

# This presentation premiered at WaterSmart Innovations

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Water Smart Innovations 2014

# GIS - Conservation Asset Management and Marketing (CAMM) Tool

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# GIS-Conservation Asset Management and Marketing Tool Presentation/Objectives

- About Valencia Water Company
- Water Conservation Program Goals
- Integrating Traditional Utility Business Systems
- Initial Product Results – GIS-CAMM
- GIS-CAMM In Action
- Conclusion/Questions

# About Valencia Water Company



# Valencia Water Company



- **Investor Owned Utility**
- **Location** – Northern Los Angeles County
- **Population** – Approximately 116,000 (30,000 Connections)
- **Annual Sales** – 9.2 Billion Gallons (**36.3 Million Cubic Meters**)
- **Partnerships Include** – WaterSense Promotional Partner, Alliance for Water Efficiency, California Urban Water Conservation Council, Santa Clarita Valley Family of Water Suppliers



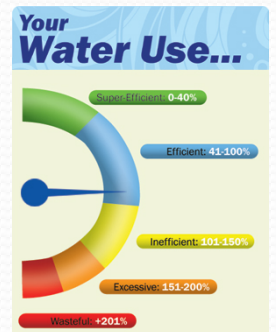
# WATER CONSERVATION PROGRAM GOALS



**Water SMART**  
Allocation Program



High Efficiency Landscape Irrigation  
Upgrade Measures



# Conservation Program Goals

- Reduce Water Use (20% GPCD Reduction by 2020)
- Increase Education and Awareness
- Develop and Foster Community Relationships
- Improve Reliability and Promote Sustainability
- Defer Capital Costs and Infrastructure Upgrades
- Instill the “Culture of Conservation” and “Water Efficient Ethic”

**Cost Effective, Long-Term and Meaningful  
Reductions in Water Use!!!**

# **Integrating Traditional Utility Business Systems**



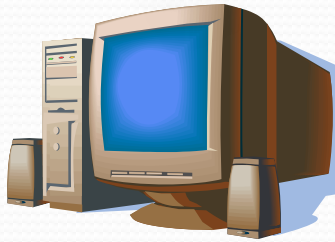


# Utility Systems Integration



## Customer Information System (CIS)

- Account Information
- Billing and Payments
- Work Orders
- Customer Communication Records



## Geographic Information Systems (GIS)

- Utility Asset Locations (Spatially)
- Spatial Analysis
- Create Maps
- Obtain Measurements and Geospatial Calculations

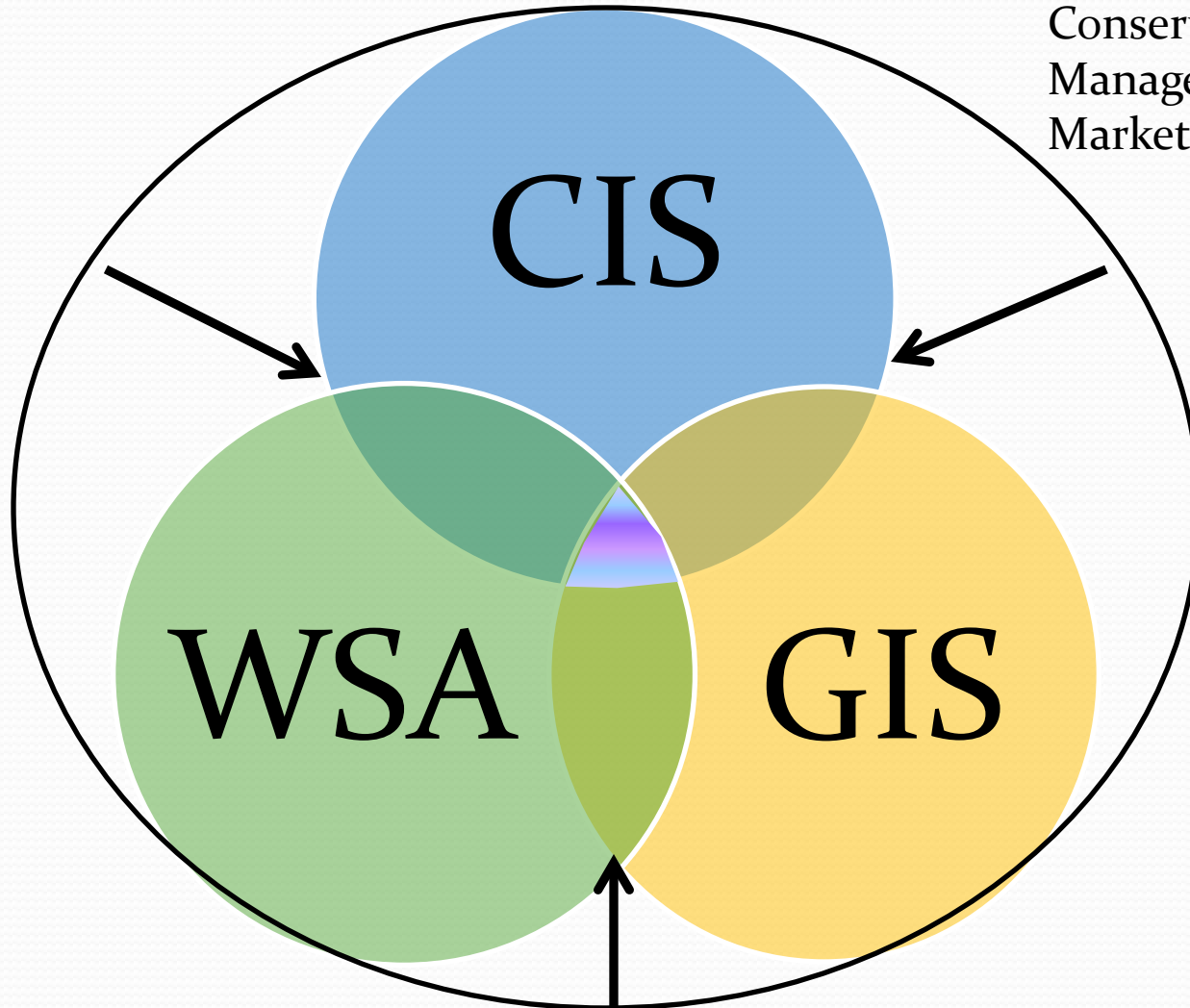
## Water Smart Allocation Program (WSA)

- Generates Water Budgets
- Customer Types
- Number of People
- Landscaped Areas (Measure in Square Feet)



# Utility Systems Integration

**GIS –CAMM**  
Conservation Asset  
Management and  
Marketing Tool



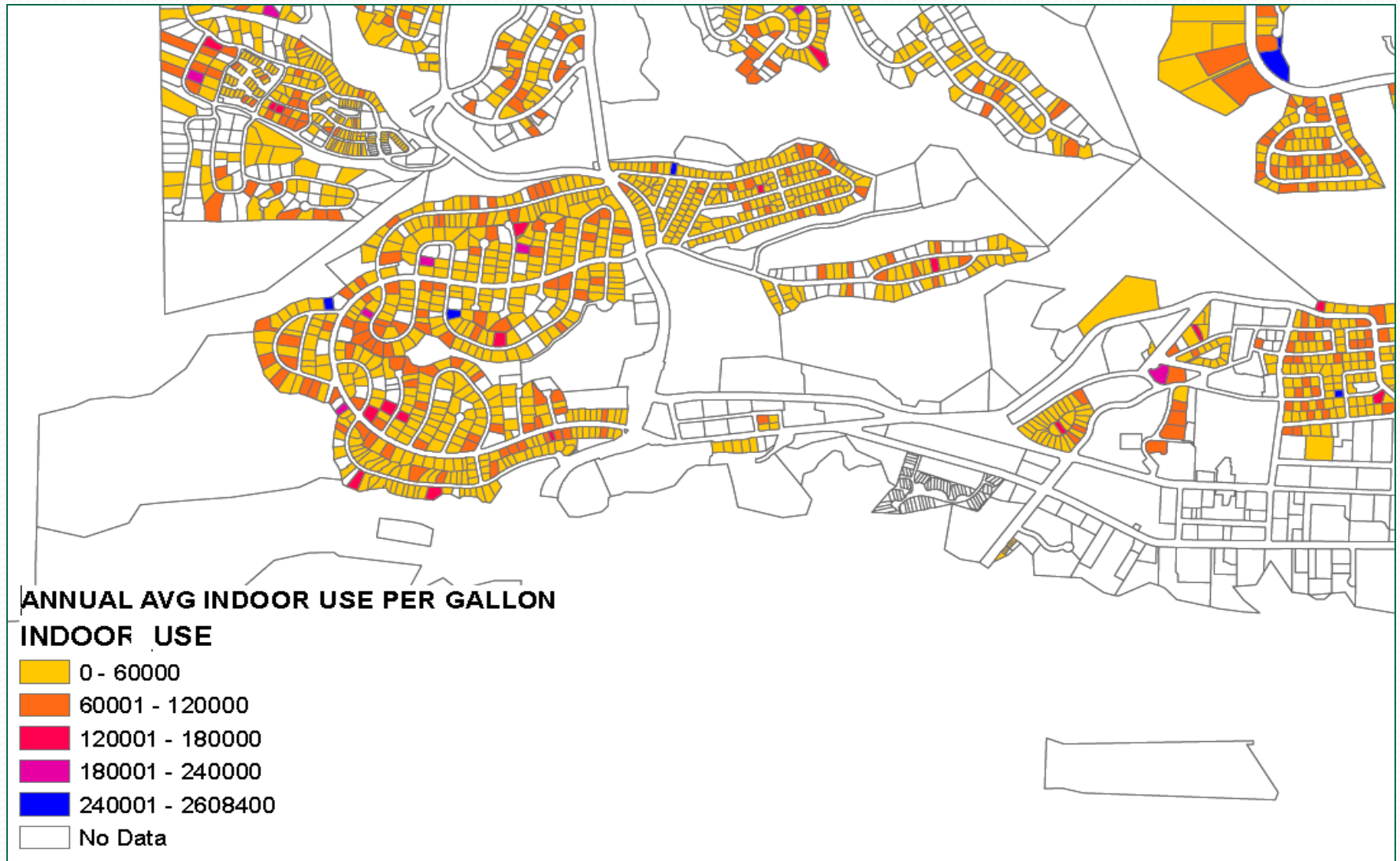
# Initial Product Results



# First Generation Water Use Map

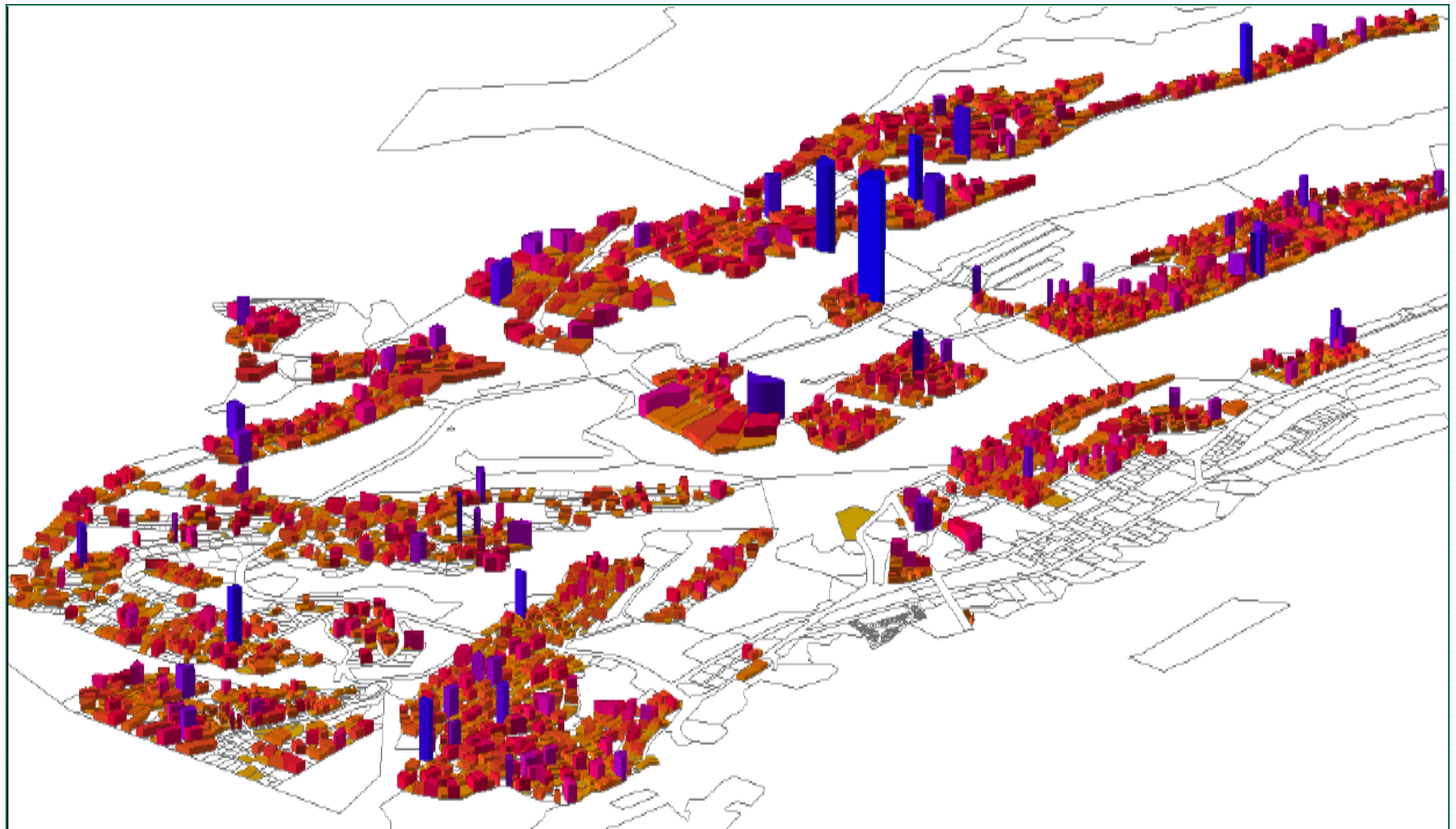


# First Generation Water Use Map

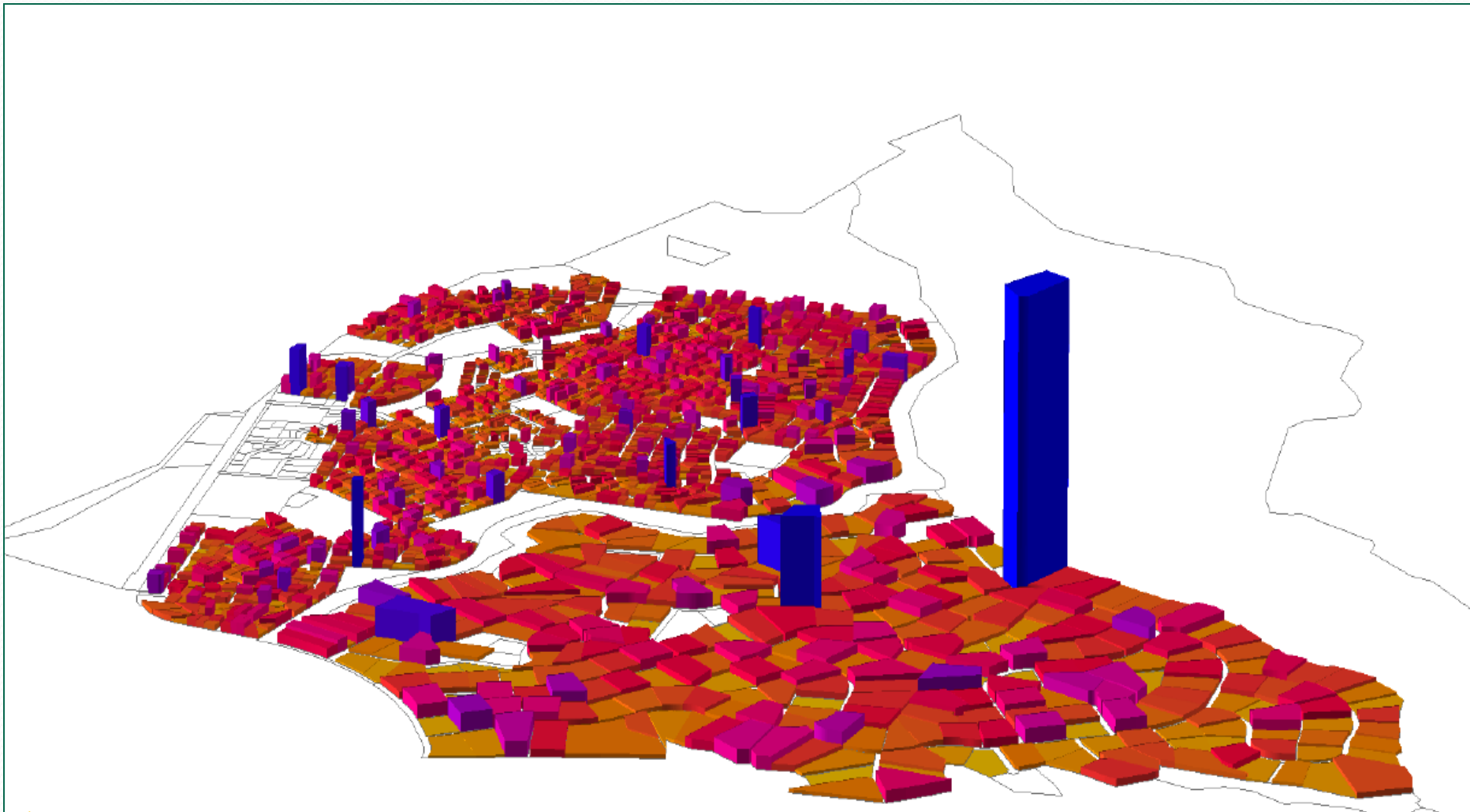




# Second Generation 3-D Water Use Map

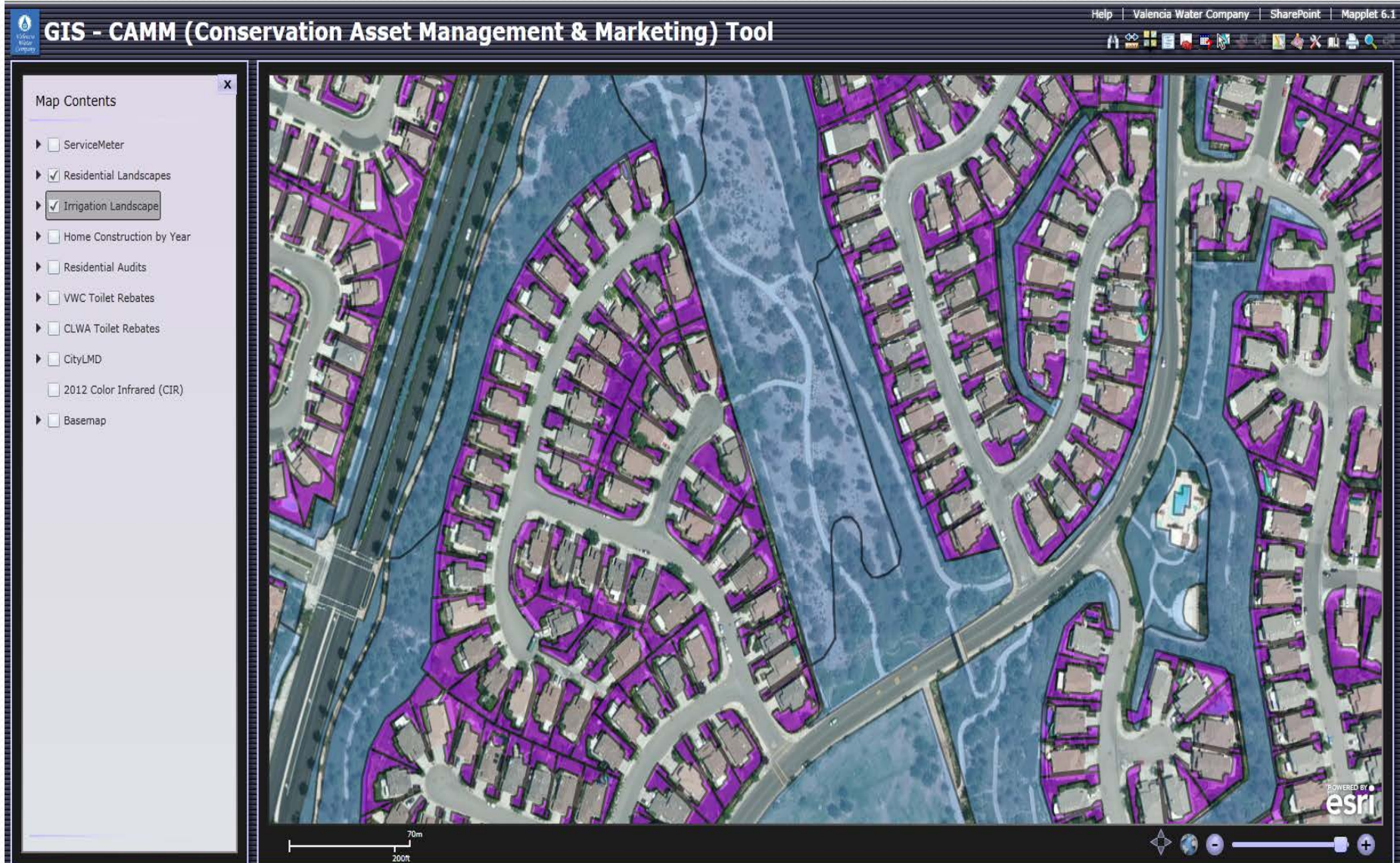


# Second Generation 3-D Water Use Map





# Third Generation Landscape Inventory Map



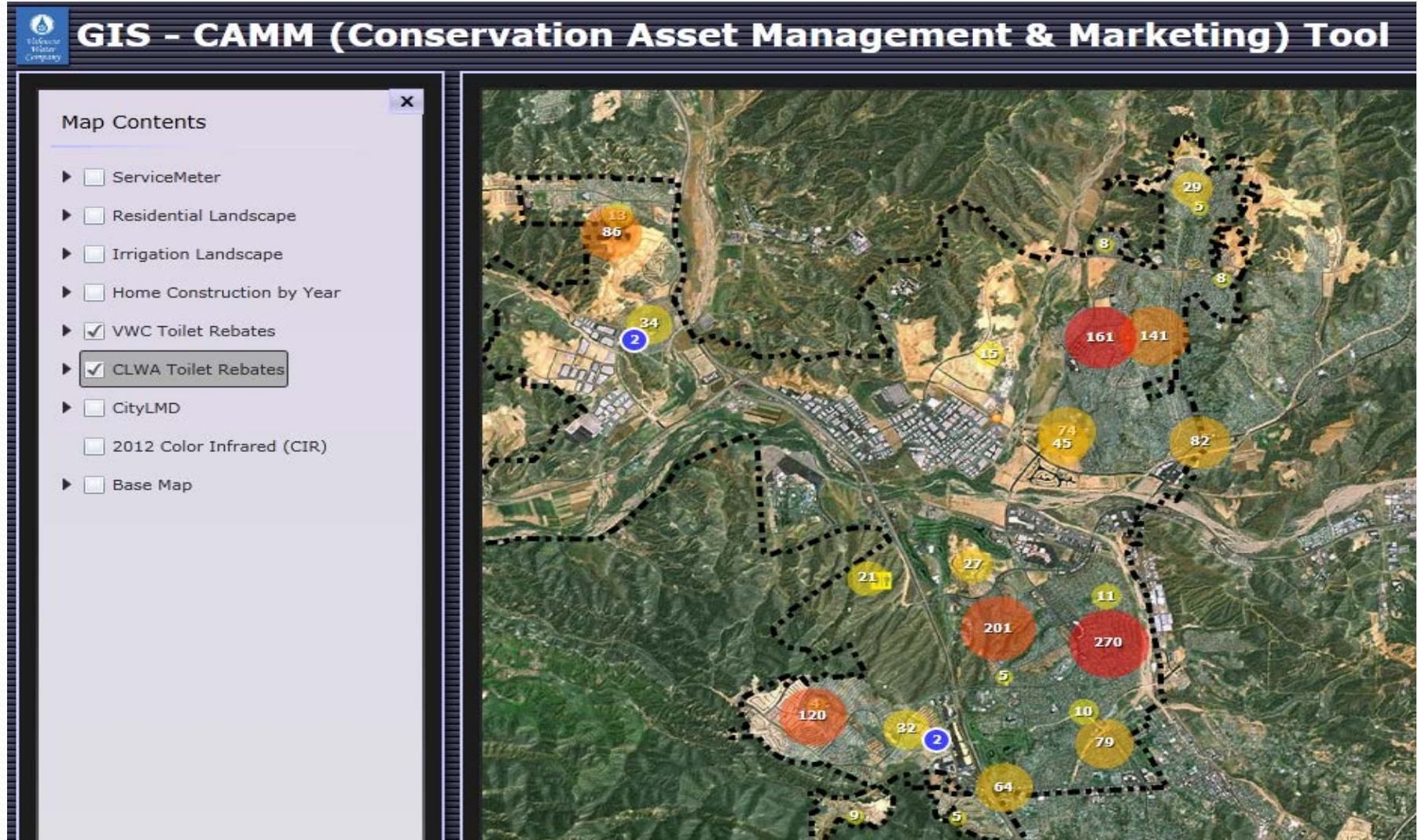


# **GIS-CAMM in Action**



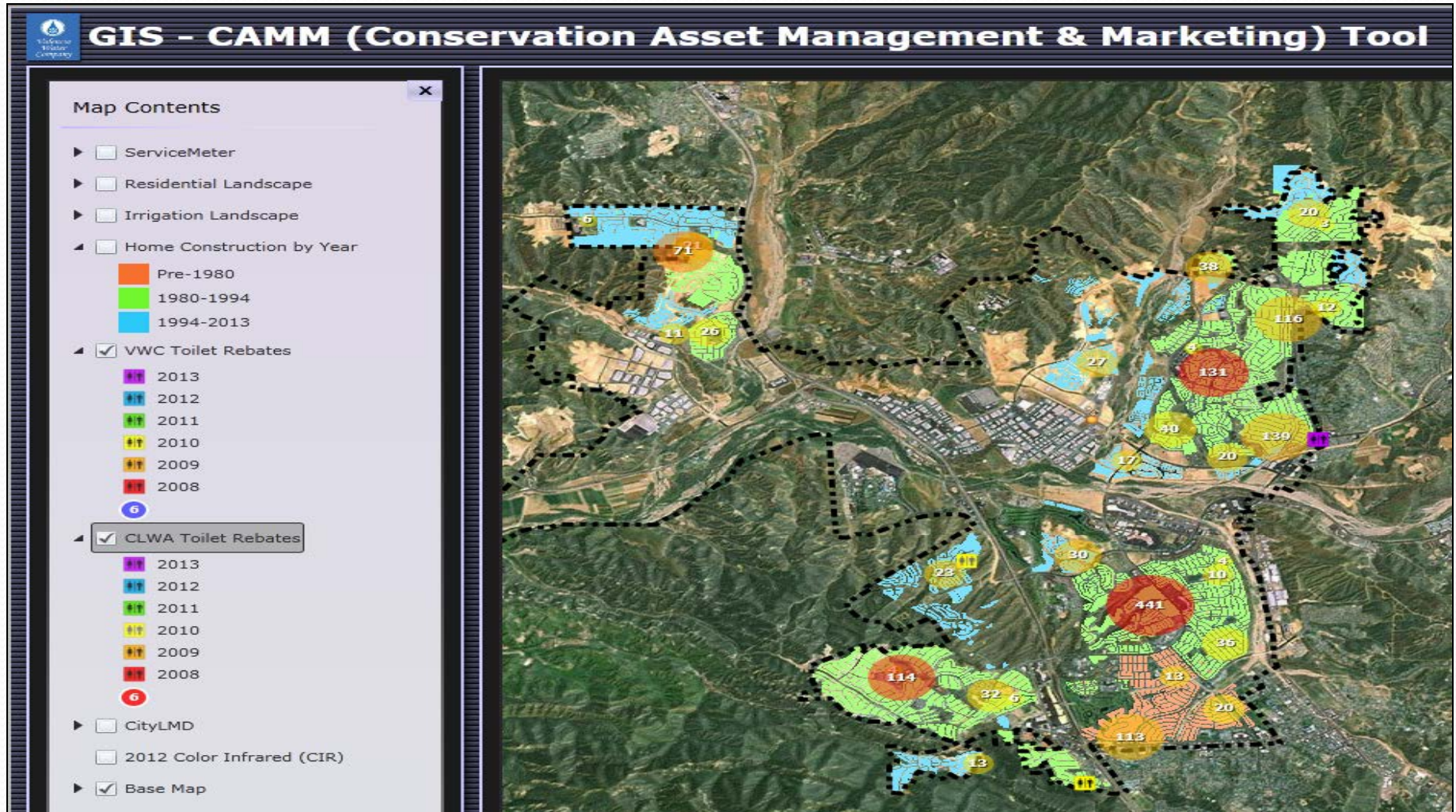
# GIS-CAMM in Action – Data Integration

## (High Efficiency Toilet Rebate Program 2008-2013)



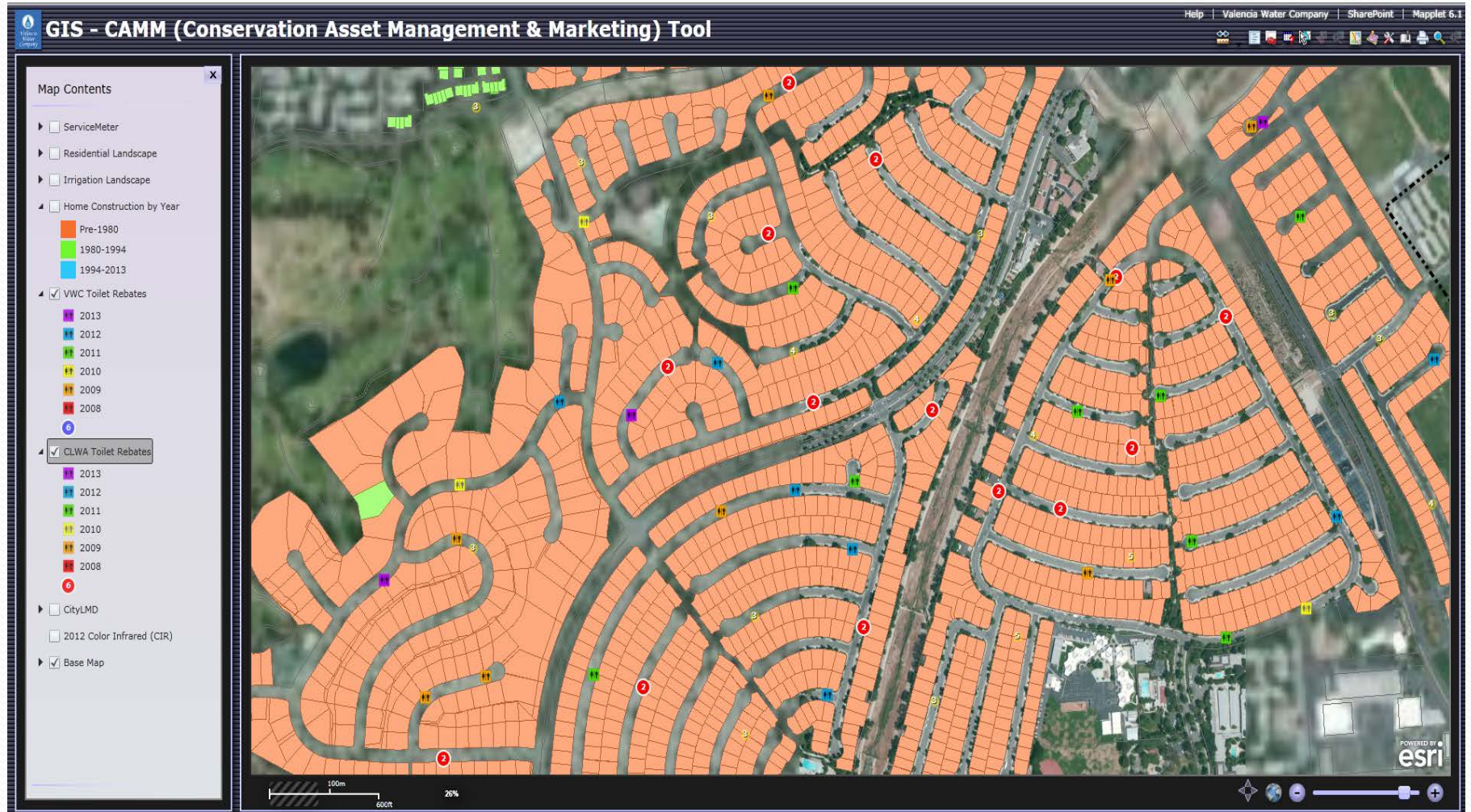


# GIS-CAMM in Action – Participation Data/Year Built (High Efficiency Toilet Rebate Program 2008-2013)





# GIS-CAMM in Action – Refined Data (Older Neighborhoods) (High Efficiency Toilet Rebate Program 2008-2013)



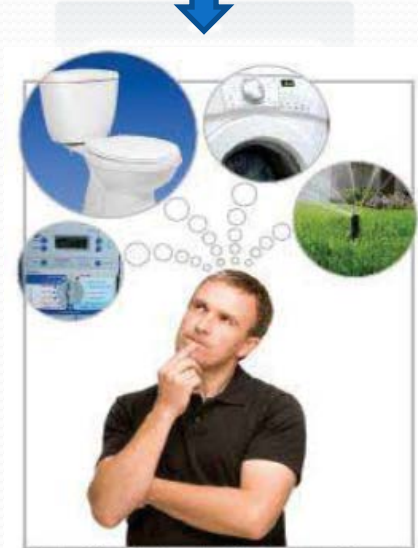
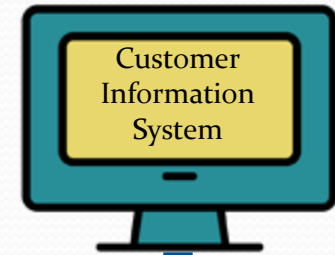


# GIS-CAMM in Action – Targeted Marketing (UHET .8gpf) (High Efficiency Toilet Rebate Program 2008-2013)



# GIS-CAMM Implementation – Targeted Marketing (Dataset) (High Efficiency Toilet Rebate Program 2008-2013)

	A	B	C	D	E	F	G	H	I	J	K	L	M	
	OBJECTID_1	OBJECTID	TRA	AIN	GlobalID	Shape_Leng	OID	Customer_N	Year_Build	Customer_C	Group_ID	AIN_1	Shape.STArea()	Shape.STLength()
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	12240	1972988		2458886637	{4FFC32F0	324.1044901	1347	11959600	1965	Residential	1	2857015012	6349.4706	324.1044726
	12304	1972989		2469476301	{E8CA5A9F	315.2190183	1346	11960600	1965	Residential	1	2857015013	5919.942131	315.2190326
	12312	1972987		2480065965	{C6B1A34F	313.9158675	1348	11961600	1965	Residential	1	2857015011	5864.822195	313.9158496
	12410	1972986		2490655629	{C731C392	313.0112456	1349	11962600	1965	Residential	1	2857015010	5829.291371	313.0112338
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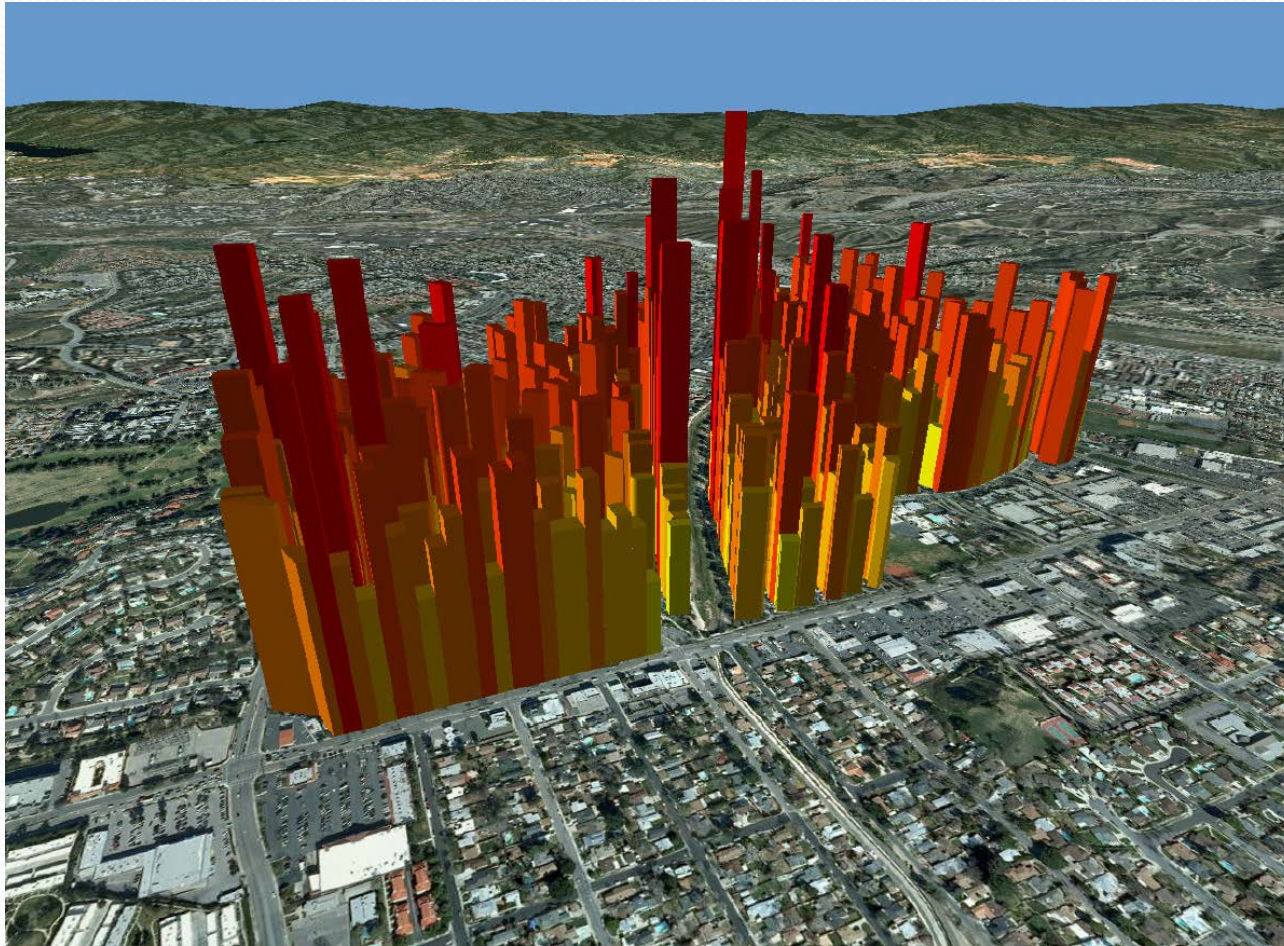


Just think how much you could save!

Direct Mailer or Email  
On Targeted Program



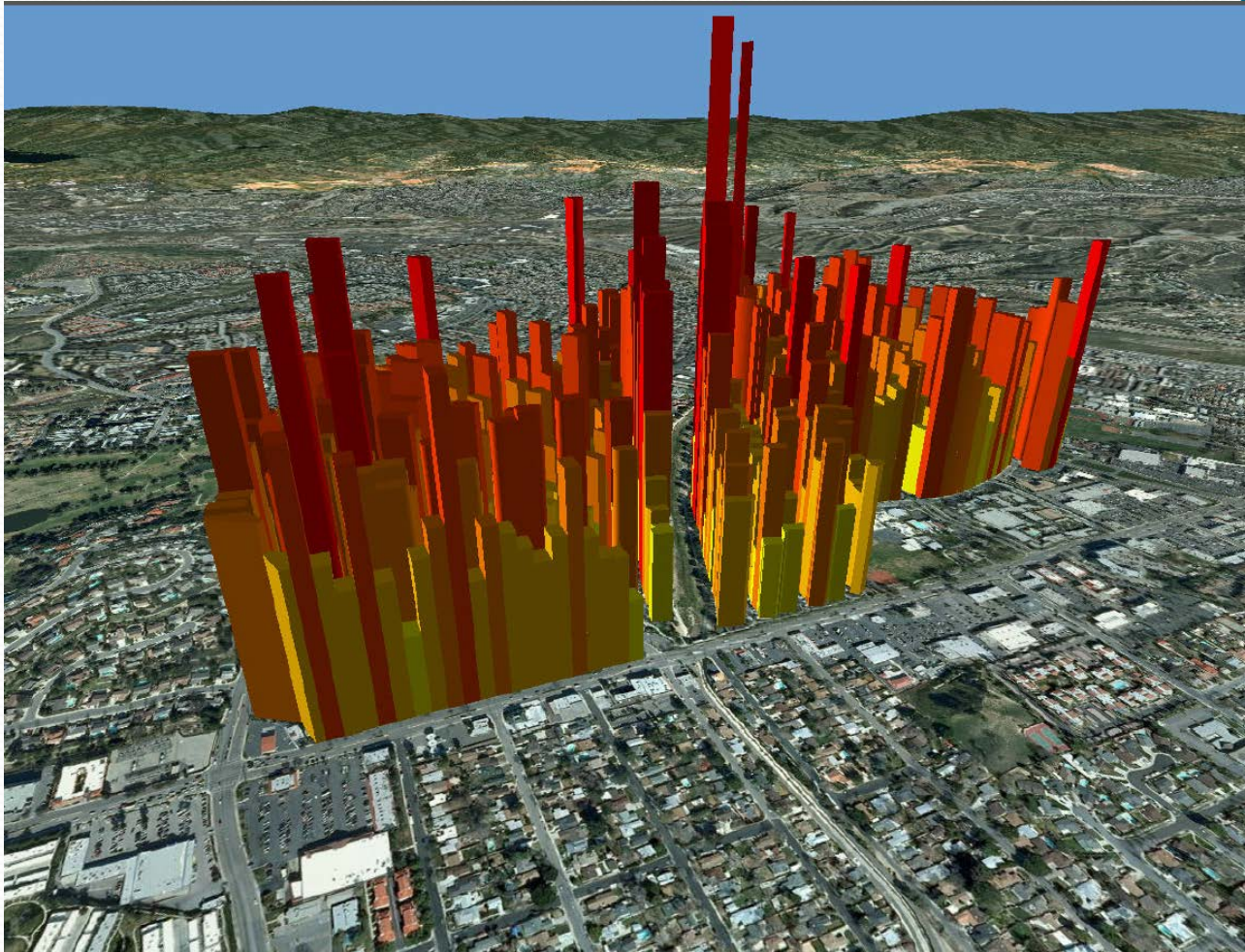
# Valencia Water 3D Modeling



2012 Water Use by  
Residential Customer



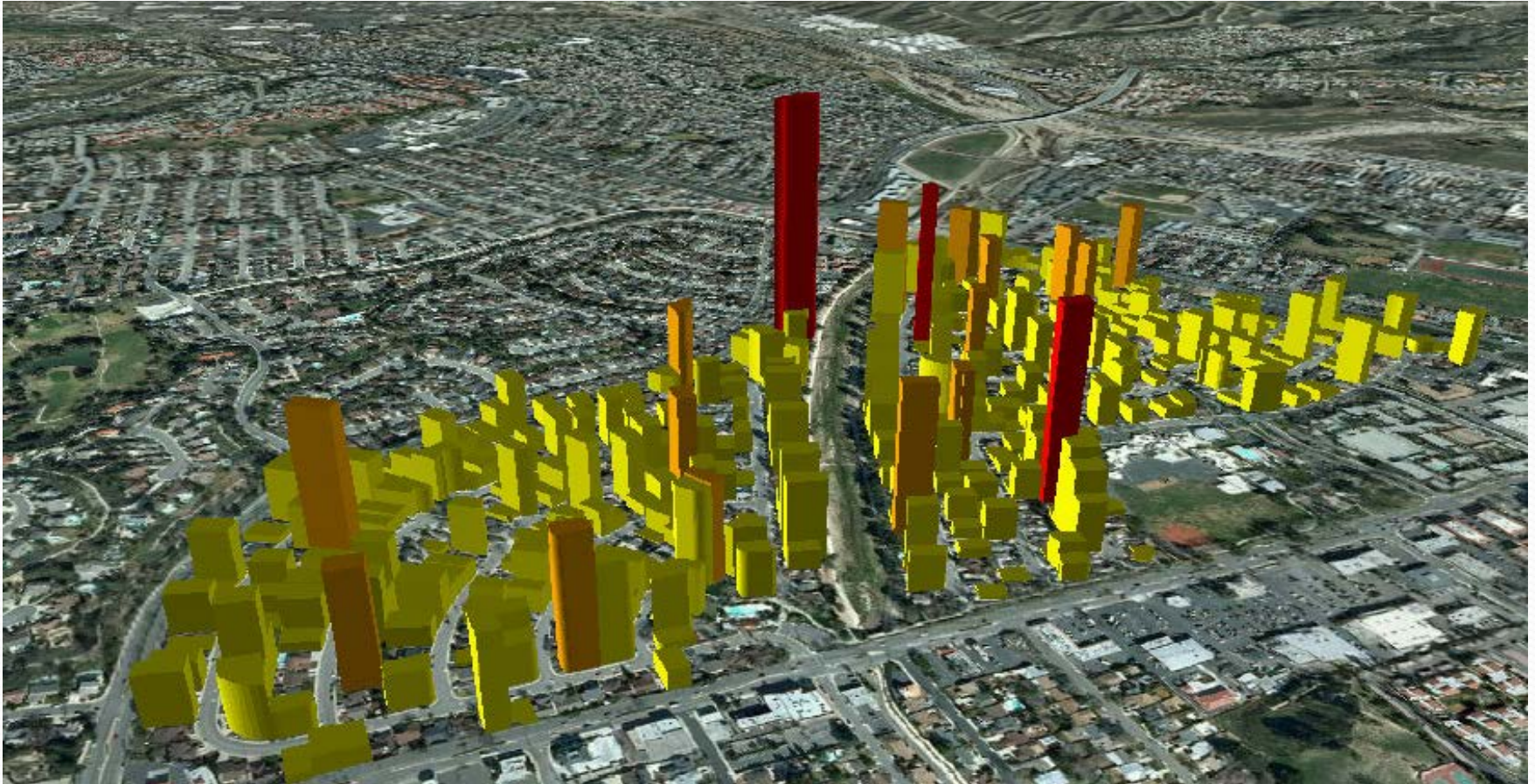
# Valencia Water 3D Modeling



2013 Water Use by  
Residential Customer



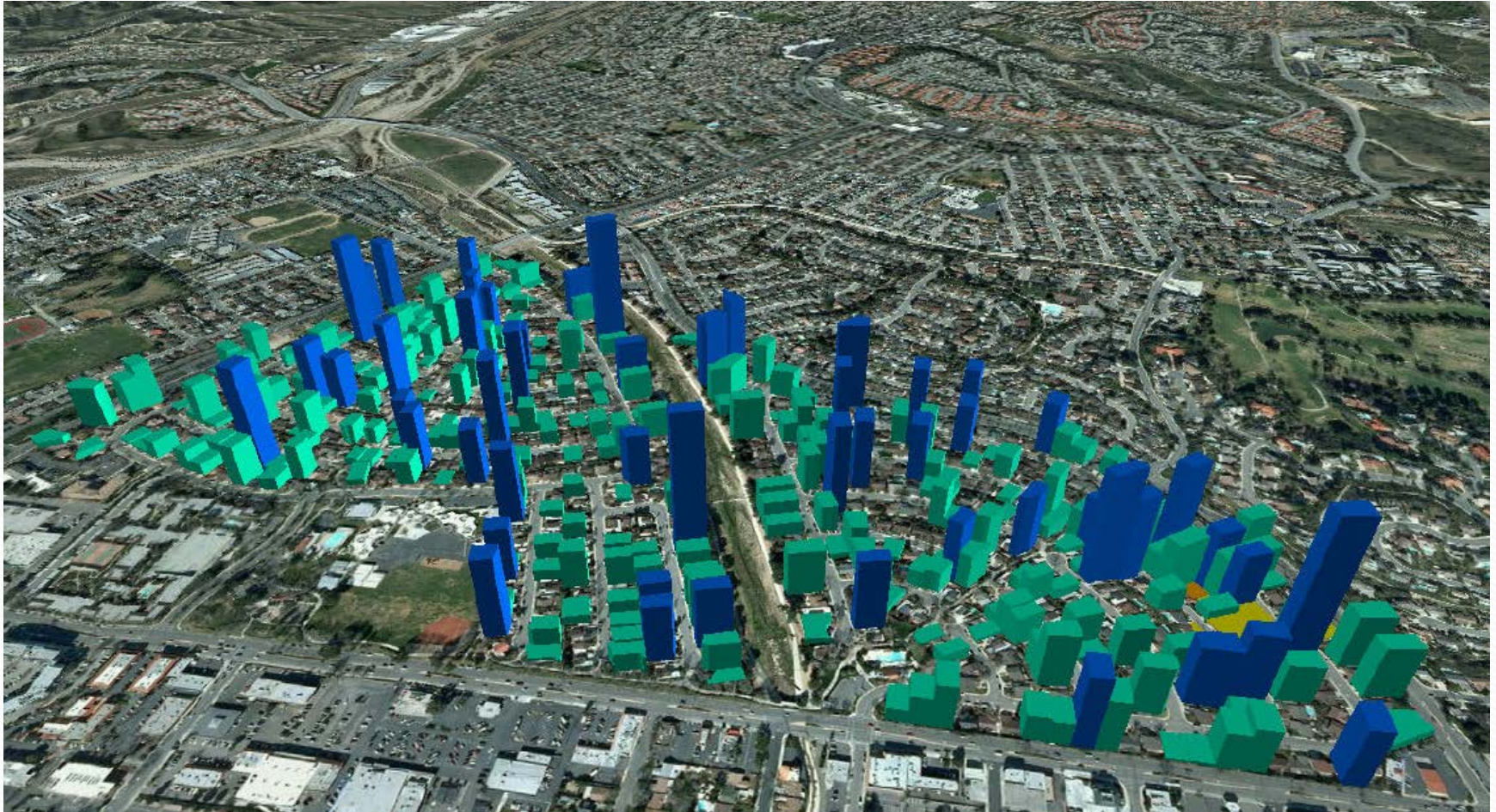
# Valencia Water 3D Modeling



2012 v. 2013  
Increase (Orange/Red) and



# Valencia Water 3D Modeling



2012 v. 2013  
Decrease (Green and Blue)

# Conclusion





# Utility Systems Integration



## Customer Information System (CIS)

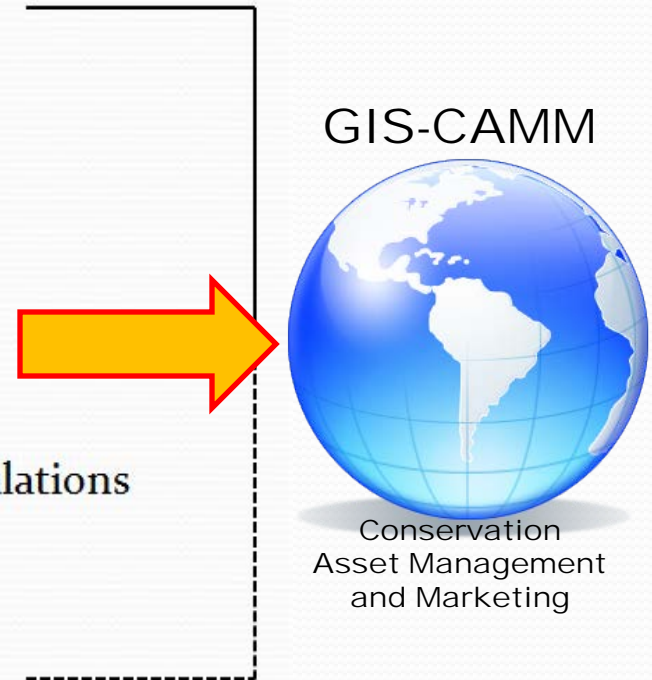
- Account Information
- Billing and Payments
- Work Orders
- Customer Communication Records

## Geographic Information Systems (GIS)

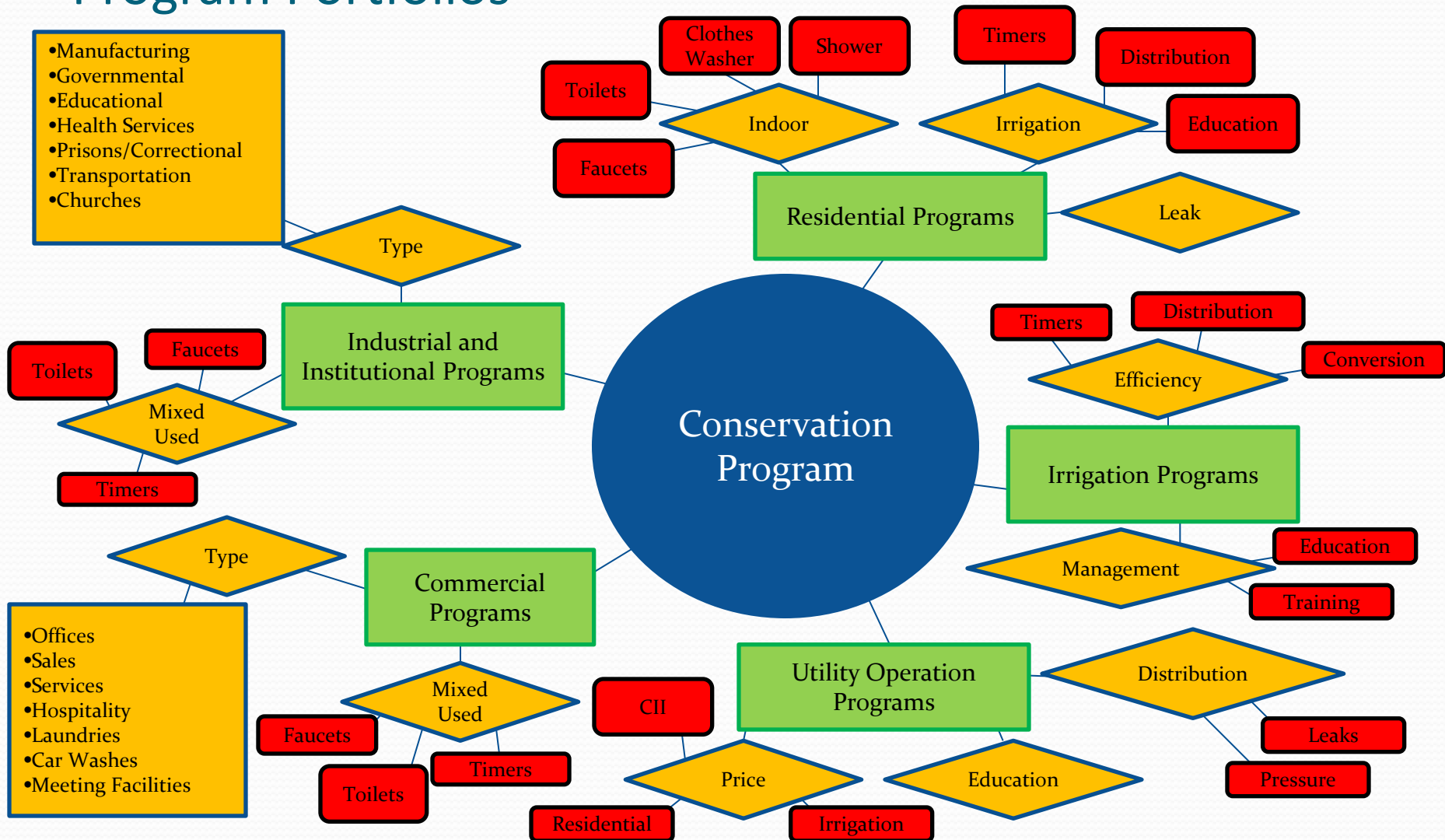
- Utility Asset Management (Spatially)
- Displays Geographic Information
- Create Maps
- Obtain Measurements and Geospatial Calculations

## Water Smart Allocation Program (WSA)

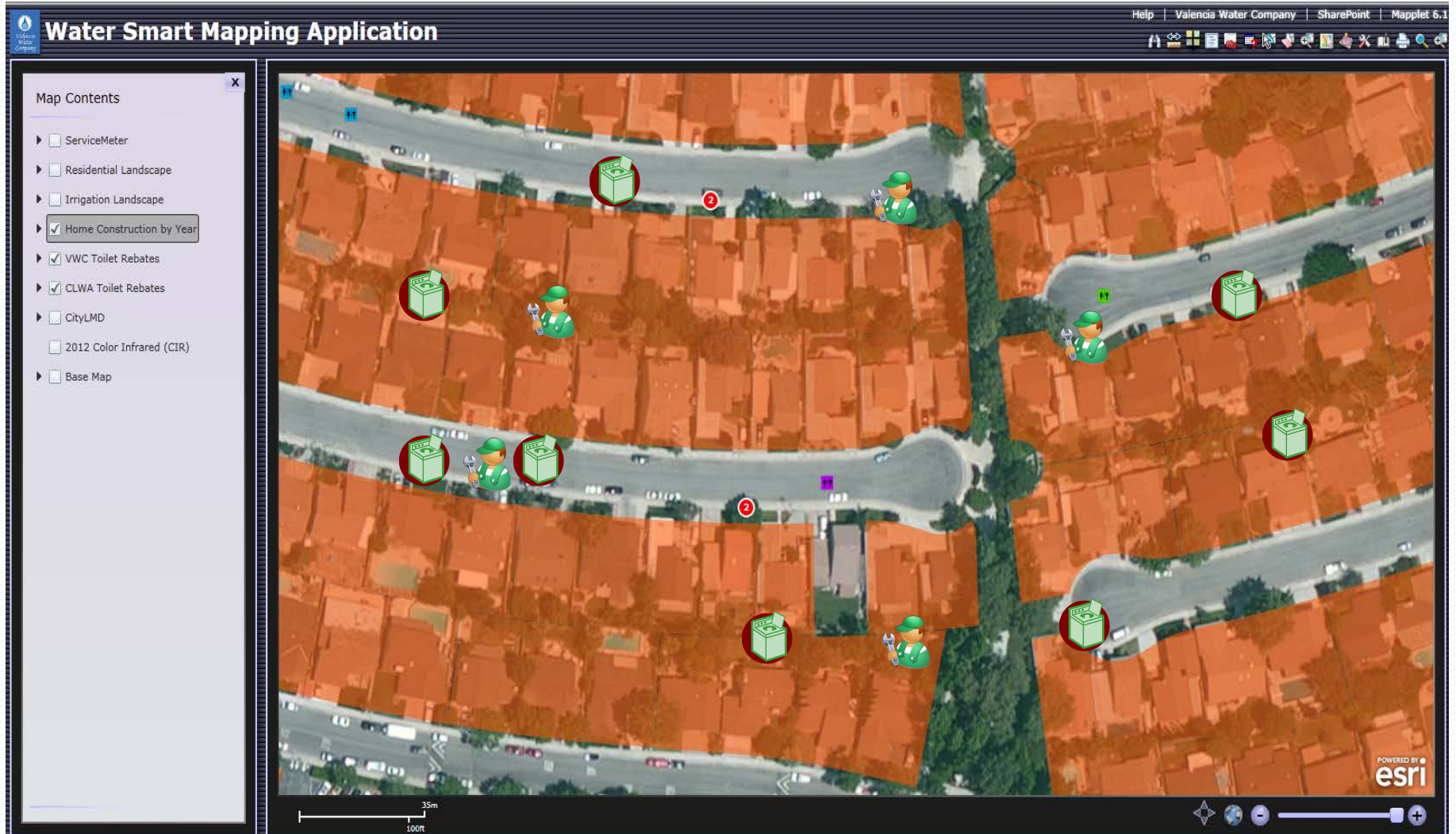
- Generates Water Budgets
- Customer Types
- Number of People
- Landscaped Areas (Measure in Square Feet)



# Conclusion: GIS-CAMM Tool for Growing Conservation Program Portfolios



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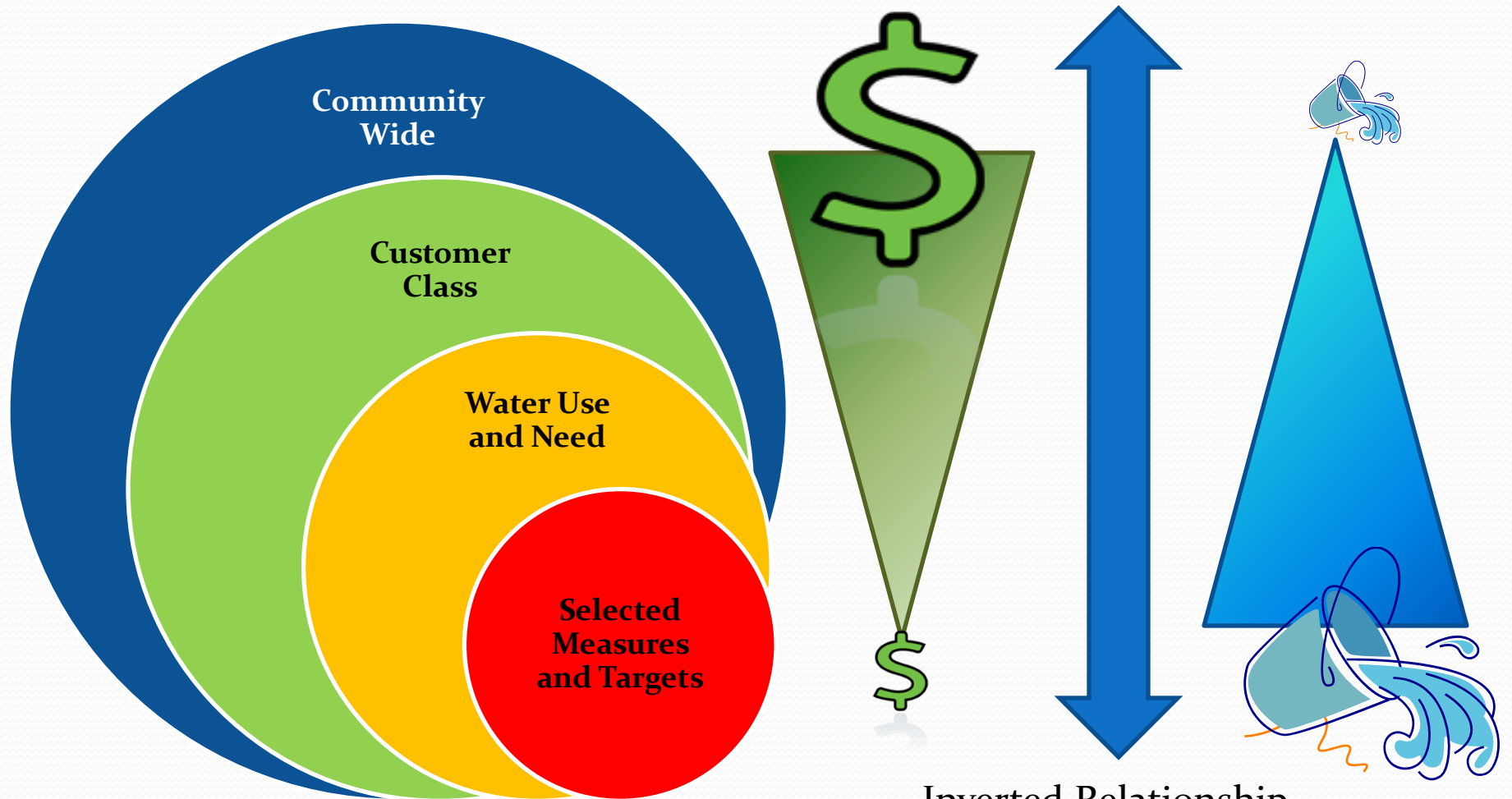




# Conclusion: GIS – CAMM Marketing Component



## Conclusion: GIS – CAMM Marketing Component



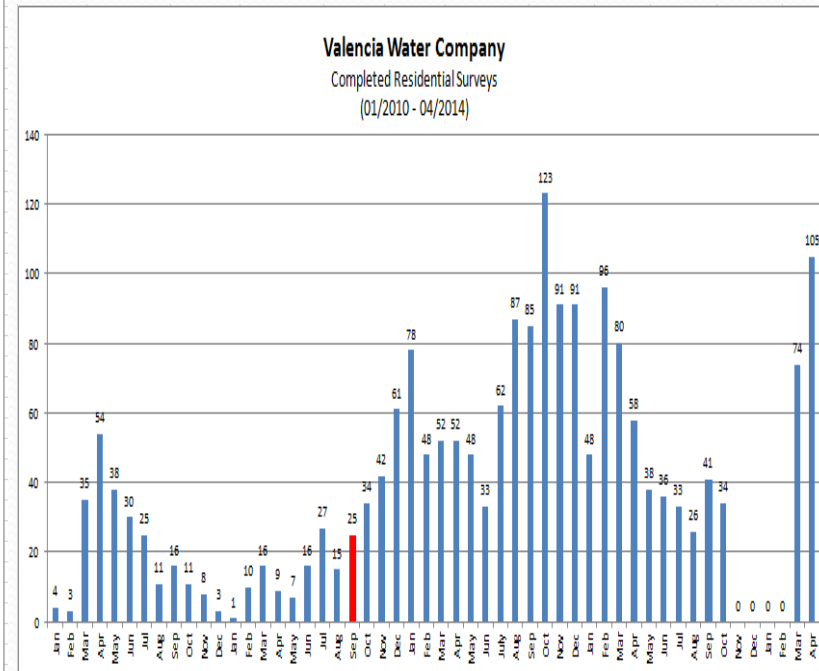
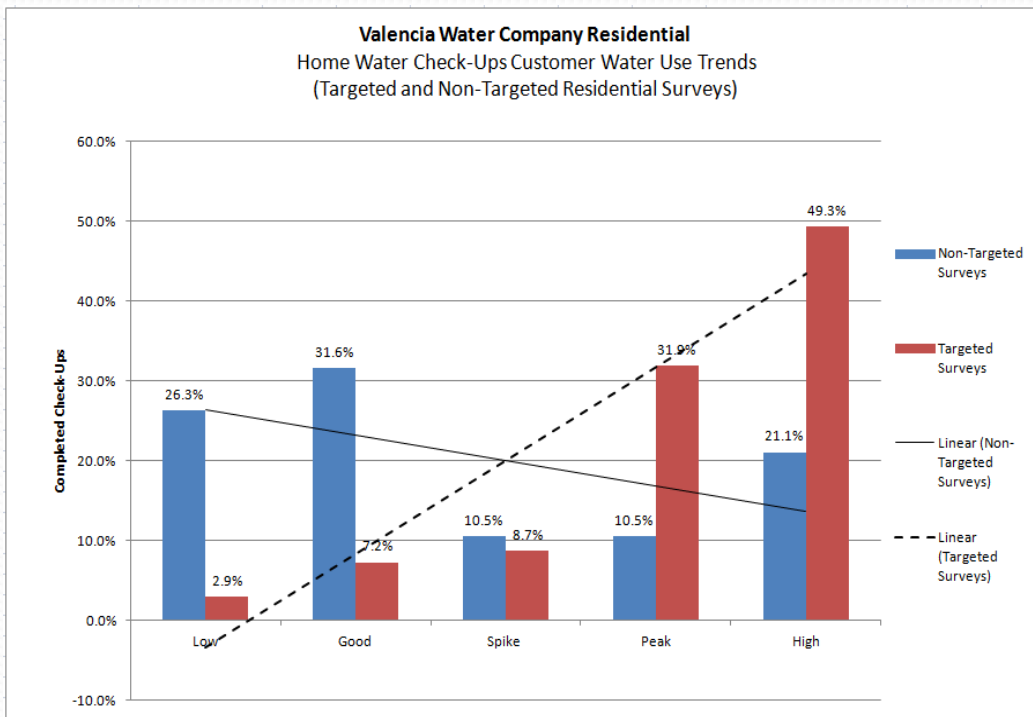
Inverted Relationship

As the audience **increases**, M and V capabilities per conservation measure(s) **decreases**.



## Conclusion: GIS-CAMM Targeted Marketing for Residential Surveys

**Targeted Marketing Results + Increased Participation=**



**Cost Effective, Long-Term and Meaningful  
Reductions in Water Use!!!**

# Questions

*Thank You!*

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