Follow up questions from the Environmental Planning Sub Committee

1. *Following up on Carbon Goals: Would JEA welcome and be willing to collaborate on setting a target deadline for zero emissions and to become carbon neutral with the Duval Co. through the City Council? While we think that JEA should have the ability to proactively set goals, it seems that maybe the city should be pursuing more community-wide commitments. We just want to make sure JEA would not be actively against that idea and lobby against setting such goals.*

JEA has proactively implemented initiatives that are projected to result in Carbon emission attributable to JEA by CY2023 at levels by 60% lower than in CY2007. Yes, JEA welcomes and will collaborate on community wide objectives to continue to reduce carbon emissions and develop carbon neutral goals.

1. *Following up on CM Carlucci’s comment on electrifying buses: I think Jacksonville, with its many municipal authorities, is actually perfectly positioned to leverage cross-agency partnerships in pursuing a transformative clean energy and transportation transition. There have been several*[*examples around the country*](https://urldefense.com/v3/__https%3A/www.apta.com/research-technical-resources/aptau/learning-and-development/webinars/committee-webinars/technical-services-and-innovation-webinars/transit-agency-utility-partnerships-case-studies-from-denver-minneapolis-portland/__;!!PTbBrQ!MqM76s-dMBcetARhggeLgQI3ug5LFvTd9F-_waQypfHyCVeXRzQgf2MeWrc$)*where utilities have teamed up with transit agencies and school districts to provide financing for electric buses. Today, we find that transit agencies cannot meet the higher upfront costs associated with electric buses and utilities are under increasing pressure from a rise in energy efficiency which is squeezing future sales revenues. However, a fleet of electric buses with their huge power needs can provide a big new customer for a utility while still substantially reducing the “fuel" costs of the transit provider. Has JEA talked with JTA and/or the school board about collaborating on a bus electrification program to solve these problems with a win-win solution?*

JEA is aware that JTA will be bringing 2 electric buses and charging stations into its fleet supported by a Federal grant in the near future.   JEA will certainly want to engage with JTA on how well these 2 initial electric vehicles are incorporated into their diversified fleet, and look at ways to grow electrification of the transportation sector, and will communicate with DCPS.

1. *Here is the data on the acceptable CO2 depository areas that are in Florida or adjacent to Florida.  DA-2 is bounded on the south by a line that probably is along A1A/SR-200, Atlantic Ocean on the East, Savannah River on the North and maybe 301 on the West.   DA-2 should hold up to 12.8 gigs-tons of CO2.*

JEA is embarking on an Integrated Resource Plan (IRP) that will consider all avenues of future generation in terms of technical, economical feasibility along with sustainability goals to minimize emissions.   Carbon Capture Sequestration is currently not an obvious leading approach, however JEA will be engaging nationally leading experts in the IRP and will consider viable options.

1. *If the U.S. rejoined the Paris Climate Agreement, how would that affect JEA?*

The central aim of the Paris Agreement is to strengthen global response to the threat of climate change. Countries participating in the agreement established laws, regulations and rules that coincided and aligned with their own national objectives. JEA's current strategy for generating electricity adheres to national objectives and did not change when the U.S. withdrew from the Paris Agreement. Therefore, if the U.S. rejoined the agreement, JEA would continue its current strategy of carbon emissions reduction. During the past two years JEA decreased the utility’s solid fuel use with the decommissioning of the coal-fired St. Johns River Power Park (SJRPP) and Plant Scherer. JEA continues on this path through use of new technology and more economical energy source opportunities such as natural gas and renewables.

1. *Given the population increase and the expectation of more storms, both water and wind events, the vulnerability of our above ground utilities places Jacksonville in the category of 'extremely vulnerable'. What can JEA do to partner with COJ and the community to more aggressively replace our more vulnerable above ground utilities? An additional benefit would be to plant more canopy trees without the ongoing maintenance of trimming.  Canopy trees have the added benefit of stormwater uptake and heat mitigation.*

Customers interested in converting electrical lines from overhead to underground in their neighborhood may do so by following a special assessment process. The program that provides a means for neighborhoods to finance overhead to underground conversion can be found in Jacksonville’s Ordinance Code - [Title XXI - Public Works and Utilities](https://urldefense.com/v3/__https%3A/library.municode.com/fl/jacksonville/codes/code_of_ordinances?nodeId=TITXXIPUWOUT__;!!PTbBrQ!IgFh-qEOVpvrY6XX8vm3PEwblRtVX53zDAJ51neQC1uYeb05JfoPAImTSbzO$) - Chapter 714 - Neighborhood Assessment Programs - Part 3: Underground Power and Communications Program Area. JEA provides specific guidelines as well as question and answers for overhead to underground conversion on the JEA.com website at JEA.com/[Engineering and Construction](https://www.jea.com/Engineering_and_Construction/)/[Community-Initiated Projects](https://www.jea.com/Engineering_and_Construction/Community-Initiated_Projects/).

1. *Stormwater: Can we just get a general overview of how JEA is involved in dealing with stormwater in the city vs COJ Public Works? And does JEA provide any financial incentives or disincentives for property owners to have more pervious surfaces on their property? If not, have they looked into it?*[*DC Water has a program*](https://urldefense.com/v3/__https%3A/www.dcwater.com/impervious-area-charge__;!!PTbBrQ!MqM76s-dMBcetARhggeLgQI3ug5LFvTd9F-_waQypfHyCVeXRzQgbTr_GdA$)*which charges customers a fee for the amount of impervious area they have on their property in order to fairly charge those who most stress the system and disincentivize tons of extra pavement in the city. Win-win for water runoff and urban heat island. Other communities (water/utility companies) have incentive programs to encourage home and commercial owners to replace grass with xeriscaping to reduce water usage.*

The stormwater system is managed by the City’s Stormwater Management Utility; JEA has no authority and is not involved in its management. Unlike DC Water, in which one-third of their wastewater flows is served by a combined sewer system (where both wastewater and stormwater flow in one piping system), JEA maintains a wastewater conveyance system separate from the City’s stormwater system.

JEA currently does not have an incentive program for xeriscaping, but soon will be introducing a Demand Side Management program to help reduce water usage as part of our Integrated Water Resource Program.

1. *Below is the study on septic tank replacement for Miami-Dade. We understand that the septic phase-out plan needs to be coordinated with the city and homeowners, but how can JEA help put together a more aggressive phase-out plan using the best, most cost effective approaches. At the current rate, it will take many decades to replace the 65,000 septic tanks. Is JEA prioritizing the most vulnerable based on age and sea/river level rise as well as extreme rain events?*

Through JEA’s Innovative Wastewater Treatment Program (IWTP), JEA is researching innovative approaches in technology and construction methods that aim to reduce costs and construction duration. The matrix that is currently used by the City and JEA to prioritize the septic tank phase-out areas does not include sea/river level rise as a parameter. However, JEA is including sea level rise impact in its ongoing preliminary assessment. This JEA IWTP assessment indicates 21 of the 32 remaining priority areas are vulnerable to sea level rise (see attached summary). Associated maps for each remaining STPO priority area showing NOAA 2060 predicted sea level rise (3 ft) can be downloaded from here: [https://hazenandsawyer.filegenius.com/downloadPublic/4dah7veclg9g4ky](https://urldefense.com/v3/__https%3A/hazenandsawyer.filegenius.com/downloadPublic/4dah7veclg9g4ky__;!!PTbBrQ!IQRmuyuiH2A303yD6RiBVYzDTMyd2bnawcD_7n2HhWMTrdCahQDT6eDNwBc$)

1. *In flood prone septic tank areas that can’t be served by gravity sewer, has JEA found any low pressure systems or innovative on-site systems that provide protection from sanitary sewer overflows or significant damage during a flood event and can quickly return to proper operation post-flood?*

JEA has found low pressure systems such as the E-One DH071-63 (attached) that are intended to be watertight during a flood situation, altough only a few have been installed in Florida. All sewer collection systems will struggle during a flood event. Low pressure and vacuum systems should quickly return to proper operation following the surficial groundwater receding to below the vacuum pit or low pressure vault if damage does not occur to the piping.

