May 7, 2019
City of Peoria, AZ

Water Services Department
FTEs = 96
FY19 Operating Budget = $37,980,900

Our Mission: To offer water services in a safe, reliable and responsible manner to enhance the quality of life in Peoria.
Peoria Leadership Institute

Water Services Divisions
David Burks – Interim Deputy Director
Utilities Operations

Deputy Water Services
David Burks

Operations Mgr. Plants
Robert Garcia
(33 Staff)

Operations Mgr. Field
Roy Finch
(33 Staff)

Env. Resources Regulatory
Bob Hollander
(17 Staff)
Current Water Treatment Facilities

Quintero .043 MGD

Pyramid Peak 11 MGD (24 MGD)

Greenway 16 MGD
Greenway Water Treatment Plant

- 16 MGD Capacity
- Average Flow is 8.6 MGD
Pyramid Peak Water Treatment Plant

- Joint Ownership with Glendale
- Peoria owns 23%
- Average Peoria Flow is approx. 11 MGD
Quintero Water Treatment Plant

0.6 MGD Capacity; Membrane Process
Average Flow is 43,000 GPD
CAP Water via an 8 mile 16” pipeline
Water Reclamation Divisions

Where does it magically disappear to?
Jomax Water Reclamation Facility

2.25 MGD Capacity
Average Flow 600,000 GPD
Beardsley Water Reclamation Facility

4 MGD Capacity
Average Flow
2.8 MGD
Butler Water Reclamation Facility

10 MGD Capacity
Average Flow 7.0 MGD
Please only flush the Three P’s Toilet Paper-Pee-Poop

PLEASE
DO NOT DEPOSIT
FEMININE HYGIENE
PRODUCTS,
BABY WIPES,
DIAPERS OR
HAND TOWELS
IN THE TOILET!
Beardsley Water Reclamation Facility
Utilities Field Operations

- **Wastewater Collection**
  - 14 Lift Stations
  - 788 Miles of Sewer Mains
  - 17,040 Manholes
  - Sanitary Sewer Overflows (SSO)
Sewer Backups

12:35:26 AM / 05-07-2016

Clay Tile Circular 12

[11' 0'']
Roach Complaints
Roaches only come from the sewer....

False. Although roaches like the sewer, they will thrive in any dark damp location that isn’t being disturbed like gardens, meter boxes, AC units, and sheds. The city has 17,000 manholes. These manholes are sprayed on an annual basis to assist with roach control.
Utilities Field Operations

- **Water Production**
  - 47 Well Sites
  - 33 Reservoirs Storage Capacity 39 MG
  - 12 Booster Sites

- **Water Distribution**
  - 1,179 Miles of Water Mains
  - 27,246 Water Valves
  - 10,093 Fire Hydrants
  - Maintenance/inspection
  - Water Main Breaks
  - Water Service Repairs
Water Distribution

- **Blue Stake**
  - 179 Square Miles
  - Markings
    - Water - **Blue**
    - Wastewater - **Green**
    - Stormwater – **Blue SD**
    - Reclaimed - **Purple**
    - Telecommunications - **Orange**
  - Arizona 811
Water Distribution

- **Hydrant Program**
  - 10,093 Fire Hydrants
  - Annual Maintenance and Inspection
  - Hydrant Flushing
Water Distribution

- Valve Program
  - 27,246 Water Valves
  - 5 yr Maint. and Inspection
  - Water Main Break Shutdowns
  - Contractor Shutdowns
Where’s the leak?
Identifying the location of leak
New pipe is placed
Drinking Water Environmental

Drinking Water Rules

- City must comply with Federal and State Drinking Water Regulations
- Drinking Water Standards
  - Microbiological, chemicals
- Conduct Sampling
  - Treatment plant, wells, distribution system

- Generate & Submit compliance reports
- Backflow Prevention Program
Water Quality Monitoring

- Drinking Water Sampling
  - Required by Drinking Water Rules
    - Water treatment plants
    - Wells
    - Distribution System
Drinking Water Environmental Laboratory

- Conducts microbiological and chemical analyses of water, wastewater
Wastewater Environmental

Pretreatment Program

- Protect sanitary sewer system and water reclamation plants

- Commercial Inspections
  - Restaurants, auto repair shops, car washes
  - Grease interceptors
  - Control Fats, Oils, and Grease (FOG); prevent sewer overflows
Wastewater Environmental

Stormwater Management

- Program focused on minimizing pollutants in stormwater
  - Public education and outreach
  - Public involvement and participation
  - Illicit Discharges
  - Construction sites
  - Post construction
  - Pollution prevention and good housekeeping at municipal facilities
Planning and Operations

Planning - integrated water, sewer and reclaimed water systems

Capital Improvement Plan - project development, budgeting and construction
Planning and Operations

- **Technology/Data Systems/SCADA**
  - Maintenance of electronic systems
  - Evaluation of new technology
  - System security
  - Data acquisition

- **Private Development Review**
  - Ensure compliance with comprehensive planning
  - Coordination with capital improvement projects
  - Variance requests
Water is Measured in “Acre-feet”

- One acre-foot is approximately a football field covered with water one foot in depth
- One acre-foot equals 325,851 gallons
- One acre-foot will fill 15 swimming pools at 22,000 gallons each
- On average, each home in Peoria uses 0.34 acre-feet each year (approximately 110,789 gallons)
Water Supply and Water Portfolio

**Total Water Supply for 2018 = 34,046 Acre-feet**

- **Central Arizona Project** 25,236 (37%)
- **Salt River Project** 25,201 (36%)
- **Reclaimed Water** 7,889 (11%)
- **Gila River Indian Community** 7,000 (10%)
- **Groundwater** 3,114 (5%)
- **Long-Term Storage Credits** 677 (1%)

* Availability & Variety of sources under 2010 Designation of Assured Water Supply

**Peoria' Water Portfolio**

<table>
<thead>
<tr>
<th>Source</th>
<th>Acre Feet</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central Arizona Project</td>
<td>25,236</td>
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<td>3,114</td>
<td>5%</td>
</tr>
<tr>
<td>Long-Term Storage Credits</td>
<td>677</td>
<td>1%</td>
</tr>
</tbody>
</table>

Total Acre Feet = 69,117 (100%)
Total Used = 34,046 (49%)
Balance Remaining = 35,071 (51%)

* Availability & Variety of sources under 2010 Designation of Assured Water Supply
Surface Water Resources

Salt River Project (SRP)
- Arizona Canal: 1885
- SRP created in 1903
- Roosevelt Dam: 1905-1911

Central Arizona Project (CAP)
- 336 Miles Long
- Starts at Lake Havasu
- Ends 14 miles south of Tucson
Water is recharged into the ground

- Reclaimed Water from treatment plants
- CAP water at recharge facilities

Some of the water is pumped back out of the ground and served to customers

Excess recharged water is used to accumulate Long Term Storage Credits (LTSC), which we can use if needed
Colorado River System Planning

Peoria in Lower Basin

- Drought = 18-24 years
- Colorado River water in two reservoirs:
  - Lake Powell currently 38% full
  - Lake Mead is currently 41% full
- Possible reduction to CAP water allocation
- Higher Costs:
  - CAP water $6.6 million/year
  - Possible increase in rates charged to the City by CAP
Peoria Leadership Institute

Lisa Estrada, Economic Efficiency and Sustainability Manager
What is Sustainability?

- Peoria’s Economy
- Peoria’s Natural Environment
- Peoria’s Citizens

Sustainable Community
City Challenges

- Population **Growth**
- Increase **demand** for services
- Increase in **homelessness and poverty**
- **Limited** financial resources
- **Decaying** infrastructure
- Massive amounts of **garbage**
- Increasing **crime**
- Food **shortages**
- Global environmental **crisis**

The Guide to Greening Cities
Johnston, et al., 2013
Focus Areas

- Management Practices
- Education & Outreach
- Municipal Facilities
- Community Building
- Transportation
- Recycling & Waste Reduction
- Water Resources
The Peoria Community Center, Municipal Court and the Seattle Mariners’ and San Diego Padres’ Clubhouses achieved LEED Gold certification.
Recycling and Waste Reduction

- Expanded Recycling on City Campus
- Encourage the Use of Reusable Water Bottles
- Increase Recycling Education at Special Events
Come Grow With Us!

Local Spring Breakers can have their very own adventure by participating in the City of Peoria’s Sustainable U’s Eco-Explorers Adventure Camp March 10-14 at Cheyenne Elementary (11806 North 87th Avenue)*

Studies show that spending time in nature makes kids healthier and happier! One key to caring for the environment as an adult is experiencing nature as a child. That’s why, through Peoria’s Eco-Explorers Adventure Camp, we are encouraging kids of all ages to get out and experience the great outdoors.

*Must be enrolled in City of Peoria Spring Break Camp in order to attend.

For more information or to register, call 623.773.7137 or visit peoriaaz.gov/ampm
Water Conservation Program
Overview
Water Efficiency Rebate Program

- Turf removal/Xeriscape Conversion
- Smart Irrigation Controllers
- High Efficiency Toilet
City of Peoria Code, Section 13-36(d): It shall be unlawful to waste water used for irrigation or permit water used for irrigation o run upon the public streets or alleys of the city or upon the property of another. prohibits water waste
Public Awareness Campaign

Bus Transit Shelter Ads
Peoria’s Sustainable U Offers FREE Workshops such as:

- Container Gardening in the Southwest
- Irrigation Maintenance for Homeowners
- Spring Vegetable Gardening
- Rain Water Harvesting
- Soils and Composting Made Easy
Water Conservation as a Demand Management Strategy

- Water conservation is encouraged through rebates, outreach programs, educational efforts, and regional cooperation with other cities.
- Water conservation is a means of adaptation to Arizona’s desert environment, not an answer to water shortages.
- Everyone can conserve water.
We manage approximately 800 pieces of equipment with a replacement value of approximately $40,000,000.

Our current operating budget is $5,300,000 and includes:

- $1,765,000 for fuel and oil
- $387,000 for tires
- $734,500 for replacement parts
We operate and maintain three fueling sites in the following locations:

- Peoria Maintenance Operations Center
- Fire Station 193, 83rd Ave & Thunderbird Rd
- Fire Station 195, Lake Pleasant Rd & Pinnacle Peak Rd

We operate and maintain an automated heavy duty vehicle wash with an average usage of 250 washes a month.
Vehicle Procurement

- Evaluate vehicles scheduled for replacement
- Determine needs of using department
- Obtain pricing from current Peoria contracts or from other government agencies in Arizona
- Prepare bid specifications when needed
- Prepare purchase order
Vehicle Make Ready

- Obtain vehicle title and registration
- Install decals
- Install specialized equipment
- Fabrication as needed
Vehicle Maintenance

We (10 technicians) provide preventive maintenance and repair. Repairs include:

- Preventative Maintenance
- Tire Shop
- Driveability & Diagnostics
- Electrical and Electronic
- Air Conditioning
- Drivetrain Repair
- Hydraulic and Water Systems
- Ground Tool Engagement
- Welding & Fabrication
- ADEQ Emission Testing

Hourly Shop Rate: $80/hour
Specialized repairs are often contracted to local vendors, these include:

- Windshield repair and replacement
- Wheel alignment
- Paint and accident repair
- Specialty Up-fit of Equipment
Vehicle Disposition

After a vehicle is replaced or is no longer needed we:

- Remove specialized equipment
- Remove decals
- Process title and disposition forms
- Establish minimum bid prices
- Arrange delivery to the contracted auction facility
Peoria Transit

- Dial-A-Ride
- Fixed Route
- Circulator
- Amenities
- Future Plans
Dial-A-Ride

- Primarily for seniors and disabled
- General public can use
- Approx. 3,000 riders per month
- City staff and contracted providers
- Buses are wheelchair accessible
Fixed Route

- 83rd Avenue
- Peoria Avenue
- Thunderbird Road
- 67th Avenue
- Bell Road
- Grand Avenue Limited
- 2 Express Routes
Circulator

- POGO – Peoria on the Go
- Started April 22nd
- Neighborhood and Community Destinations
- FREE to ride
- Providing mobility and connectivity
Amenities

• Park and Ride
• Bus Stops
  – Shelter
  – Seats
  – Shade
Future Plans

• Transit Master Plan
  – Start in FY20
  – Identify Needs and Get Citizen Input
  – Identify New Routes and Implementation Schedules

• Emerging Technology

• Planning for the Future
PEORIA LEADERSHIP INSTITUTE

FACILITIES DIVISION

Kyle Kobashigawa, Facilities Manager
Facilities Facts

• 800,000+ sq. ft. of building space
• 87 structures
• 32 parks, 16 miles of trails
• $5,950,564 operational budget
• 37.75 positions
• 45% of the budget is contractual services
Facilities Functions

Maintenance Section

• Consists of a first and second shift, blending both technicians, and custodians

• Duties include plumbing, painting, meeting room setup, generators, janitorial, special event support, and contract administration
Facilities Functions

Security

• One Security Systems Coordinator

• Duties include access control permissions, system connectivity and health, project management of system expansion, interdepartmental collaboration and meetings, Key control, security audits, and contract management
Facilities Functions

Project Management

• Consists of Construction Superintendent and two project managers

• Duties include projects that support operations. Major maintenance, repair, refurbishment and replacement of equipment and structures
Facilities Functions

Software Support

- Consists of one Business Analyst
- Duties include training, deployment, report generation and maintenance of various software systems used by Public Works; webpage maintenance
- Departmental liaison with IT for hardware and Citywide software issues
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PUBLIC WORKS STREETS DIVISION
Janet Ramsay, Street Division Manager
Street Division Services

- Streetlight Outages
- Potholes
- Traffic Signal Issues
- Sidewalk Issues
- Roadway Debris
- Sign or Striping Issues
- Drainage Systems Issues
- Sweeping

Email: streetrepair@peoriaaz.gov
Call: 623-773-7432
Submit Online Repair Request: www.peoriaaz.gov
How do you submit an Online Service Request?

- Submit Online Repair Request: www.peoriaaz.gov
  - Click Services on Mega Menu
  - Search for Street Repair Request under Services
  - Click View More Button to access Request Form
**I Want To...**

- **Report a streetlight outage or issue...**
  - Download PeoriaReporter from the Google Play Store
  - Send an email to streetrepair@peoriaaz.gov
  - Call Streets Administration at 623-773-7432
  - Submit Online Repair Request www.peoriaaz.gov
  - Find streetlight pole numbers using interactive map on Street Division Webpage

- **Adopt a street...**
  - Send a completed Adopt-A-Street Application to Streets Administration
    - Mail: 8850 N. 79th Avenue, Peoria, AZ 85345
    - Fax: 623-773-7425
    - Email: streetrepair@peoriaaz.gov

- **Find out when my community will be swept next...**
  - Use interactive map to search by address or cross streets

- **See current, past, or upcoming pavement maintenance projects...**
  - Visit Streets Improvements Webpage

**Need help with something else?**
Call Streets Administration at 623-773-7432.
Pavement Management Program

- Pavement Management Team treats about 50 miles of Peoria roads per year.
- The primary focus is preventative maintenance of our roadways.
  - Treat early, extend the lifecycle of the road, avoid high rehabilitation costs.
  - Includes concrete, inspection, replacement and ADA compliance
- Independent survey of our pavement network rated Peoria at 74;
  - National average is 65

To learn more: visit our Street Improvements Webpage @ peoriaaz.gov
SOLID WASTE DIVISION
Aaron Redd, Solid Waste Manager
Commercial Service

- Frontload
- Roll-off
Residential Trash/Recycling Services

• Operators service 900-1100 containers per day

• Same Day Collection

• Projected Growth
Bulk Trash Collection

- Increased Service in 2016
- Acceptable Items
- Unacceptable Items
Household Hazardous Waste

- HHW Program
- Collection Methods
Can you put it in the curbside recycling bin?

City of Peoria edition

All questions pertain to being able to recycle in a Peoria bin curbside
What year did Peoria launch the comingled curbside recycling program?

A. 1995
B. 2011
C. 2009
D. 2007
What color is the Peoria curbside recycle container?

A. Tan
B. Dark Brown
C. Blue
D. Green
Which of the following cannot be recycled?

A. Milk Cartons
B. Plastic Water Bottles
C. Dog Food Bags
D. Paper Bags
How many plastic bottles do Americans go through every year?

A. 1.8 Million
B. 2.5 Million
C. 5.3 Million
D. 7.1 Million
What are the three R’s of recycling?

A. Repackage, Return, Recycle
B. Reuse, Reimagine, Recycle
C. Reuse, Repair, Recycle
D. Reduce, Reuse, Recycle
What is the name of Peoria’s Recycling Mascot?

A. Recycling Roadrunner
B. Waste Not Owl
C. Javi the Javelina
D. Super Recycle Sloth
Can a pizza box be recycled?

A. Yes
B. No
C. In part
Can you recycle any empty sports drink box and plastic wrap?

A. Yes
B. No
C. In part
Can you recycle a used paper towel?

A. Yes  
B. No  
C. In part
Approximately what percentage of solid waste is recycled in the City of Peoria?

A. 5%
B. 15%
C. 23%
D. 60%
Can you recycle a propane tank?

A. Yes
B. No
C. In part
Which of the following is sometimes recycled into fibers for carpets or clothing?

A. Paper  
B. Plastic Bottles  
C. CD’s  
D. Computers
Can yard waste be recycled?

A. Yes
B. No
C. In part
Which Item can you recycle?

A. Aluminum Can
B. Potato Chip Bag
C. Plastic grocery bag
Which item can be recycled in the City of Peoria?

A. Vegetable Peelings
B. Tree Branches
C. Aquafina Water Bottle
D. Fire Engine Toy Truck
Which item is **not** recyclable in Peoria?

A. Newspaper  
B. Junk Mail  
C. File Folders  
D. Tape
Which item can you recycle in Peoria?

A. Old Torn T-shirt
B. Laundry Detergent Plastic Bottle
C. Plastic bag full of Water Bottles
D. Latex Paint
Which item can be recycled in the City of Peoria?

A. Empty Soda Can
B. Full Water Bottle
C. Donuts
D. Computer Monitor
Which item cannot be recycled in the City of Peoria?

A. Cottage Cheese Container
B. Plastic Bags
C. Plastic Milk Jugs
Which item is not recyclable in the City of Peoria?

A. Metal Tomato Sauce Can
B. Metal Soup Can
C. Metal Brake Pads
D. Aluminum Soda Can
Can you recycle a newspaper in a plastic bag?

A. Yes
B. No
C. In part
Water Services and Public Works
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Equipment
Displays