

# PUBLIC WORKS DEPARTMENT

Estrella Mountain AMI  
(Advanced Meter Infrastructure)  
Pilot Program

# Water Distribution



## WHAT WE DO



- ELECTRIC POWER
- GAS-OIL PRODUCT LINES
- WATER SYSTEMS / SLURRY PIPELINES
- COMMUNICATION CABLE TELEVISION
- SANITARY SEWER SYSTEMS
- TEMPORARY SURVEY MARKINGS
- RECLAIMED WATER
- PROPOSED EXCAVATION



A scenic view of a golf course green and fairway, surrounded by desert vegetation and mountains in the background. The text "AMI Pilot Program" is overlaid in the center in a bold, yellow font.

# AMI Pilot Program

# METER READING



## PROGRESSION



**MANUAL**

**TOUCH**

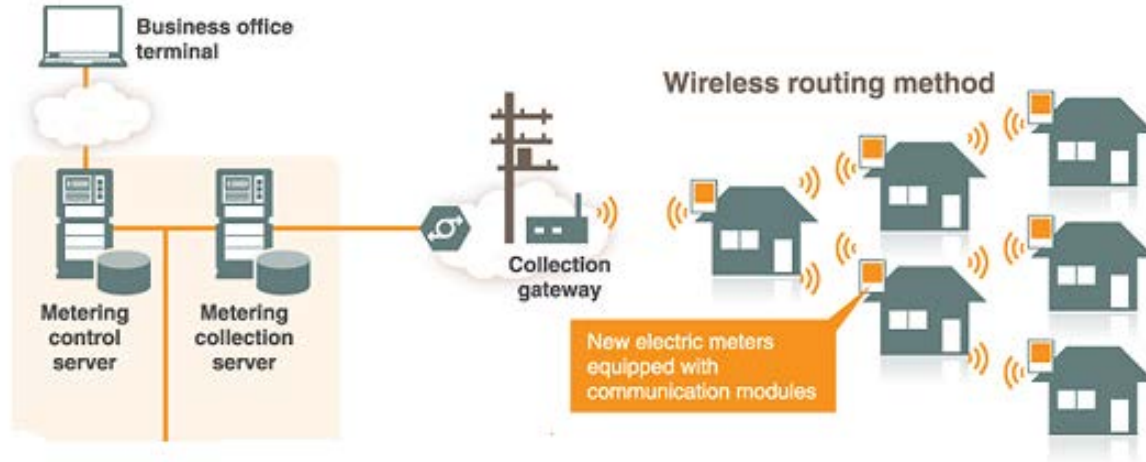


**DRIVE BY (AMR) = Automated Meter Reading**

# METER READING



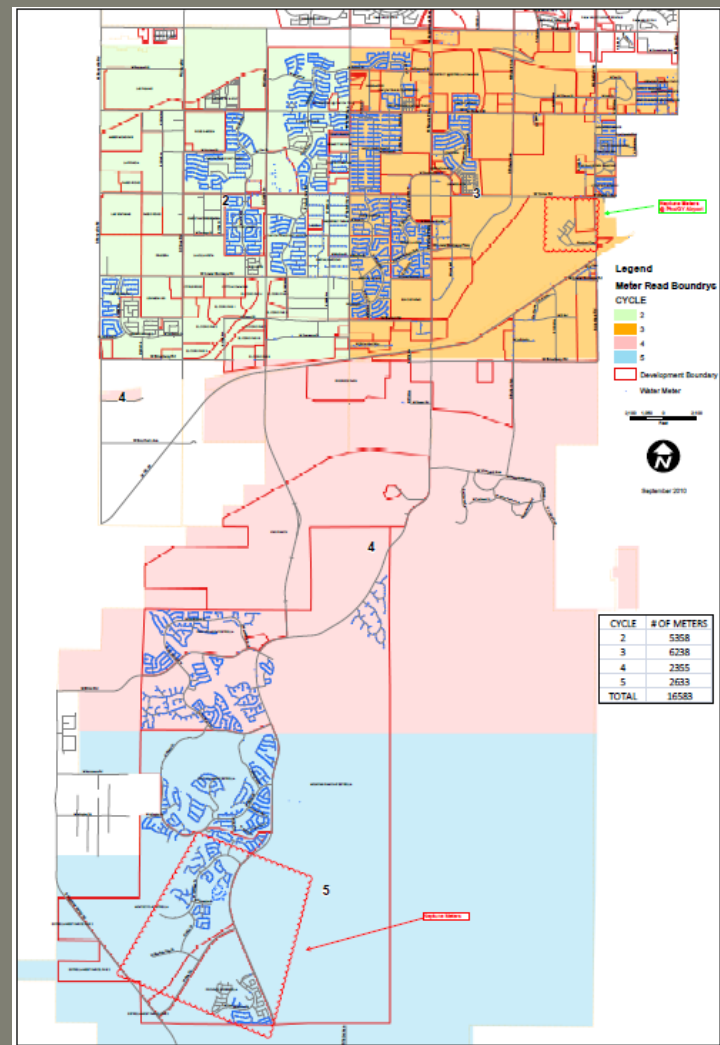
## PROGRESSION



**Fixed Base (AMI = Advanced Meter Infrastructure)**

# AMI Pilot

- 1 Collector (Neptune Gateway)
- 100% Free Reading Equipment
- Located on the Roof of the CantaMia Village Center
- Reads 700 meters



# AMI PILOT PROGRAM



## CHALLENGES

- Finding a location: Agreements, Power, Collaboration
- Connection Issues: FTP Site (Cloud) - Billing System
- Hardware Issues: Receiver unit stopped working
- City Staff: Learning new software



# AMI PILOT PROGRAM



## COMPARISON

### DRIVE BY (AMR)

- METER READINGS IN 30 DAYS = 1
- High Usage Alerts – 30 DAYS
- Data Logging – Onsite
- 4.5 hours Staff time
- Fuel and vehicle costs

### FIXED BASE (AMI)

- METER READINGS IN 30 DAYS = 720
- High Usage Alerts – Within 24 hours
- Data Logging – Office/Desktop
- 4 minutes Staff time
- Reduced fuel and vehicle costs



# AMI PILOT PROGRAM



## BENEFITS OF AMI

### Reduced Operational costs

- Staff/Fuel

### Increased Customer Service

- Customer Usage Profile – Trends/Habits
- Immediate Usage Data – Billing Disputes
- Improved handling of customer accounts
- **Early Leak Detection – 24/48hrs vs. 30 days**

# AMI PILOT PROGRAM



## BENEFITS OF AMI (CONT.)

### Enhanced Monitoring

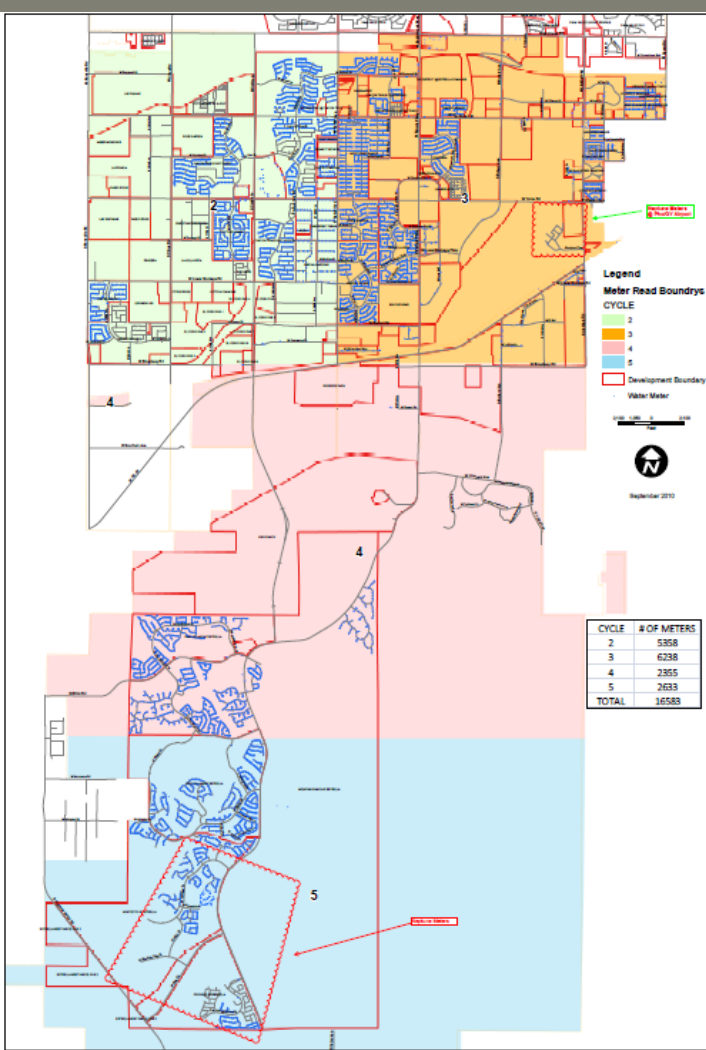
- Identify Illegal Consumption on closed accounts (alerts)
- Identify “dead” or non-functioning meters (alerts)
- Tamper Detection on disconnected accounts for non-payment (alerts)



What's Next for AMI ????

# AMI - Future

- Propagation Study
- Additional Cost Analysis
- Explore Customer Interface
- Quantify Savings Benefits



A scenic view of a golf course green and fairway, surrounded by lush greenery and mountains in the background. The text "Questions ????" is overlaid in the center.

Questions ????