



## CONGAREE RIVER PROJECT

COLUMBIA, SOUTH CAROLINA

### QUARTERLY REPORT – FIRST QUARTER 2019

#### SIGNIFICANT ACTIVITIES/MILESTONES

<u>Date</u>	<u>Milestone/Event</u>
January 17, 2019	SCE&G sent via email to the USACE (cc'd SCDHEC), a completed pre-application meeting request form and the Conceptual Design for the MRA in preparation of the January 23, 2019 meeting.
January 22, 2019	SCE&G met with Charlie Thompson to discuss and review updated plans for future development on the property adjacent to the Congaree River area of concern. The meeting objective was to discuss access points and infrastructure that would be needed to support the stakeholder-developed MRA.
January 23, 2019	SCE&G, in conjunction with SCDHEC, attended a pre-application meeting with the USACE to discuss revised project plans that SCDHEC had approved (i.e. the Conceptual Plan for the MRA) and various related permit requirements (e.g. plans, engineering studies, computer models, new approaches to previously identified risks, etc.). Numerous members of the USACE, SCDHEC and SCE&G were in attendance. The Corps discussed some of the modeling, analyses, studies and plans that would be required for a complete application. They also discussed the role of DHEC as the authorizing State Agency to be able to move the permit process forward. They advised SCE&G that any and all landside activities that are a part of the project and would require a Corps permit must be included in a complete application (e.g. the planned bridge crossing of Kinsler Creek).
January 30, 2019	USACE's email to SCDHEC regarding the MOA and Support Agreement regarding oversight of the UXO by the Huntsville office which will expire in August 2019. The Corps recommended that SCE&G should continue to "work through the planning and permitting process to develop the full set of plans and permits needed to execute the proposed remediation project, after which the oversight role that is intended for Huntsville to support can be clearly defined and funded. A new MOA executed closer to physical start, if limited to 5 years duration, will also support the projected remediation over multiple years." The Corps intends to return all remaining funds to DHEC (which could be used for the future MOA).
February 7, 2019	SCDHEC provided SCE&G with concurrence of the Conceptual Plan for the MRA (dated 12/12/18) with attached documentation entitled "Declaration of Support by Stakeholders". Henceforth, the plan will be referred to as the "Stakeholder MRA Plan".

- February 8, 2019 SCE&G provided a tentative schedule to the USACE (cc'd SCDHEC) for submitting a completed application during the 4<sup>th</sup> quarter of 2019. SCE&G anticipates additional meetings to discuss various elements of the submittal, prior to final application. SCE&G also provided an update on the status of the engineering work to be completed to address the initial FEMA requirements.
- February 25, 2019 SCE&G provided SCDHEC with an update on the engineering progress related to the cofferdam and the FEMA-Required backwater analysis and 100-year storm No-Rise Certification and the tentative schedule for submittal of the USACE permit during the 4<sup>th</sup> quarter of 2019.
- March 5, 2019 SCE&G authorized renewal of the underwater recovery license with the State underwater archaeologist.
- March 8, 2019 USACE provided comments to SCE&G email dated February 8, 2019 regarding the potential unexploded ordnance (UXO) anomalies oversight, FEMA No Rise Certification, related hydraulic modeling (with validation requirements) and Flood Plain Coordinator communication requirements.
- It was noted that the Corps does not approve No Impact/No-Rise Certification. Approval of No Impact/No-Rise Certification is FEMA's role that has been delegated to the local Floodplain Managers. The next steps must include seeking written concurrence from the local flood plain coordinators and evaluating lower flow conditions (i.e. a lower flow sensitivity study to examine the effects of the Stakeholder MRA Plan on the western shore line of the river). The Corps noted that jurisdictions on both sides of the river would need to be involved in the approval/concurrence of No Impact/No-Rise Certification.
- The Corps also emphasized that the plans should address what would occur with a large flood event. For example, provide a remedial plan for cleanup in the event that the cofferdam would overtop, and cofferdam material would be carried downstream. If the cofferdam is designed with a larger footprint and with larger rock to enable overtopping without moving cofferdam material downstream, it is likely that more channel flow would be obstructed with such a design, which would need to be addressed in the application and hydraulic models.
- March 14, 2019 SCE&G responded to the USACE comments provided on March 8, 2019 regarding the FEMA No Rise Certification, related hydraulic modeling and Flood Plain Coordinator communication requirements.
- SCE&G advised the USACE (cc'd SCDHEC) that WSP was selected to provide the hydrogeologic and hydraulic engineering support for this project and they had invested several months developing the FEMA-based hydraulic model. WSP had validated the modifications to the same water surface elevations as the FEMA model and that SCE&G anticipates communicating with both the Lexington and Richland County Flood Plain Coordinators. We will also communicate with the

City of Columbia, as was requested during our previous efforts by the Richland County Flood Plain Coordinators.

The design and dimensions of the cofferdam will be very robust and include conservative margins of safety. SCE&G previously submitted a “Stability Analysis” for the original cofferdam approach and we will re-evaluate and update this analysis for the stakeholder-developed MRA to ensure that the revised cofferdam and its material will remain stable during a large flood event.

- March 18-21, 2019 SCE&G attempted to complete the field work for the fourth surface water sampling event during the week of March 18, 2019. Due to high water level conditions within the river, the work was postponed due to safety concerns for the sampling team. The sampling work will be rescheduled to be completed in the second quarter 2019.
- March 20, 2019 SCE&G/WSP completed the first draft of 2019 Congaree River Hydraulic Analysis Report Memo (aka 100-Year No-Rise Certification).
- This stage of work started with the latest model of the river segment from FEMA, incorporated the recently obtained topographic and bathymetric survey information obtained by SCE&G, created a current conditions model, and calibrated the model using data from the nearby USGS river level gauge. Following model calibration, the proposed cofferdams (Area 1 and Area 2, evaluated separately) were incorporated into the model to evaluate their effect on water surface elevations. Incremental increases in water elevation were evaluated within the project area for the higher flow (10, 50 and 100-year flood) conditions. The project is required to not cause an increase in the surface water elevation for the 100-year flood event. Assuming that a 0.0 feet change (no-rise) is supported by the hydraulic analysis and supporting calculations, a no rise certification will be prepared along with hydraulic analysis documentation for review by the USACE.
- March 25, 2019 DHEC conducted a meeting with SCE&G, Congaree Riverkeeper and the adjacent property owner to review and discuss the up-coming April 2, 2019 public meeting.
- March 28, 2019 SCE&G conducted a status update meeting with the residents of City Club Condominiums which are directly adjacent to the Congaree River area of concern.