Call to Order
Mayor Williams called the Water, Wastewater, Infrastructure and Sustainability Subcommittee meeting to order at 9:08 a.m., with Vice Mayor Waring and Councilwoman Vania Guevara present. Councilwoman Stark arrived at 9:13 a.m.

Call to the Public
None

1. For Approval or Correction, the Minutes of the Water, Wastewater, Infrastructure and Sustainability Subcommittee Meeting on Oct. 3, 2018
Vice Mayor Waring made a motion to approve the minutes of the Oct. 3, 2018 Water, Wastewater, Infrastructure and Sustainability Subcommittee. Councilwoman Guevara seconded the motion which passed unanimously, 3-0.

Items 2-3 were for consent action. No presentations were planned and staff was available to answer questions.

2. Intergovernmental Agreement with Flood Control District of Maricopa County and the City of Scottsdale for the Rawhide Wash Project
Vice Mayor Waring made a motion to approve consent item 2. Councilwoman Guevara seconded the motion, which passed unanimously 3-0.

3. Solid Waste Cost of Service Study
Councilwoman Guevara made a motion to approve consent item 3. Mayor Williams seconded the motion, which passed 2-1.
4. Solid Waste Fleet Asset Management Program
Public Works Director Ginger Spencer introduced the item, as well as fellow presenters Assistant Public Works Director Joe Giudice and Deputy Public Works Director Keith Carbajal.

Councilwoman Stark arrived at 9:13 a.m.

Mr. Giudice presented solid waste fleet and asset management, explaining the importance of preventative vehicle maintenance, repair and replacement. He outlined market and technology changes affecting solid waste management, as well as future population growth considerations.

Mr. Carbajal detailed solid waste vehicle life-cycles, the current fleet age, and considerations related to preventative maintenance, warranty repairs, normal wear and tear, non-warranty failures and major component failures. He described types of solid waste vehicles and their cost, as well as the types of vehicle currently due for repair.

Ms. Spencer stated the Public Works Department will work with the Finance Department to strategize on ways to address the condition of the fleet.

Councilwoman Stark asked whether staff has considered increasing impact fees as a source of revenue for the solid waste fleet.

Ms. Spencer clarified impact fees have not previously been used to purchase fleet vehicles, but could be a future consideration.

5. Air Quality Ozone Update
Environmental Programs Administrator Nancy Allen introduced the item, as well as fellow presenter Director of Arizona Department of Environmental Quality Misael Cabrera.

Ms. Allen presented United States Environmental Protection Agency (EPA) ground-level ozone federal health standards, local ozone trends, and the City’s recent history of moderate nonattainment. She explained two recent exceptional events which occurred due to Arizona and California wild fires, which the EPA may consider in order for the City to maintain moderate nonattainment. Ms. Allen stressed, however, if both events are not accepted as exceptional events beyond human control, the City could be reclassified as being in serious nonattainment.

Ms. Allen detailed potential challenges in sufficiently reducing carbon emissions in order to offset emissions both within and beyond human control throughout the City. She outlined possible economic development impacts related to regulation, expansion and new locations of emissions-producing facilities.
Mayor Williams asked how emissions offsets are calculated.

Mr. Cabrera explained difficulties associated with calculating tons of offset. He stressed the importance of recent Maricopa Association of Governments (MAG) presentations to the EPA related to the two exceptional events. Mr. Cabrera stated the City will find out by the end of November whether the events will be accepted by the EPA as exceptional. He continued by stating in January 2019, the City will find out whether Phoenix is in nonattainment due to lack of offset.

Mr. Cabrera detailed the City partnership with the Arizona Department of Environmental Quality (ADEQ), the Air Quality Ozone Coalition.

Ms. Allen outlined City and regional programs aimed at controlling ozone.

Mayor Williams asked whether the City of Phoenix, Maricopa County or State of Arizona has authority to regulate emissions.

Mr. Cabrera clarified Maricopa County has the authority to regulate emissions.

6. Water Pipeline Asset Management Update

Water Services Assistant Director Troy Hayes introduced item 6, as well as Deputy Water Services Director Darlene Helm.

Mr. Hayes presented capital needs related to water distribution pipeline systems. He explained types of pipelines, aging infrastructure challenges and population growth considerations. Mr. Hayes stressed the importance of proactive repair and replacement.

Ms. Helm explained asset-based management systems designed to inspect and identify life expectancies of existing pipelines, recommending sections for repair and replacement. She detailed common replacement timelines based on the material and age of a pipeline.

Ms. Helm stressed the importance of inspecting large water mains, which pose potential catastrophic property damage and road closures. She explained pipeline replacement considerations and recent City investments in rehabilitation and replacement of water pipelines.

Councilwoman Stark requested an explanation of how large areas of North Phoenix development built around the same time are inspected.

Mr. Hayes explained large areas are broken down into smaller neighborhoods for inspection and analysis used to identify likelihood of failures.
Mayor Williams requested clarification on City policies related to potential soil reactions to pipeline materials. She outlined recent development issues in North Phoenix causing property damage.

Mr. Hayes stated pipeline materials are analyzed for applications in certain types of soil.

7. Groundwater Well Management Update
Water Services Assistant Director Troy Hayes introduced item 7, as well as fellow presenter Deputy Water Services Director Darlene Helm.

Mr. Hayes presented on aquifer storage and recovery well systems, recovery of groundwater processes, and current availability of stored groundwater.

Ms. Helm explained increased needs for City-owned and drilled wells, as well as partnerships to exchange banked groundwater and access regional well systems. She detailed locations of current wells throughout the City and proposed locations of new wells, either presently being drilled or planned for future expansion of well systems.

Mayor Williams asked about the size of construction sites, citing large construction materials at the sites currently under construction.

Mr. Hayes clarified construction materials will be removed from well sites once construction is complete, leaving minimal long-term footprints at well sites.

Vice Mayor Waring asked how many aquifer recharge storage and recovery wells, spreading basins, and groundwater savings facilities are being built. He requested clarification on the size and locations of spreading basins.

Mr. Hayes clarified facilities are being built to supplement existing infrastructure with access to groundwater and aquifers. He stated spreading basins are the size of several football fields, and are typically located in rural areas, over aquifers.

Call to the Public
None

Future Agenda Items
Councilwoman Stark requested an update on solid waste impact fees.

Adjournment
Mayor Williams adjourned the meeting at 10:06 a.m.

Respectfully submitted,
Alexa Martin
Management Intern
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<tr>
<td>Richard Rea</td>
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<td>Joe Gudinere</td>
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<td>Public Works</td>
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<td>Keith Caronel</td>
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<td>Michael Carbajal</td>
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<td>Darleen Helm</td>
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<td>A. Husband</td>
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<tr>
<td>Tim Franklin</td>
<td>Air Quality Dir.</td>
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