Presentation Overview

- CIP Strategy Partners
- Water Resources Department Infrastructure
- Infrastructure Maintenance
- Long Term Infrastructure Planning
- Predictive Citywide CIP
- Future CIP Tools
- Questions
Pomona CIP Strategy Partners

- Geodatabase Protocol
- ESRI Utility Model for Data
- Web Applications
- Citywide Data Integration
- Geodatabase Updated
- Portal for ArcGIS
- Supplemental IT

- GIS Applicability for hydraulic modeling
- Dynamic real-time tools for decisions and action
- Hydraulic modeling generation
- Customized Sedaru application tools for each section of the Water Resources Department
Water Resources Department
Water and Wastewater System - Infrastructure Facts

- 23 Square Miles of Service Area
- 421 Miles of Potable Water Main
- 10 Miles of Recycled Water Main
- 400 Miles of Sewer Main
- Over 30,000 Customers
- 22 Reservoirs
- 41 Wells
2005-2009 Planning Documents

- **2005 Water Master Plan**
  - Hydraulic Model *(calibration)* ~ $150M; phased 20 years
  - CIP Projects (25) ~ $52M (Construction Cost)

- **2005 Sewer Master Plan**
  - Hydraulic Model 10” and larger sewer mains/CCTV-100%
  - CIP Projects (13) ~ $11M(Construction Cost)

- **2009 Recycled Water Master Plan**
  - Hydraulic Model, Identification of potential new customers, & required new infrastructure,
  - CIP Projects – none
Infrastructure Maintenance

- Currently project selection based on master plan from 2005
- Original GIS from 2005 not robust enough to set criteria for project selection
- From 2005 to 2016 only potable water and sewer CIP projects
- Integrated regional recycled water and groundwater recharge projects to come

How does the City continue to create the best CIP annual projects?
Long Term Infrastructure Planning

- Utilize current Operations Staff work orders to identify frequency of work completed
- Identifying power costs savings with actual system demand
- Incorporating new and updated hydraulic modeling data
- Quarterly analysis of work orders to predict CIP
Sedaru Application with Updated Geodatabase
Water Resources Strategic Plan
Optimizing Information Technology

Existing Work/Data Flows
- Archived Operations Data
- Archived Master Plans
- Hydraulic Models
- GIS Geodatabase

Current Integrated Work/Data

Management
- Customer Service
- Engineering

Maintenance

Operations

Water Quality
ID Modeling – Sedaru Smart CIP

Information Technology - Sedaru

- Smart CIP
- Smart Modeling
- Asset & Operational Management Platform w/Field Mobility

- Esri GIS
- Sedaru CMMS
- Sedaru Field Mobility
- Innovyze Hydraulic Model
- Other DB
Sedaru Tools for CIP

Valve Exercising

Sedaru Smart Modeling

Sedaru Smart CIP

Sewer Mainline Cleaning

Asset Condition + Asset Performance

Connected, Integrated, Asset Management Plan to Quantify and Prioritize Replacement Projects
Questions?