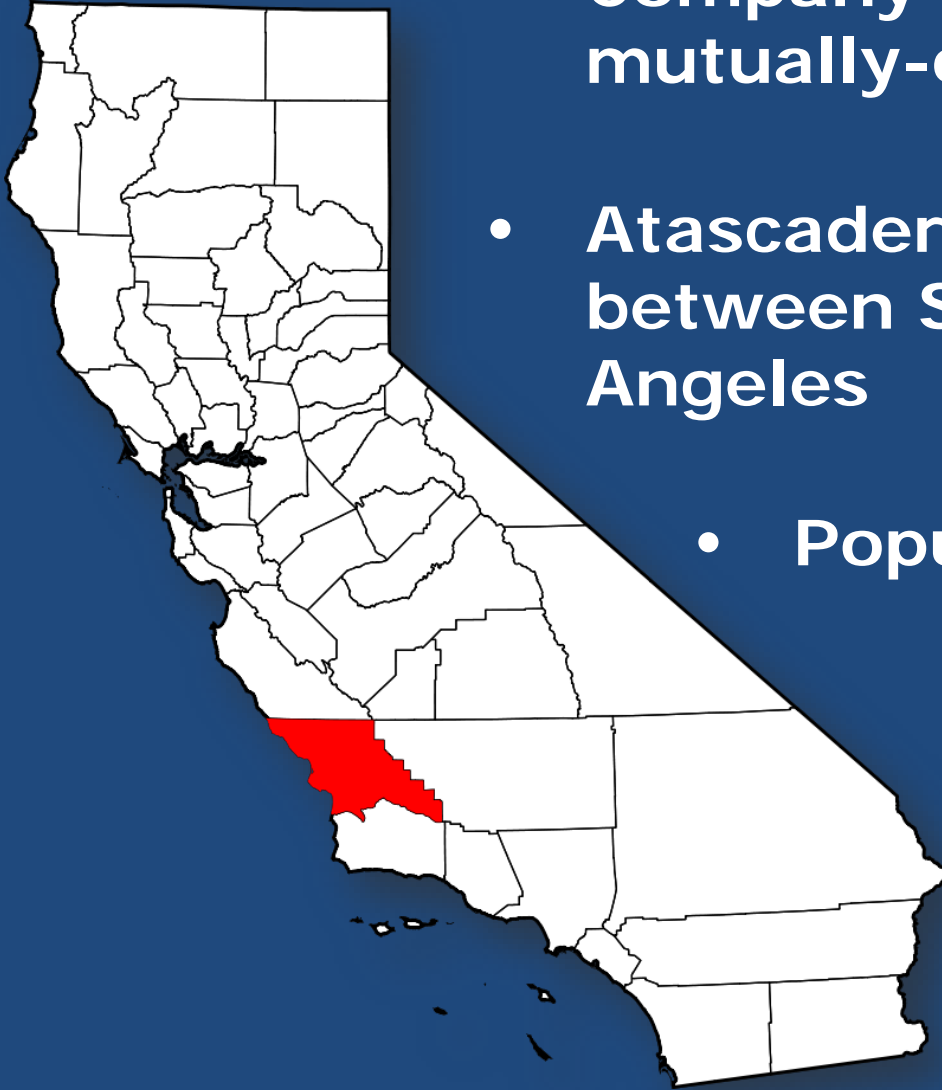


Survey123 for NPDES



Atascadero Mutual Water Company
Lorraine Halderman, *GIS Administrator*

- **Atascadero Mutual Water Company (AMWC) is a private, mutually-owned water company**
- **Atascadero is located half way between San Francisco and Los Angeles**
 - **Population around 28,000**
 - **Approximately 10,000 service connections**



What is NPDES?

National Pollutant Discharge Elimination System (NPDES)

“The NPDES permit program addresses water pollution by regulating point sources that discharge pollutants to the waters of the United States.

Created in 1972 by the Clean Water Act, the NPDES permit program is authorized by state governments by EPA to perform many permitting, administration, and enforcement aspects of the program.”

Source: <https://www.epa.gov/npdes>

Regional NPDES Programs

Regional offices work with the states to implement the NPDES program and specific information by State or EPA region is available on the EPA.gov website.

NPDES Program in Your Region

The EPA has 10 Regional offices around the country. Regional offices work closely with the states to implement the NPDES program. For specific NPDES information in your state or EPA Region, click on the corresponding Region below.

Region 1: NH, VT, ME, MA, RI, CT

Region 2: NY, NJ, DE, MD, DC, VA, WV, PA

Region 3: OH, MI, WI, MN, IA, MO, IL, IN, KY, TN, NC, SC, GA, AL, MS, AR, LA, TX, NM, AZ, NV, CA

Region 4: WV, VA, PA, NY, NJ, DE, MD, DC

Region 5: OH, MI, WI, MN, IA, MO, IL, IN, KY, TN, NC, SC, GA, AL, MS, AR, LA, TX, NM, AZ, NV, CA

Region 6: TX, NM, AZ, NV, CA

Region 7: IA, MO, IL, IN, KY, TN, NC, SC, GA, AL, MS, AR, LA, TX, NM, AZ, NV, CA

Region 8: WY, UT, CO, NE, KS, MN, ND, SD

Region 9: CA, NV, UT, CO, AZ, HI

Region 10: WA, OR, ID, AK

Trust Territories: American Samoa, Northern Mariana Islands

Other: VI, PR

Headquarters: EPA Logo

Atascadero Mutual Water Company
Best Management Practices (BMP) Discharge Record

Alternatives to discharging to a waterway have been considered?

Yes: No:

Emergency Discharge:

- Leak
- FH Damaged
- Tank Overflow
- Pressure Relief Valve
- Other

Discharge Date: _____ Operator Name: _____

Source Address/Location: _____ Time: _____

Conveyance System Entry Location		Discharged Into (✓) (Check all that apply)						
GIS Asset # (If applicable)	Address (Location, Etc.)	Grass/Drain Inlet	Ditch	Culvert	Retention Pond	SW Catch Basin	River, Creek, Lake, Etc.	Is Water Body Dry? Yes: <input type="checkbox"/> No: <input type="checkbox"/>
								Name of Surface Water Body (River, Creek, Lake, etc.)
Comments:								
How long was discharge Hrs. Min.:				Volume of discharge:				

BMP:
Description of BMPs in place
Dechlorination Method Used:
Type of BMPs used:

Water Captured for Beneficial Use
Volume (Gals):
Type of Use:
Comment:



Effluent Water Quality Data (Prior to storm drain or waterway)					
Annual Representative Monitoring? Yes: <input type="checkbox"/> No: <input type="checkbox"/>					
	Total Chlorine	Turbidity (Visual estimate)	pH (If Super Chlorinated Water)	Turbidity (NTU)	pH (Well Discharge)
Start (Within first 10 Min.) Time:					
Middle (If over an hour) Time:					
End (within last 10 min.) Time:					
Comment:					

Receiving Water Monitoring							
30' Upstream of discharge				30' Downstream of discharge			
Total Chlorine	pH	Temperature	Visual Turbidity	Total Chlorine	pH	Visual Turbidity	Other
Is it possible to access receiving water for monitoring/observations? If No, explain. Yes: <input type="checkbox"/> No: <input type="checkbox"/>							

Receiving Water Visual Observations						
Erosion	Floating or suspended matter	Discoloration	Nuisance Conditions	Impact to aquatic life	Visible films, sheens or coatings	Other (describe)

Attach photographs to above observations.

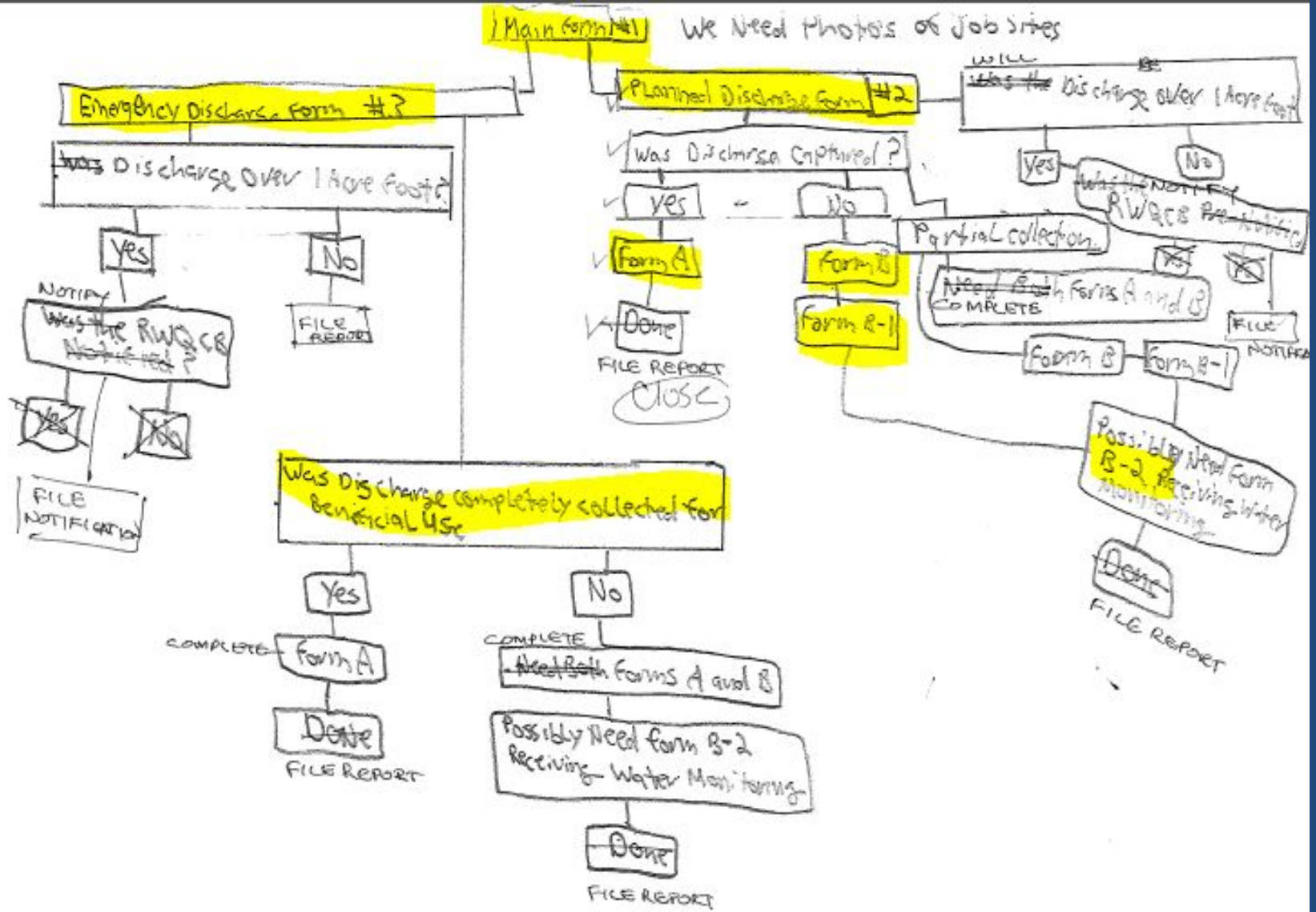
Planned Discharge over 1 Ac Ft? <input type="checkbox"/>	Well Discharge? <input type="checkbox"/> Tank Discharge? <input type="checkbox"/>	RWQCB Pre-Notified? <input type="checkbox"/>
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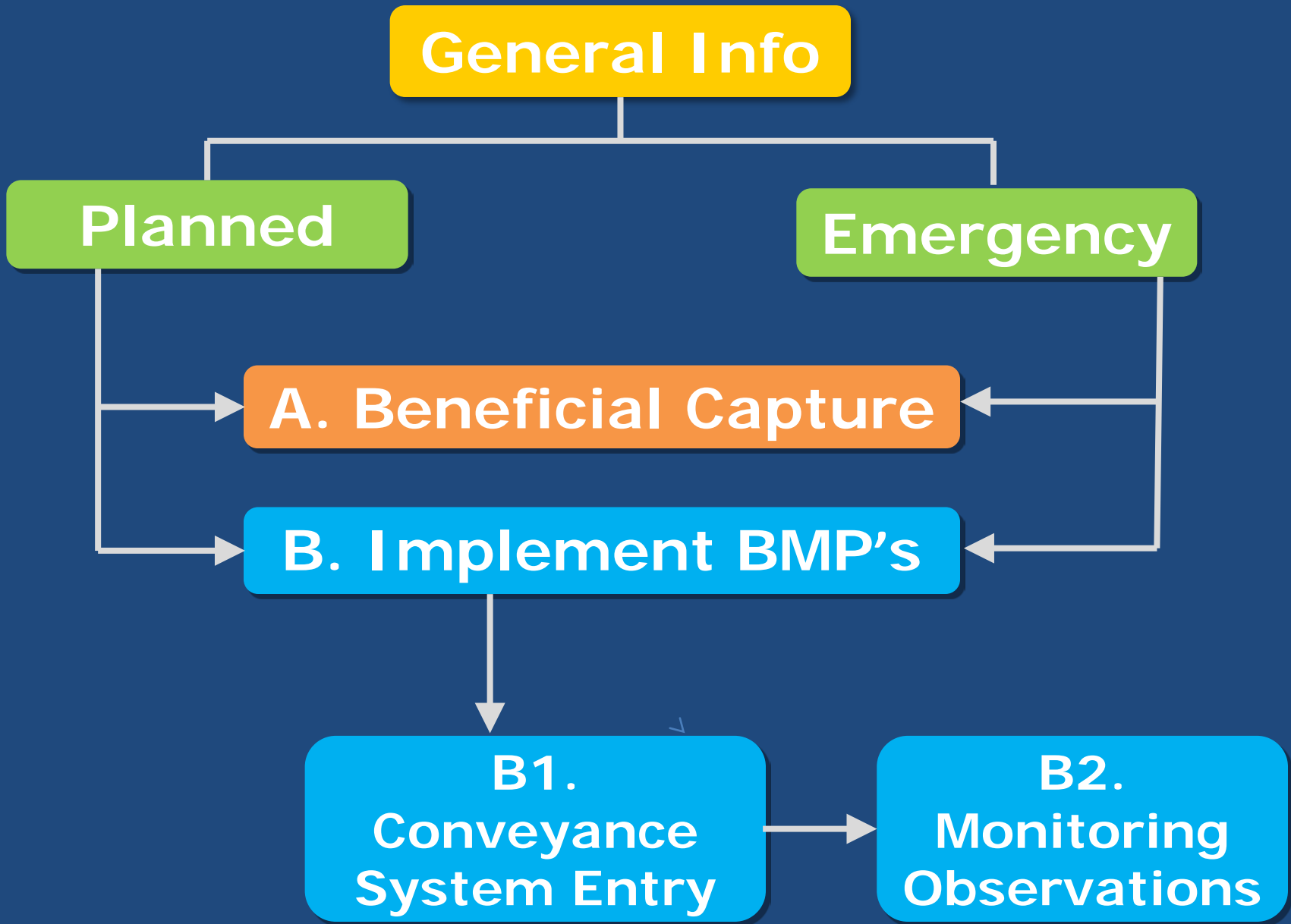
Approach

- 1) Document criteria that needed to be met.**
- 2) See if current work order management system could meet the demand**
- 3) Research web-based form applications**

Criteria

- ✓ **Work on PC , Android, Apple**
- ✓ **Work in disconnected environment**
- ✓ **Pre-populated Drop-down lists**
- ✓ **Take photos or attach images**
- ✓ **User friendly**
- ✓ **Have conditional logic**
- ✓ **Support relational data**





Survey123



- Design
- Collect
- Analyze

Demo



Survey123
for ArcGIS

Access Your Data

Survey123 Dashboard

- **View Survey**
- **Interact with data in map and table view**
- **Analyze data**
- **Export in various formats**
- **Collaborate with others**

Access Your Data

ArcGIS Online

- A separate folder is created for each survey
- Located in My Content
- Open in Map Viewer
- Interact with map & table view
- Edit data
- Various export options

Reporting

NPDES Reporting

- Volume **discharged** to Waters of the U.S.
- Volume **collected** for beneficial Use
- **Number** of direct discharges to the Waters of the U.S. over 50,000 gallons
- **Number of non-compliant Discharges**

Demo



Survey123
for ArcGIS

Resources

- <http://survey123.arcgis.com/>
- <https://www.youtube.com/watch?v=0gGQbCuPRQI&feature=youtu.be>
- <http://survey123.esri.com/resources/XLSFormSupport/>
- <https://geonet.esri.com/groups/survey123>
- <https://www.epa.gov/npdes>