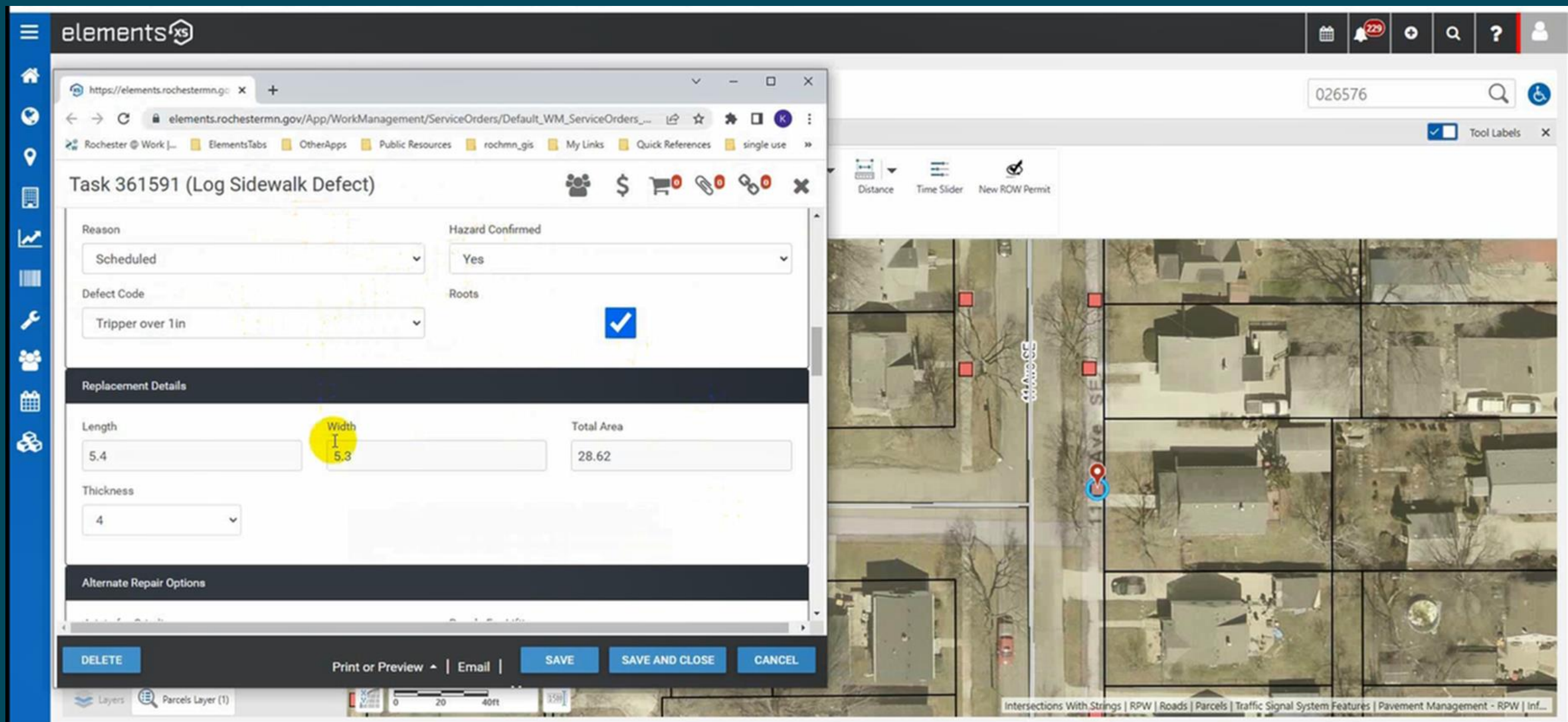


EAB Injections: GIS, Forestry

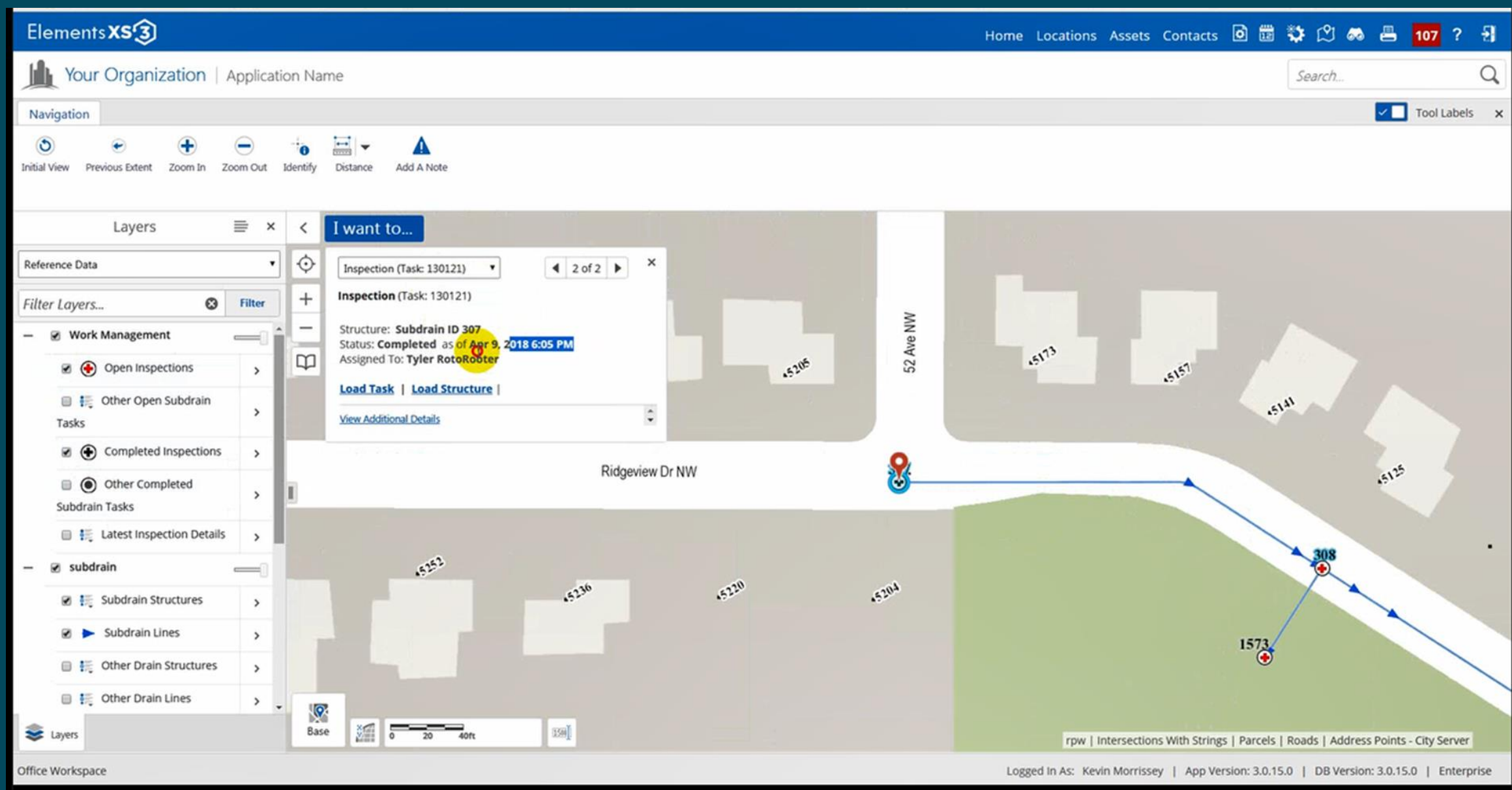
# Focus Item: ElementsXS Work & Asset Management System (W&AMS)

- **Goal(s):** streamline & coordinate work (field/office), structure data, collect and present real-time information to allow for situational awareness, produce efficient reports/data queries
- **Collaborators:** GIS, Public Works (many divisions/groups >100 users), Community Development, Forestry, Contractors 
- **Processes:** sidewalk snow removal, ROW permitting, tree maintenance, EAB injections, sanitary jetting, subdrain inspections, sign maintenance, sidewalk improvement district, etc.

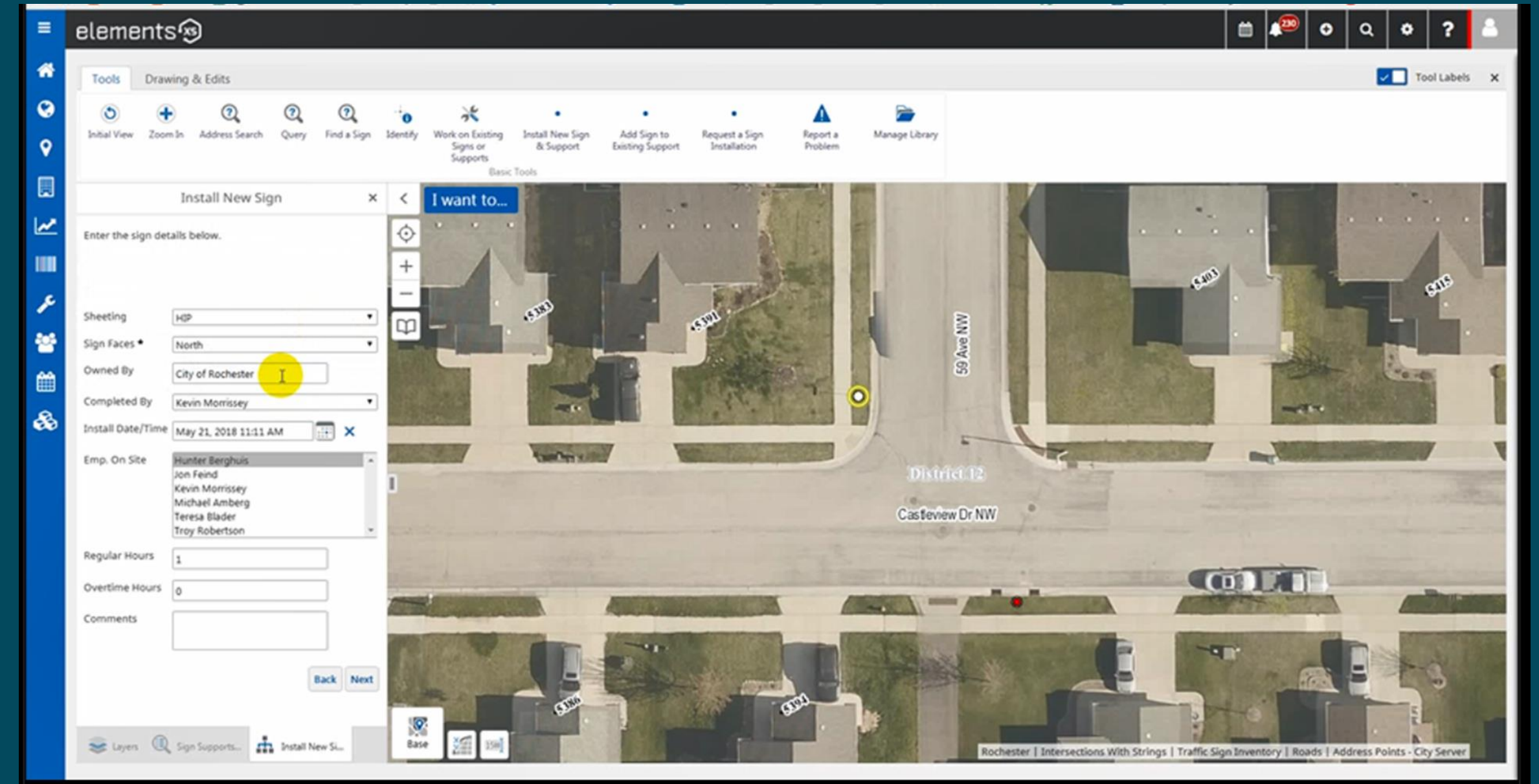




Sidewalk Defects: GIS, Public Works

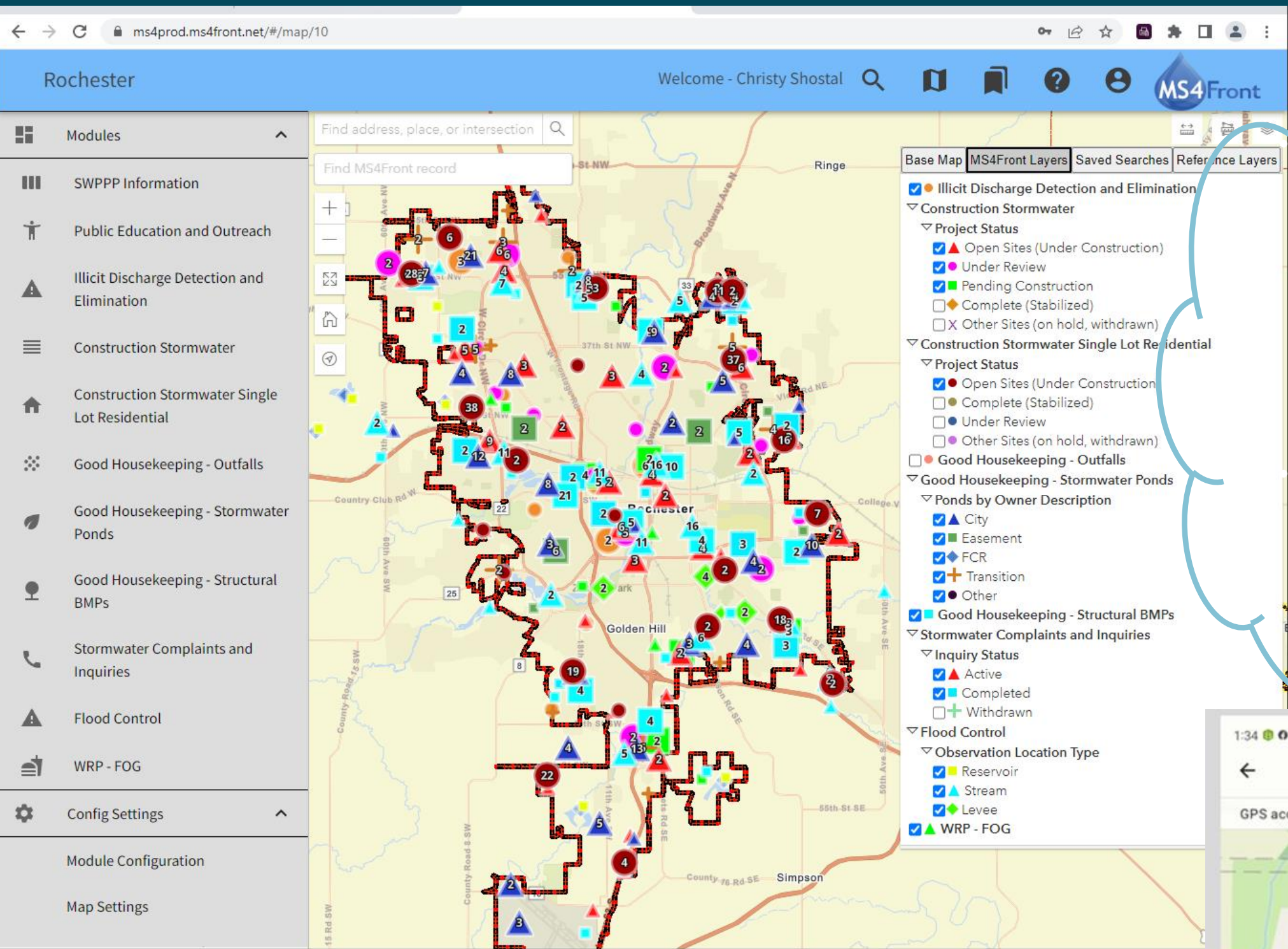


Subdrain Inspections: GIS, Public Works,  
Rochester Heating & Plumbing




Sign Installations: GIS, Public Works

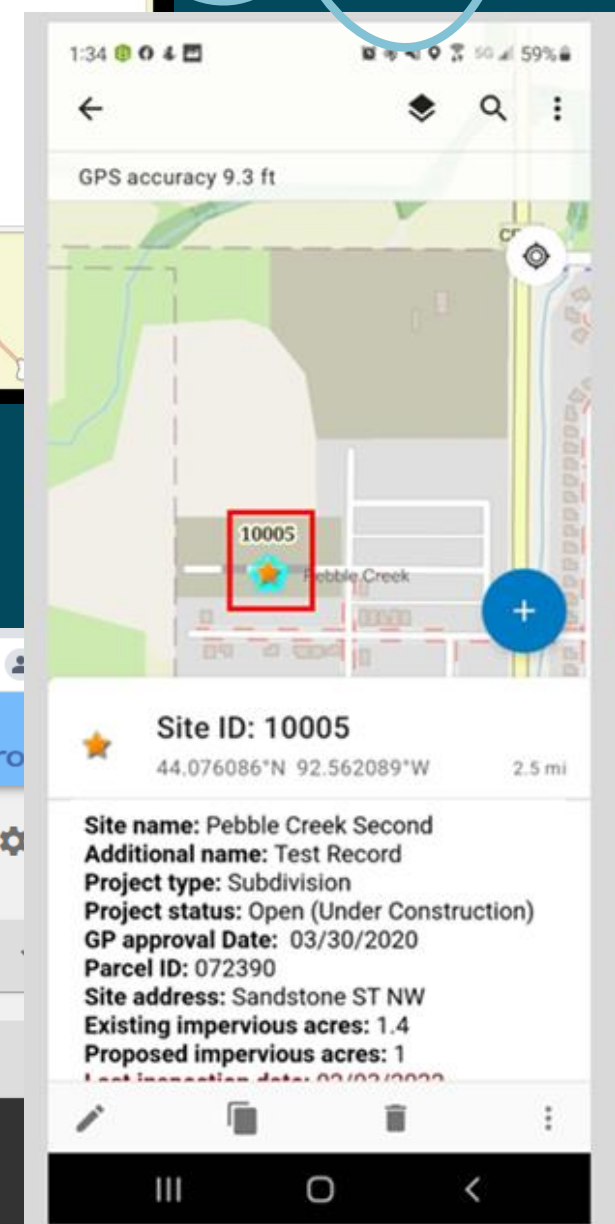




**Webhooks:**  
 “behind the scenes” tech collaborations between many programs/apps (Google, ESRI, Microsoft, Smartsheet, etc....)

# Focus Item: MS4Front Asset Management System (AMS)

- **Goal(s):** streamline mandated MS4 permit tasks/activities (field/office), structure data, collect real-time information to allow for situational awareness, produce efficient reports/data queries
- **Collaborators:** GIS, Public Works (Water Resources, Land Development), Contractors 
- **Processes:** grading plan review, erosion & sediment control inspections/enforcements, illicit discharges, BMP inspections/maintenance, outfall inspections/maintenance, educational activity tracking, flood event inspections.



## Construction SW Activities: Grading Plan Reviews, Erosion/Sediment Control Inspections and Enforcements

Construction Stormwater - Enforcements

Use the table below, the filter tool or the map to identify and select an existing record or create a new record.

Filters

Rows per page: 25 | 1-25 of 80

	Site ID	Enforcement ID	Planning number	Site name	Enforcement action date	Associated inspection date	Date resolved	Enforcement type	Enforcement action performed by
<input type="checkbox"/>	10158	82	CD2022-008SDP	Maine Heights Apartments Phase 2	01/04/2023	12/28/2022	12/30/2022	Verbal Warning	Ryan Thesing
<input type="checkbox"/>	10164	81	CD2022-013SDP	MB Service Center	11/15/2022	11/15/2022	11/22/2022	Verbal Warning	Aaron Cunningham
<input type="checkbox"/>	10163	80	CD2022-019SDP	Ed Lunn Building Addition	10/24/2022	10/24/2022	11/01/2022	Official Notice of Violation	Josh Brunholz
<input type="checkbox"/>	10070	79	R2019-026SDP	F&M Community Bank	11/01/2022	10/25/2022	11/10/2022	Verbal Warning	Jonathan Root



### Flood Control - 129 (SR-2 (Silver Creek))

[FLOOD CONTROL](#)
[FLOOD INSPECTIONS](#)
[CONTACTS](#)

---

#### Inspection Background

Inspection ID Res10002	Location ID 129
Location Name SR-2 (Silver Creek)	Inspector Account * Christy Shostal
Inspector Name 1 (if applicable)	Inspector Name 2 (if applicable)
Inspection date 02/07/2023	Inspection time * 09:21 AM
Inspection reason * Flood Event	Weather conditions * Very rainy...
Inspection Background Notes Test inspection	

---

#### Reservoir Inspection Observations

Green/yellow/red pool indicator * Red	Feet Below Green (if applicable) 0.000
Intake Structure * Free of Debris	Water Level - Fix Level Gage * 0.000
Water Level - Flowlink Website * 0.000	Outlet Pipe/Structure * Free of Ice or Other Restrictions
Erosion - Poolside of Dam * Major Erosion	Erosion Comments
Bulges or Upwellings (Downstream Side of Dam) * Major Bulge or Upwelling	Bulges or Upwellings - Location (as applicable)
Emergency Overflow Channel * Major Obstruction (Operation Impeded)	Additional Inspection Comments Water very close to top and dam at risk of failure.

---

#### Inspection Results



Indicate Overall Status \*  
 No Action Necessary
  Immediate Action Necessary

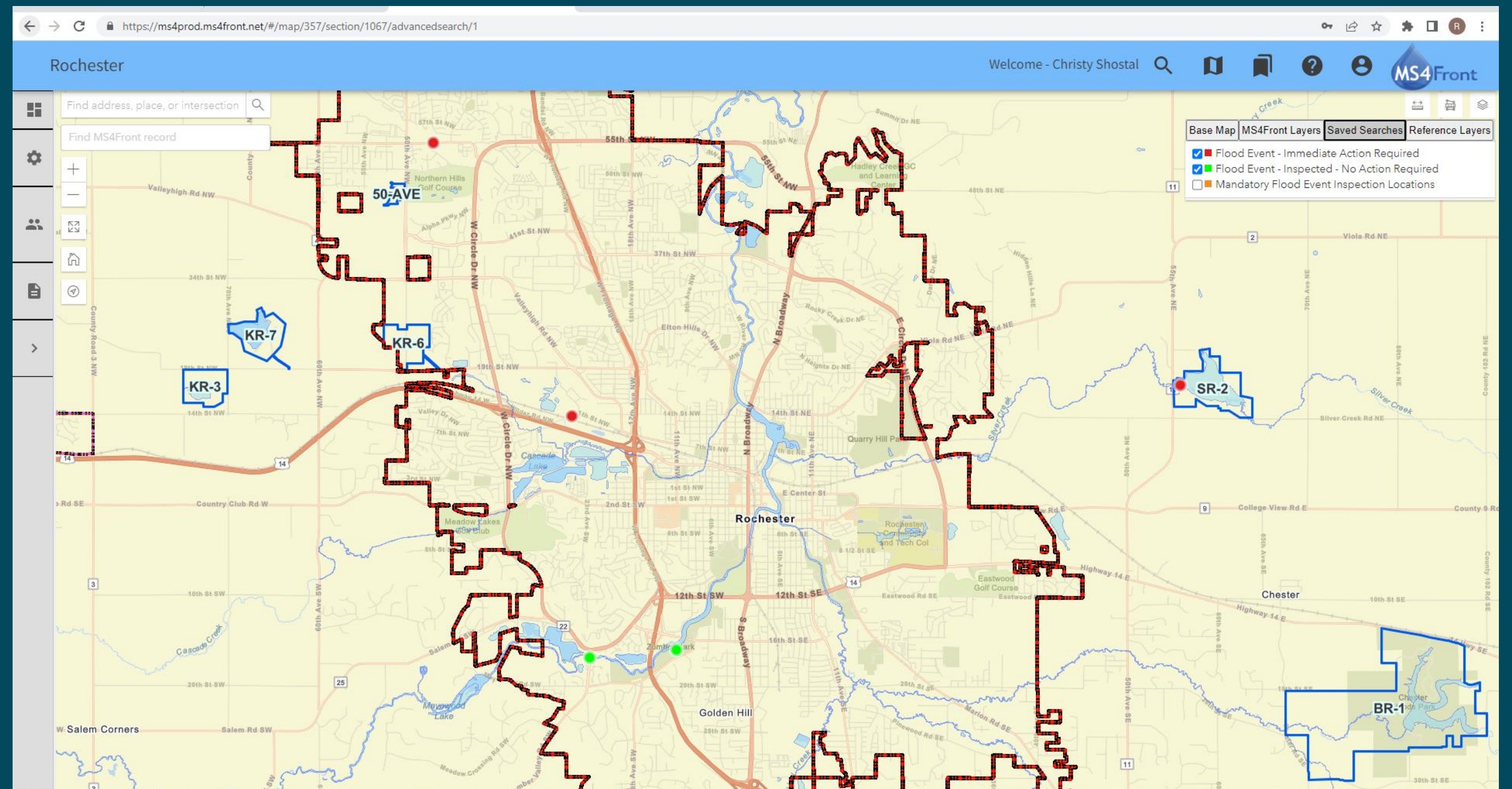
Overall Inspection Comments  
Test inspection.

---

#### Attachments

Search
 Sort Options  
 Name  Date  Asc  Desc

	20190720_111841.jpg Type: Photo Date Uploaded: 02/07/23 File Size: 1.53 MB		20190720_161829.jpg Type: Photo Date Uploaded: 02/07/23 File Size: 2.07 MB
---	--	---	--



**Flood Event Inspections: GIS, Public Works, EOC, etc.**

[Rochester](#)
Welcome - Christy Shostal

---

### Flood Control - Flood Inspections

Use the table below, the filter tool or the map to identify and select an existing record or create a new record.

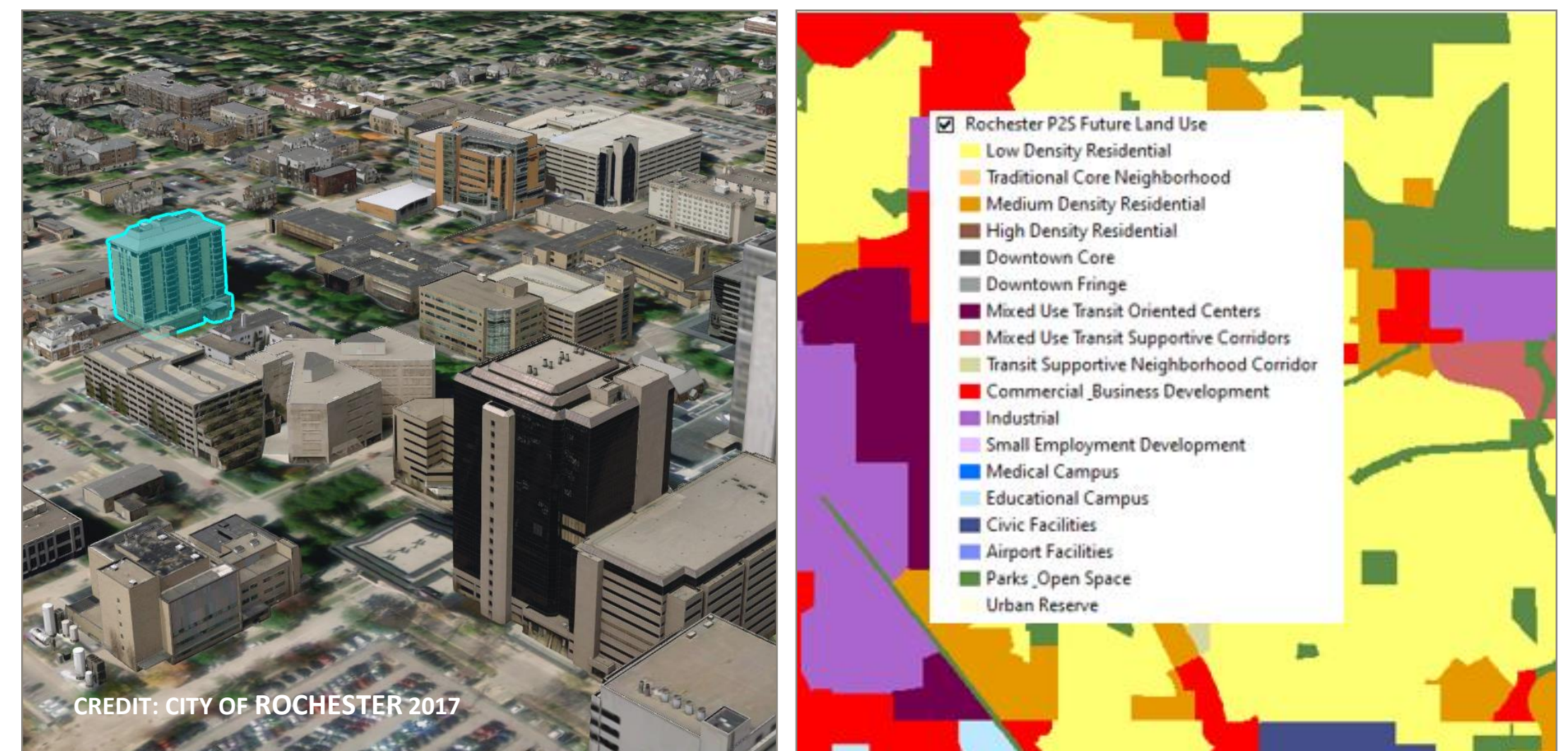
Filters

	Location ID	Form Name	Inspection ID	Location Name	Inspector Account	Inspection date	Inspection time	Inspection reason	Indicate Overall Status	Overall Inspection Comments
<input type="checkbox"/>	129	Flood Event Reservoir Inspection	Res10002	SR-2 (Silver Creek)	Christy Shostal	02/07/2023	9:21:38 AM	Flood Event	Immediate Action Necessary	-
<input type="checkbox"/>	130	Flood Event Levee Inspection	Lev10002	WR-4 (Gamehaven)	Christy Shostal	01/23/2023	9:49:41 AM	Flood Event	No Action Necessary	Test inspection
<input type="checkbox"/>	112	Flood Event Stream Inspection	Str10003	Olmsted County Bridge 55567	Christy Shostal	12/19/2022	9:51:25 AM	Flood Event	No Action Necessary	-
<input type="checkbox"/>	88	Flood Event Stream Inspection	Str10002	Wilder RD NW and 7 ST NW	Test Account	09/16/2022	2:34 PM	Flood Event	Immediate Action Necessary	-
<input type="checkbox"/>	120	Flood Event Levee Inspection	Lev10001	Section on south side of river	Christy Shostal	09/02/2022	9:32:59 AM	Flood Event	No Action Necessary	Test record
<input type="checkbox"/>	129	Flood Event Reservoir Inspection	Res10001	SR-2 (Silver Creek)	Christy Shostal	09/02/2022	9:08:32 AM	Flood Event	No Action Necessary	-
<input type="checkbox"/>	12	Flood Event Stream Inspection	Str10001	City Bridge R0299	Christy Shostal	09/01/2022	1:54 PM	Flood Event	Immediate Action Necessary	-



# Future Initiatives

- Collaboration with DMC EDA to have ArcGIS Urban model built
  - ◆ enhanced planning & engagement tools
- Implementation of Portal
- Development of new apps (hubs, Experience Builder, etc.)
- Migration of existing apps to new platforms
- More Growth (“building the case”)
- Other optimizations TBD.....





City of Rochester Minnesota  
**Project Details**  
 Internal Input Map version 1.0

Layers Instructions Project Input Project Edits

Find address or place

**Project Details: Silver Lake Park Master Plan**

Zoom to

**Project Details Input Survey**

**CIP?**  
 Is the project a Capital Improvement Project?  
 Yes  No

**DMC Funding?**  
 Does the project utilize DMC Funding?  
 Yes  No  Unknown

**Compliance**

**Budget Details**  
 Provide a brief description of project funding, including funding sources. This will be used on the project details page.  
 It is estimated that improvements at Silver Lake Park will be funded from Referendum Funding for prioritized future projects.

**Compliance Goals?**  
 Does the project have any goals around Buy American, Targeted Business, or Workforce Participation? Yes/No

**Project Details Apps (Internal & External) – under construction:** GIS, communications, Public Works, Community Development, Administration, DMC EDA/Private (future)

City of Rochester Minnesota  
**Project Details**  
 version 1.0

View Legend View Layers

Search Sort by Name

Find address or place

Elton Hills Drive Complete Details

Example Project - Complete Details

Example project with Not Started Details

Silver Lake Park In Progress Details

Test 2 Complete Details

Test project Not Started

**Project Details: Example Project - Parking Lot**

J Number	33333
Project Name	Example Project - Parking Lot
Department(s)	Parking
Assigned Project Manager Name	Christy Shoal
Assigned Project Manager Email	cshoal@rochestermn.gov
Project Status	Complete
Target Start Date	August 1, 2022
Target End Date	January 13, 2023

2 km

HERE, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, USDA Powered by Esri





Drones

???

Business Analyst

MORE Hubs

???

???

???

MORE Dashboards

Growth

New Collaborations

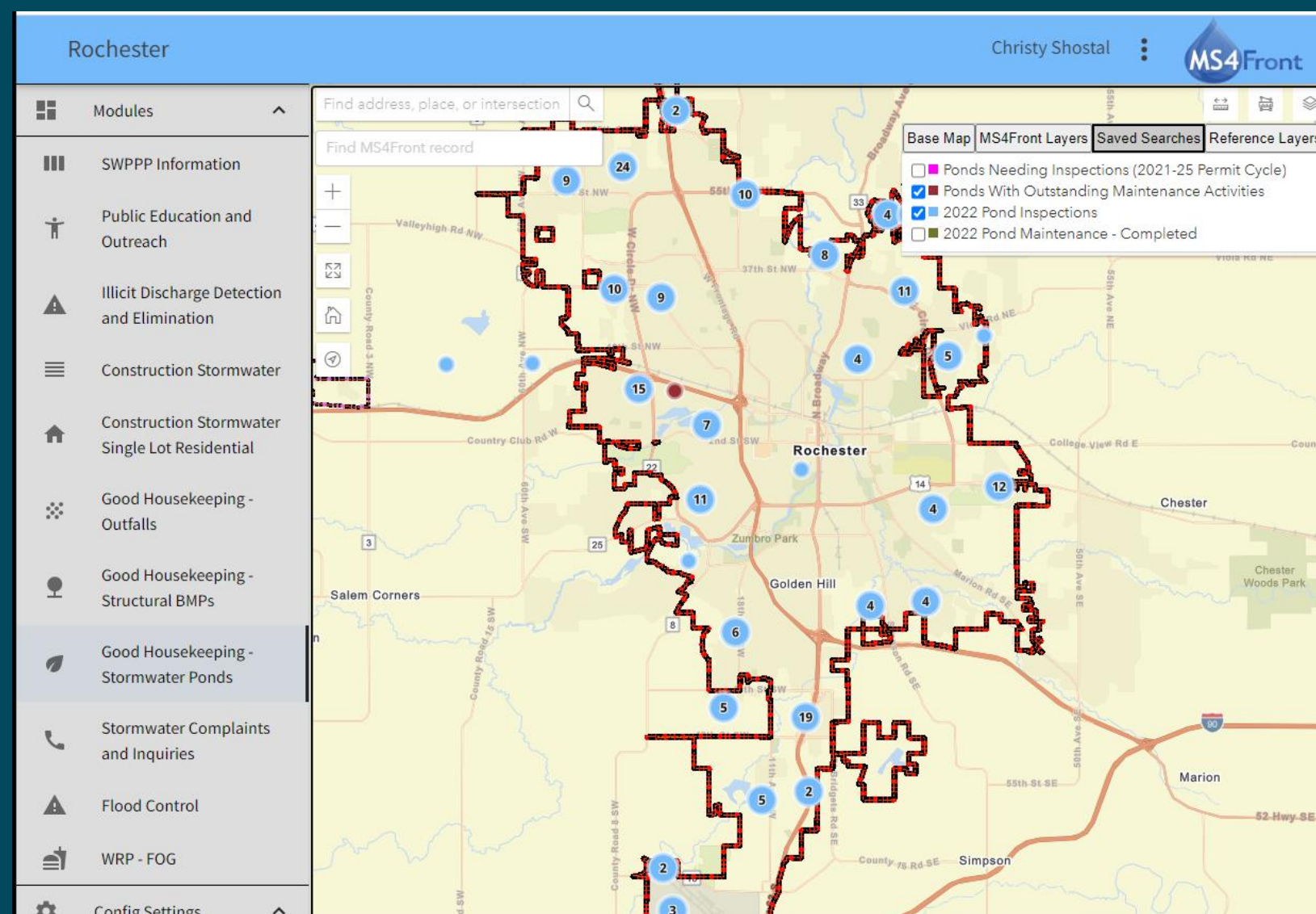
???

MORE Asset  
Management

Webhooks

# Demonstration(s)

<https://arcg.is/01PXTD>



<https://ms4prod.ms4front.net/#/>

**Questions?**