

# PINE STRAWBERRY WATER IMPROVEMENT DISTRICT

---

FUNDING DISCUSSIONS WITH THE COMMUNITY

DECEMBER 18, 2025



# INTRODUCTIONS

---

- Cory Ellsworth, Board Chair
- Beth Pierson, Vice Chair
- Teresa Hasenwinkel, Treasurer
- Roger Childers, Secretary
- Kent Thompson, David Diggs, Brent Pruett, Board Members
- Melissa Durbin, PSWID Manager
- Paul Hendricks, EUSI Contractor

# MEETING RULES

---

- Please keep a polite and civil tone
- If you have questions, please ask. If the answer is clear and fits in the flow of the meeting, it will be addressed then. Otherwise, we will note the question and get to it in the Q&A session at the end.
- Each question will be addressed

# PRESENTATION FLOW

---

- PSWID Responsibility
- History
- Infrastructure Status
- Actions Taken
- Plans
- Funding Model Proposal

# PSWID RESPONSIBILITY

---

Sustainable water.





# PSWID RESPONSIBILITY

---

- The PSWID Board has a role as a Fiduciary and is charged with establishing policies and procedures that ensure a Business Model and Budget that provides:
  - A Safe, Adequate, Reliable Water Supply
  - System Sustainability
  - Financial Viability
  - Efficiency and Affordably

# HISTORY

---

How we got here.



# HISTORY

---

- There were various small water systems in Pine and Strawberry for decades
- **Pine Water Company** was established in the early 1980s. It served the community for several decades but faced significant challenges due to inadequate infrastructure investment and reliance on limited water sources.
- In 1989, the Arizona Corporation Commission imposed a total moratorium on private hookups.
- In response to these challenges, the Pine Strawberry Water Improvement District (PSWID) was established by Gila County in 1996.
- Through time, PSWID took over the local water system to address the community's water needs more effectively.
- PSWID also brought several systems together, inheriting aging and disparate water companies, wells, and infrastructure, including pumps and storage tanks, which had evolved over decades with varying levels of quality and professionalism.



# INFRASTRUCTURE STATUS

---

PSWID has varied pipes in terms of age and type.



# INFRASTRUCTURE STATUS

---

- Since the records of the various systems and companies are spotty, we don't know precisely what is in the ground and what shape it is in.
- We do know what the dominant products were throughout the decades. We know that current PSWID infrastructure is mostly:
  - Galvanized steel (20-50 year useful life)
  - Copper (40—60 years), and
  - Early plastics (ABS/PE/PVC) (40 years).

# INFRASTRUCTURE STATUS

---

- The PSWID system includes:
- 72 miles of underground lines, mostly older as noted
- 23 water wells (18 owned and 5 under water-sharing agreements)
- 22 water storage tanks, and
- Various system isolation valves and pressure-reducing valves

# INFRASTRUCTURE STATUS

---

- What are the signs that infrastructure needs repair or upgrade?
  - Water loss (the difference between water pumped and water consumed by end users) is a good indicator. Typical water loss for a well-maintained rural system is 10-20%. For older or poorly maintained systems it is 20-40% and can go even higher. Factors contributing to water loss (in order of impact) are:
    - Leaks (older pipes)
    - Meter issues - aging or poorly calibrated meters, and
    - Unauthorized consumption (unauthorized connections or bypasses)



# INFRASTRUCTURE STATUS

---

- Based on the previous eight years of data (2017-2024 calendar years), PSWID averages 29% water loss, placing it in the middle of the “older or poorly maintained systems” category.
- While meters and unauthorized water use are a source of constant vigilance by the District staff, the heart of the issue is the quality of the infrastructure.
- *Summary: The system needs improvements.*

# ACTIONS TAKEN

---

Doing nothing was not an option, considering the responsibility of PSWID



# ACTIONS TAKEN

---

- In 2016 PSWID moved to begin replacement of the oldest and worst in-ground water lines using the known frequency of leaks and breaks as their guide.
- Based upon recent water line replacements projects, replacing a mile of in-ground water line costs approximately \$1M.
- Most water companies, including PSWID, do not have the ability or rate base to replace aging infrastructure without the use of loans and grants.
- The Board worked with government entities created specifically to help rural companies with low-interest loans or grants (USDA at the federal level and WIFA at the state level).

# ACTIONS TAKEN

---

- To extend low-interest loans (1-1.5% interest, payable over 40 years) and grants, the lenders require a revenue model which guarantees the rural water company's ability to repay the loans over time.
- Prior to 2016, PSWID's revenue model was to bill customers based on usage with no significant base fee.
- Rates were enough to keep the water flowing but it was not adequate to fund line upgrades and replacement of aging systems.
- At the same time, water usage in the community continued to increase year over year, adding pressure to act.

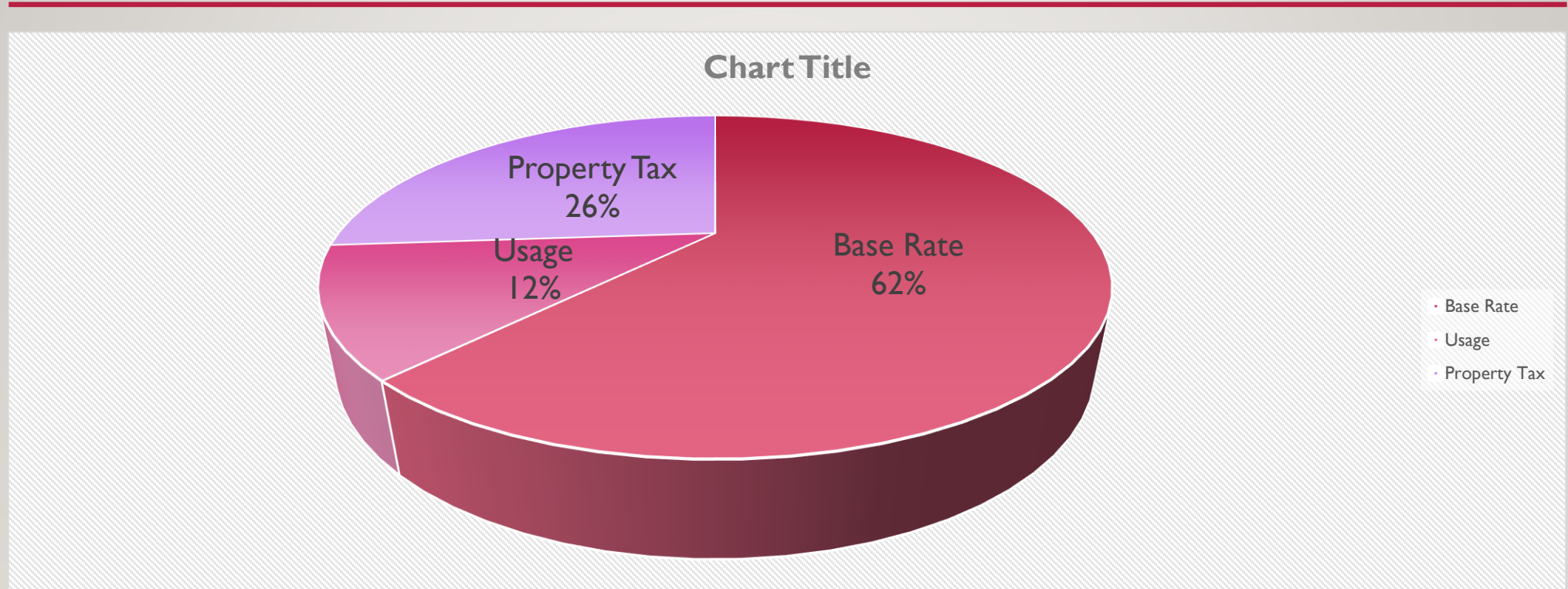


# ACTIONS TAKEN

---

- PSWID gets its funding from the following sources:
  - Base rate (fixed fee to each household that receives water from PSWID)
  - Water usage rates (variable fee based on water usage)
  - Fees (ala carte charges for one-time services)
  - Grants from State and Federal agencies. and
  - Taxes (administered by the county).
- As part of the WIFA and USDA requirements, PSWID was asked to change the revenue structure by instituting a significant base fee and altering usage rates.

# PIE CHART OF REVENUE SOURCES



# ACTIONS TAKEN

---

- The implemented changes resulted in increases to the water bill for a low-usage or seasonal homeowner in Pine or Strawberry.
- The Board was mindful of the increases but knew the system must be upgraded and the lending organizations required such moves.
- The result was a \$24M loan facility at 1-1.5% as well as a \$1M grant. It was the cheapest possible money and a needed strategic move.

# ACTIONS TAKEN

---

- Since 2016 PSWID has worked with WIFA and USDA and contractors to replace 17 miles of line of our 72 miles of infrastructure (23% of the system). The most leak-prone sections were prioritized.
- PSWID is just finishing up the last pieces of this aggressive project. The new infrastructure has a longer useful life than the previous generation and has been carefully documented. Water loss percent shows signs of improvement in 2025.
- In the meantime, with growing water demand (impacted also by Covid), and known multi-tenant construction projects, the PSWID Board implemented a moratorium on new connections in April 2021 in order to secure water availability. Note: The moratorium was revised in September 2023 to allow for 5 new meters each month.



# PLANS

---

We have more to do.



# PLANS

---

- PSWID is proposing more updates to the revenue structure, starting in the summer of 2026. Why?
  - Because there are still 55 miles of unimproved, aging lines.
  - Because leaks and water loss continue (despite the 17 miles of new line and slight improvement in water loss, our loss rates are still higher than we want)
  - But primarily because any water system should have a process for sustainably replacing its infrastructure over the useful life of the assets.

# PLANS

---

- The average age of the remaining 55 miles of in-ground pipe is over 30 years old. PSWID plans to perform spot tests to check for quality of existing line in addition to paying attention to the regularity of leaks and breaks.
- It is wise, even necessary, to have a plan to replace those miles of line.
- The PSWID Board will have to ensure a sustainable revenue plan that allows for the replacement of all lines over the course of their useful lives.
- Such a plan will also be a prerequisite to any lending organizations.

# PLANS

---

- We want to improve our own process and efficiencies
- Those kinds of improvements are underway and include more pre-emptive servicing of infrastructure, a more logical flow of water to maximize gravity flow and minimize pressure spots in the line.
- While difficult to predict financial outcomes of these initiatives, PSWID is assuming small gains in the financial analysis.



# FUNDING MODEL

---

Proposed changes.



# FUNDING MODEL PROPOSAL

---

- PSWID has worked with the Rural Community Assistance Corporation (RCAC) to assess our financial viability and needs.
- The RCAC update to the water rate is presented for consideration to meet our fiduciary responsibility.
- RCAC works extensively with rural Arizona communities, including **water improvement districts, sanitation districts, and housing nonprofits**, to Provide **low-interest loans** for infrastructure projects (like wells, storage tanks, and distribution lines); Offer **technical assistance** on water system management, operations, and compliance with **ADEQ** and **EPA** standards; Help communities prepare **funding applications** for programs such as USDA Rural Development, **WIFA** (Water Infrastructure Finance Authority of Arizona), and CDBG; and Provide **training and capacity building** for board members and operators.

# FUNDING MODEL PROPOSAL

---

- PSWID and RCAC did a deep dive on the assets that make up the distribution system.
  - There is \$86M of infrastructure between pipes (90%), Tanks (6%) and other (4%) in the current system
  - Based on the average lifetime of each piece of equipment, \$1.8M (2025 dollars) needs to be spent each year to replace expiring equipment
  - The current PSWID budget has \$1.04M allocated to this effort, leaving a ~\$800K gap.
- How do we fill that gap?
  - Value engineering – fancy way of saying get creative to extend the life of existing equipment
  - State grants
  - Increasing PSWID rates to community (base rate and/or usage rates and/or taxes)

# FUNDING MODEL PROPOSAL

---

- One Scenario:
- Value engineering
  - Still a work in progress as our new Manager works to improve operations
  - Expectation is ~\$200K annually of operating savings
- State grants
  - Pine no longer qualifies a low-income community, but Strawberry does, so this is more difficult now
  - Expectation is ~\$200K annually (on average) of State/Federal grants
- Increasing PSWID rates to community (base rate, usage rate, taxes)
  - \$400K (in 2025 dollars) rate increases
  - 3% per year expected inflation over the next five years



# FUNDING MODEL PROPOSAL

---

- Summary:
  - We know the size of the financial challenge - \$800,000 per year
  - We know the levers available to us – value engineering, grants, customer rates
  - We are continuing to refine the numbers and work on which revenue sources
  - We will provide a concrete proposal and plan in January
- The increased costs will not be small. We know that. Candidly, we are all paying the price, not only for aging infrastructure but also for a lack of foresight to plan for the future during the years 1980-2016.
- PSWID is working toward a time when our infrastructure is known, more current, and has funding to continue to keep it that way.

# Q & A

---

What questions do you have?



# BACK UP SLIDES

---

Supporting information.



# TAX HISTORY

---

- Year and percent
- 2007 - .1376
- 2008 - .1395
- 2009 - .4144
- 2010 - 2011 - .3558
- 2012- .5501
- 2013- 1.2638
- 2014- 1.0596
- 2015- 1.0481
- 2016 - present - 1.3981
- Proposed 2026 – ?????



# ONE EXAMPLE OF CURRENT TAXES

---

- PSWID \$598 – 9.2%
- Gila Country \$1,792 – 27.5%
- Schools \$1,955 – 30.2%
- Community College \$387 – 6.0%
- PS Fire \$1,540 – 23.4%. Jumped 35% from 2024 to 2025. New prop would add ~\$150
- Gila County Library \$104 – 1.6%
- Total \$6,483.

# IMPACT ON PROPOSED TAXES

---

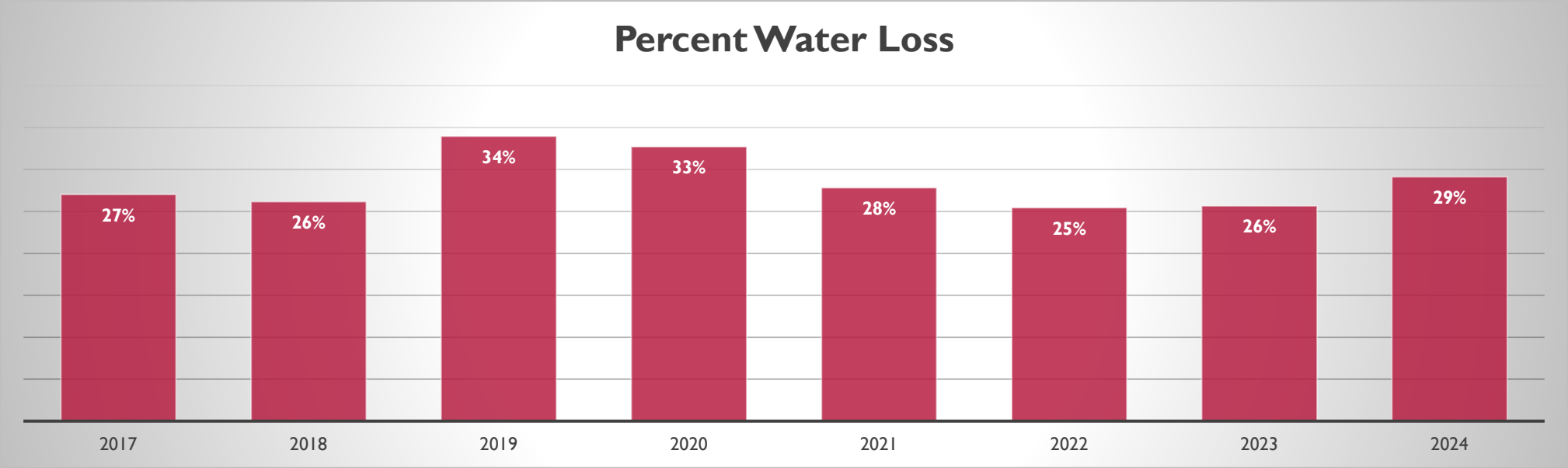
- In the previous example, if the tax rate changed from 1.3981 to 1.8942, this person's taxes related to PWSID would increase by \$212 from \$598 to \$810 or the equivalent of \$18/month. The overall taxes would increase from \$6,482 to \$6,695, an increase of 3.3%

# USEFUL LIFE OF IN-GROUND PRODUCTS

---

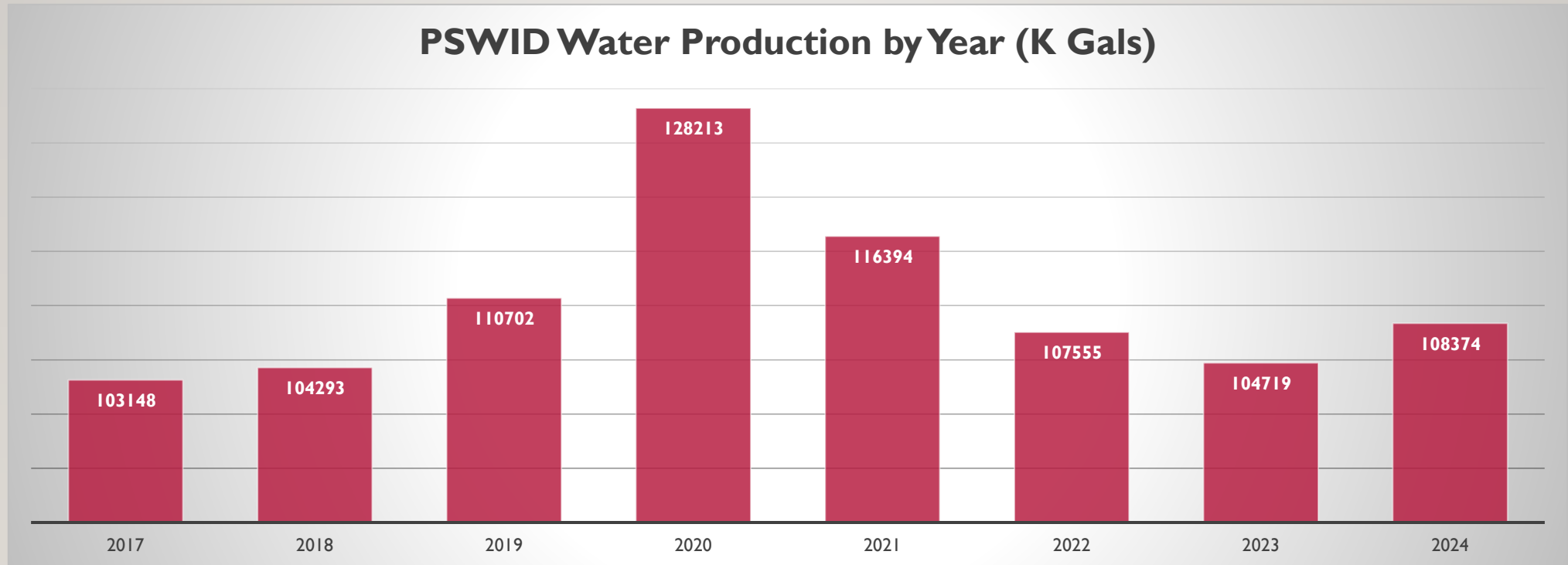
- Newer products have longer service life than previous generation of pipe Distribution mains, as follows:
- PVC, HDPE, Ductile iron – 50-75 years
- Copper, PE, PVC - 40-60 years.

# WATER LOSS PERCENTAGE





# WATER PRODUCTION



# WATER USAGE

