



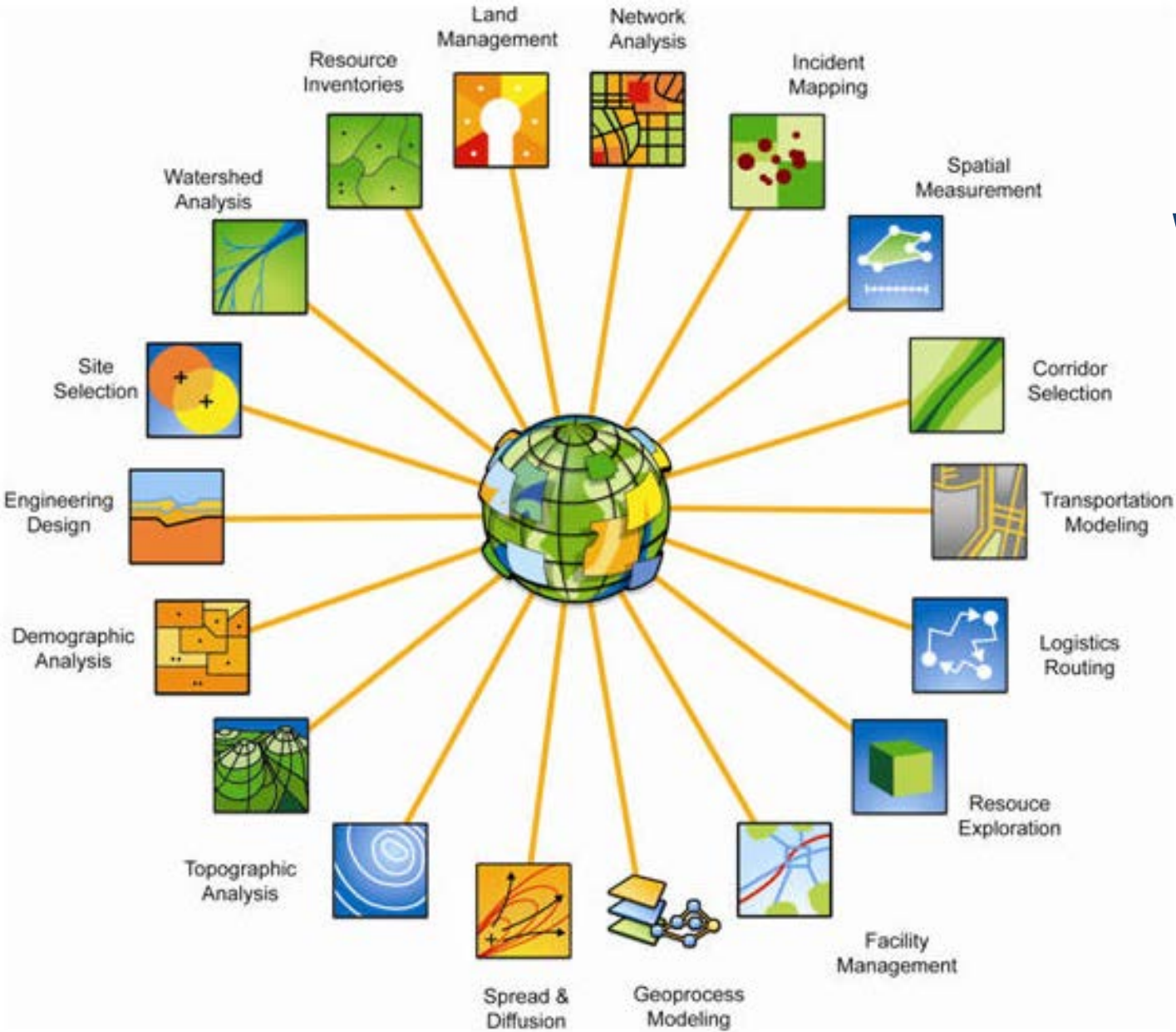
SCV
WATER

November 19, 2019

GIS

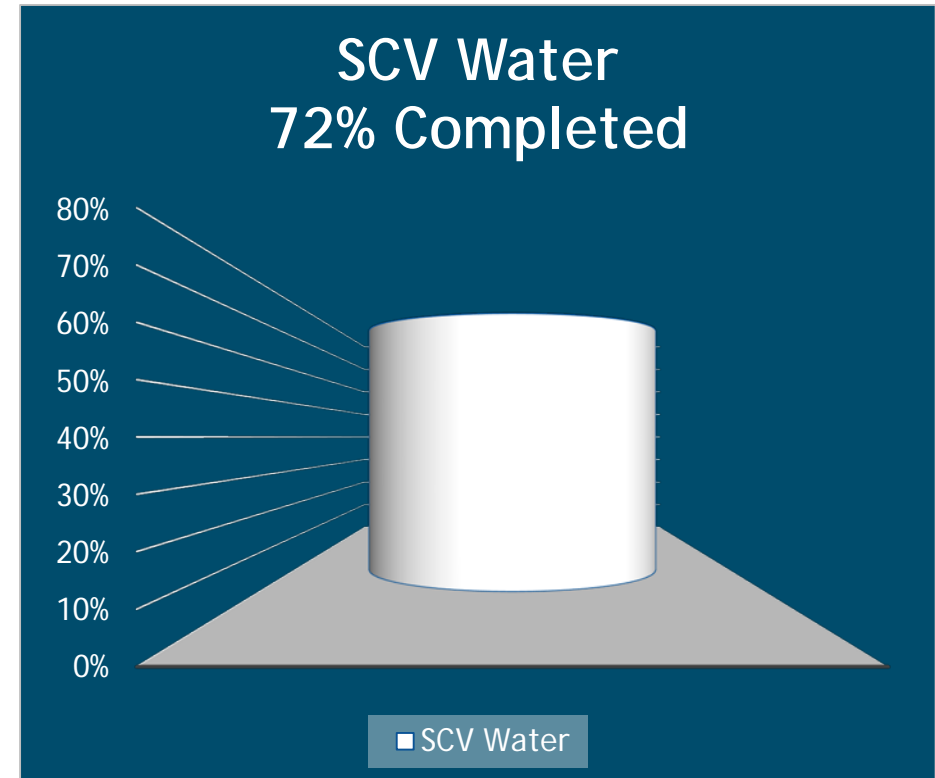
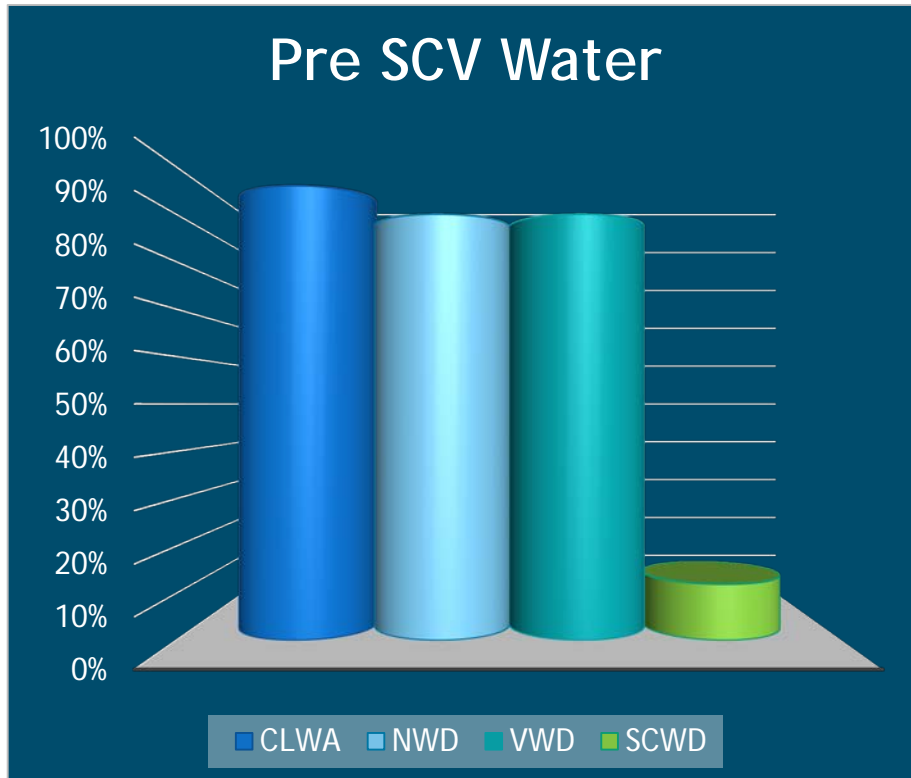
The Science of Where

WHAT IS GIS?

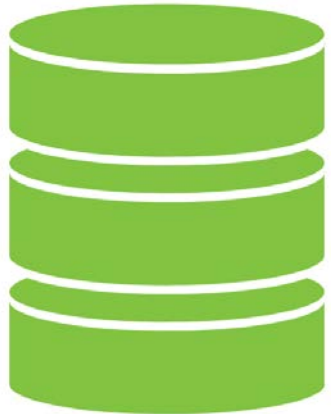


PRE/POST MERGER

GIS Data Completion



WHERE WE WERE



- 9GB of data
- Lack of consistency
- Independent water system models



- 600MB of data
- Consistent
- Model organized



THEN

NOW

Contractors/Consultants



Jose



Doug



Danielle



Kimberly

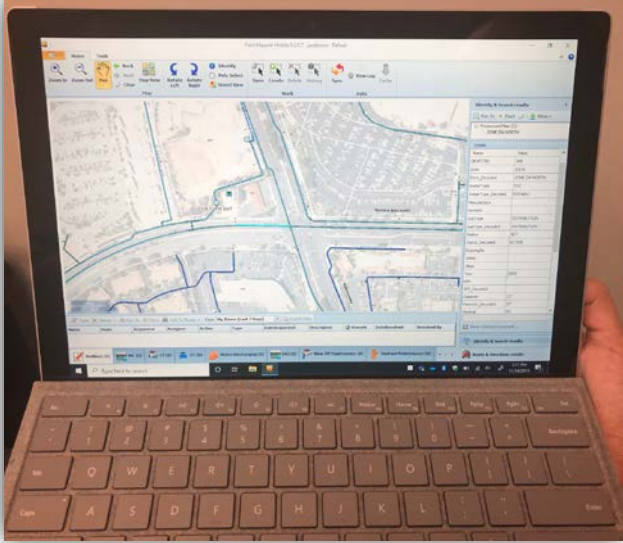
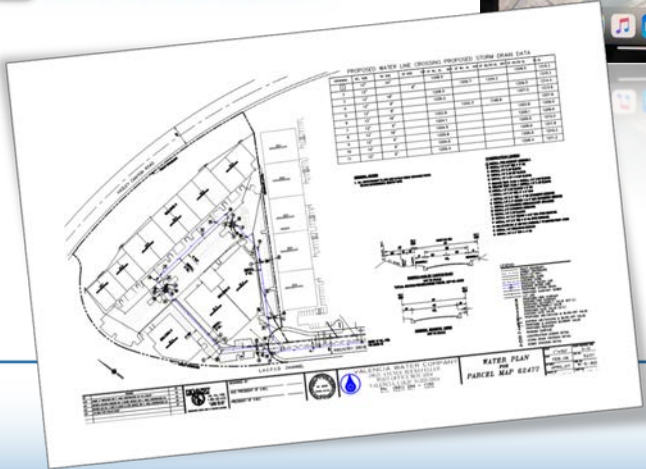


Melissa



WHERE WE ARE

Field/Mobile Work Orders



WHERE WE ARE

Field/Mobile Work Orders

ASSET ID	PL-18000
DIVISION	VWD
WATER TYPE	POTABLE
INSTALL YEAR	1996
PRESSURE ZONE	ZONE I
DIAMETER	16"
MATERIAL	POLYVINYL CHLORIDE PIPE
CLASS	C-900
TRANSMISSION	NO
CURB OFFSET	5'
CENTERLINE OFFSET	35'
RECORD DRAWING No.	W-5-505
MANUFACTURER	DIAMOND PLASTICS
ATLAS No.	NW-C9
RECORD DRAWING HYPERLINK	https://scvwdadmin.sharepoint.com/W-5-505.pdf
GIS GUID	F4809B6A
MAXIMO ID	124826



WHERE WE ARE

Survey Grade Field Data Collection



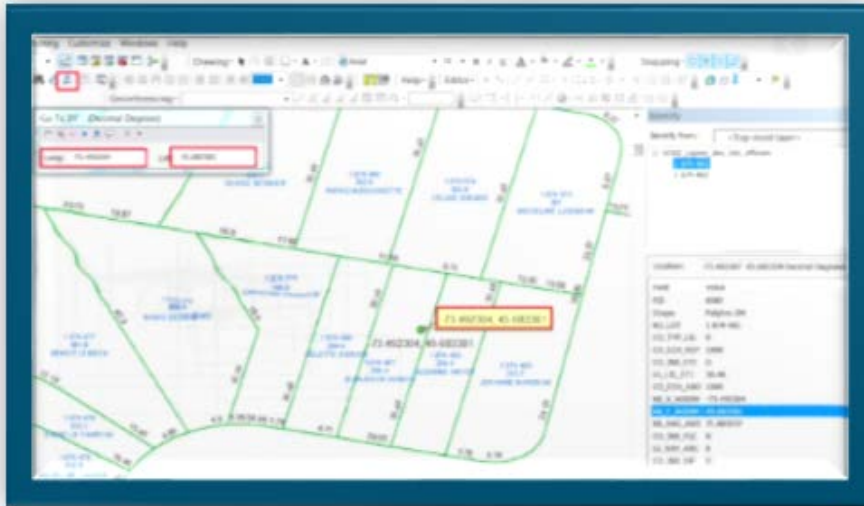
WHERE WE ARE

Survey Grade Field Data Collection



WHERE WE ARE

Water Demand Factor Analysis



3
DESIGN GUIDELINES
WATER SUPPLY

Typical Water Demand Guidelines

WATER DEMAND GUIDELINES

TABLE 1. Average Water Demand

LANDUSE	DAILY WATER CONSUMPTION	
	Liters / day	Gallons / day
Domestic		
Low cost house and low cost apartment	100	220
Medium cost apartment and medium low cost	150	330
Singly / double story terrace house	150	330
Apartment / Condominium	150	330
Singly / double story semi-detached house	200	440
Singly / double story bungalow	200	440
Commercial		
Singly story shop house	200	440
Multi-story shop houses - per storey	150	330
Office - per 100 Sqft	150	330
Police station	5000	1100
Market	2000	500
number 1 cinema	1000	200
Hotel - per room	150	330
Shopping complex - per 100 Sqft	150	330
Industrial lots	Actual demand	Actual demand
Light industrial workshop	150	330
Terrace factories	500	1100
Social & Public		
Hospital - per 100 Sqft	100	220
Mosque / Gurdwara - per 1000	50	110
Community hall	25000	5500
Club-house	10000	2200
Cinema hall	200	440
Day school - per pupil	50	110
Boarding school - per pupil	250	550
institution - per ha	20000	4400
Kidney park - per street	50	110

Water Demand Criteria

Type of Water Demand	Demand Criteria
Housing	1.6 CuM/unit/day
Hotel	1.5 CuM/room/day
Commercial	6.0 CuM/Acre/day
Industrial	20.2 CuM/Acre/day
Ships Supply*	160 CuM/Ship
Port Area (incl. ships supply)*	6.0 CuM/Acre/day

Source - PUAS BERNAD

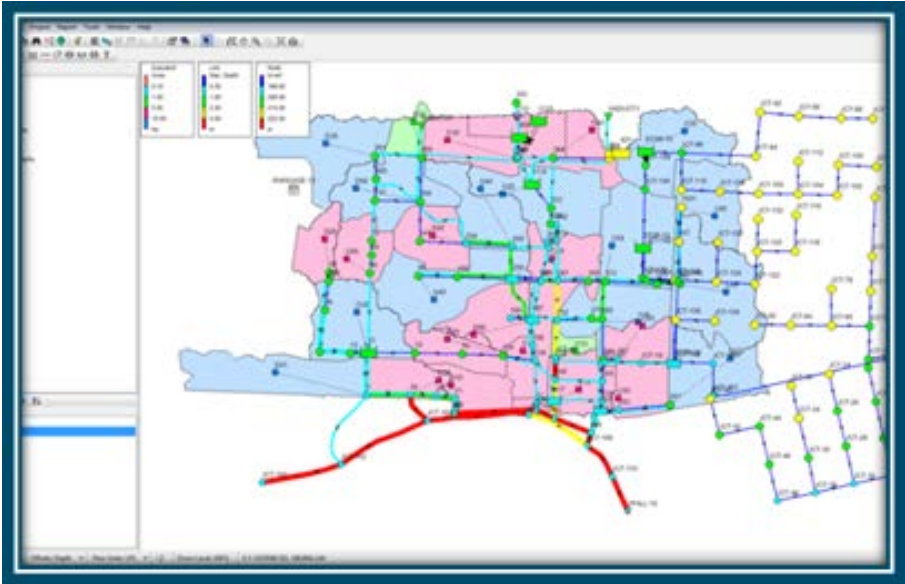
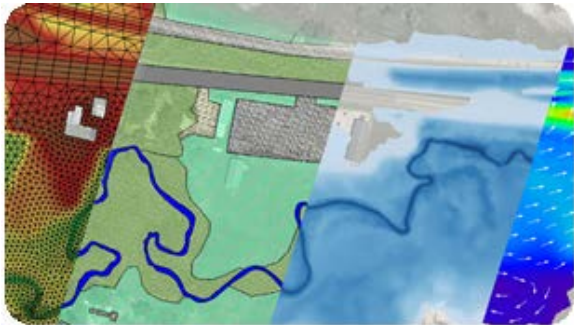
Note:

- * If the water demand for the factory is not known, use 75000 gal (102000 gal) per ha.
- * If the category of ports, land-use is not included in Table 1, please contact the Planning



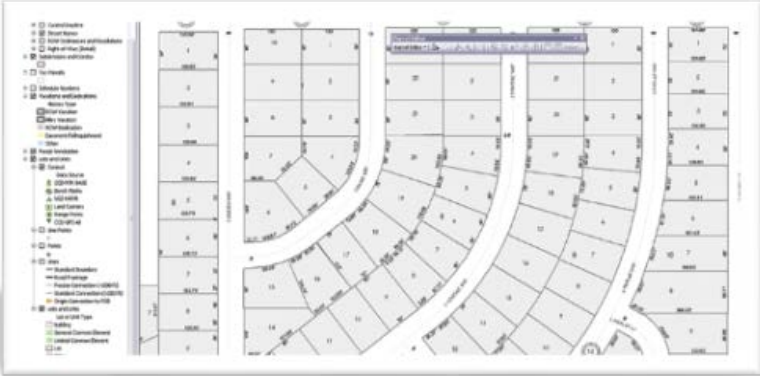
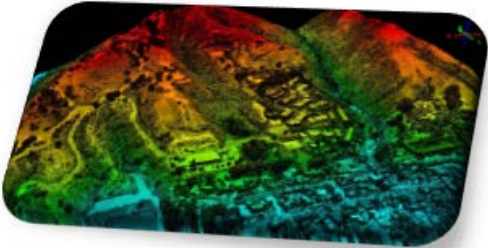
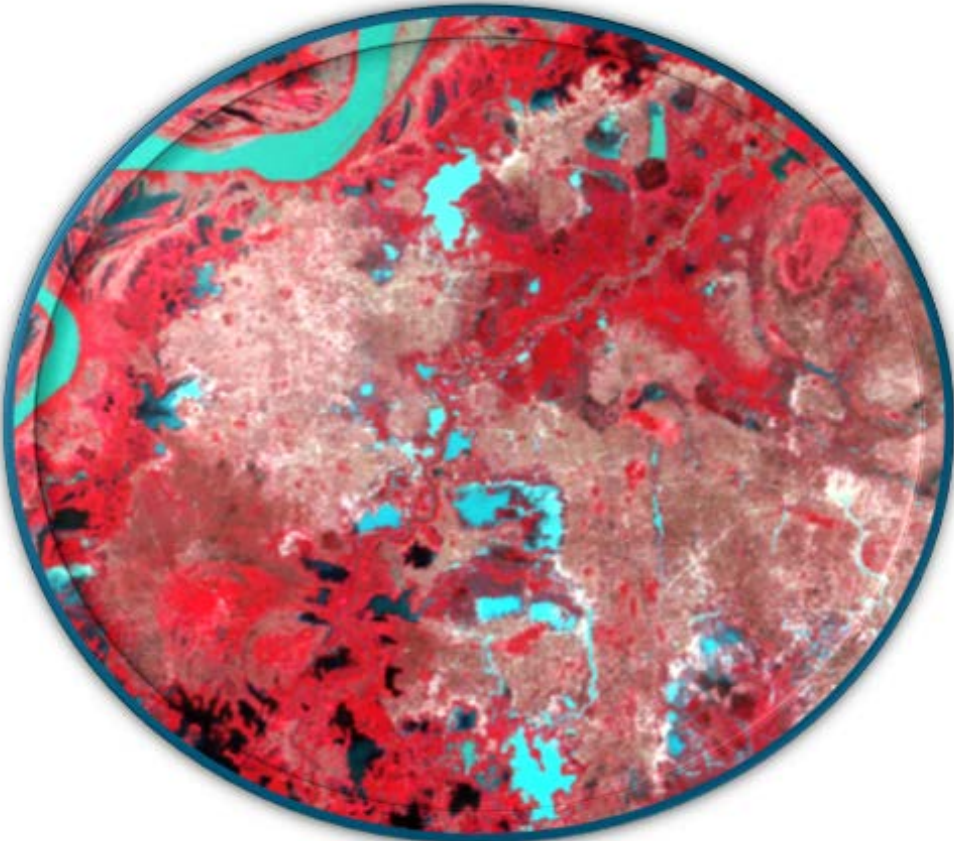
WHERE WE ARE

Hydraulic Modeling



WHERE WE ARE

Lot Line/Landscape Correction



WHERE ARE WE GOING?

- Asset Management
- Water Quality Modeling
- SCADA Connectivity (Water System Analytics)
- Production Work Orders
- Customer Information System (Meter AMI)
- Enterprise Resource Planning (Inventory)
- 3rd Dimension
- Indoor Mapping





Rio Vista

1947