MEETING NOTES

SOUTH CAROLINA ELECTRIC & GAS COMPANY Fisheries TWC Meeting

September 29, 2015

Final KDM 11-10-15

ATTENDEES:

Bill Argentieri (SCE&G) Ray Ammarell (SCE&G) Randy Mahan (SCE&G) Steve Summer (SCANA) Brandon Stutts (SCANA) Caleb Gaston (SCANA) Byron Hamstead (USFWS) Dick Christie (SCDNR) Bill Marshall (SCDNR) Ron Ahle (SCDNR) Henry Mealing (Kleinschmidt) Jordan Johnson (Kleinschmidt) Kelly Miller (Kleinschmidt)

These notes serve as a summary of the major points presented during the meeting and are not intended to be a transcript or analysis of the meeting.

The meeting opened with introductions, a safety review, and an agenda review. Henry then discussed the goals of the Reservoir Fluctuation Study Plan pertinent to Monticello Reservoir. The goals include improving habitat along the shoreline below the 420' contour and developing recommendations for fish attractors, or aquatic habitat structures, throughout the reservoir.

Dick said there are currently no structures around Monticello to improve spawning. Henry showed pictures of a variety of different fish attractors that are commonly used. SCDNR would like to develop an adaptive management plan for installing lasting fish enhancement structures around the reservoir.

The group discussed installing structures in shallow water for spawning/fry rearing and in deeper water to attract fish for fishermen. The structures in the shallow water would need to be deep enough to prevent exposure during max drawdowns. Markers would be installed where necessary for navigation purposes. Approximately four deep water attractors are already installed in the Recreation Lake.

The group discussed how SCE&G and SCDNR could work together to get these structures installed, including permits and funding. SCE&G would work with SCDNR to install structures through an Army Corps of Engineers' Programmatic Agreement SCDNR is currently working toward securing. SCE&G could create a fund for SCDNR to use as needed for maintaining or adding enhancement structures during the license. Bill said that this could be included as part of the PME measures and included in the License Application.

Byron asked if hydro-seeding was an option around the reservoir. Henry said that can work if the substrates are exposed long enough for plants to grow. This may not be an option around



Monticello because of daily fluctuations. However, aquatic habitat structures installed underwater would encourage algae growth. In the past, Cypress trees have been planted around Parr and Monticello reservoirs. Dick said button bushes might also be good to plant as shoreline enhancements.

The group reviewed a map of Monticello Reservoir and identified areas where enhancements could be installed. Brandon pointed out that shallow water structures shouldn't be installed around certain islands, since people like to park their boats in these shallow areas while recreating. Structures will need to be installed below 420.5', so that they remain submerged during fluctuations. The TWC agreed to focus on installing structures aimed at benefitting Centrarchids, and possibly Ictalurids. A side benefit of spawning/gravel areas is for freshwater mussel use.

Steve said that these enhancements may not increase population levels in the reservoir. Dick said that it will be difficult to measure, and if it is measured, negative results shouldn't put an end to the enhancement efforts. Is productivity increased, or are fish just drawn to these attractors from other areas? Dick said that although it isn't necessarily proven that these aquatic habitat structures increase fish populations, they do enhance fishing recreation and are supported by fishermen, and that is important.

During the next bi-annual shoreline erosion inspection on Monticello, Brandon or Caleb will scope out areas that will be good for installation of the aquatic habitat structures. Ron said that spawning and fry fish attractors should be installed in the same areas. Cove areas are good spots, because they are generally protected from high winds. If an area is identified as already providing good spawning habitat, maybe fry protection/nursery habitat should be installed nearby.

The group decided to develop a matrix that identifies sites where structures could be installed, what type of structure and how much should be installed, and how much it will cost to install and maintain each site. A strawman will also be developed for an Adaptive Enhancement Plan, that will identify where to start and how much to spend over the life of the license. An example of the matrix is included below.

Area	Spawning Area (ft ²)	Fry Area (ft ²)	Attractors (ft ²)
1	2,000	1,000	3,000
2	75	50	NA
3	1000	500	1,500
4	250	200	NA
5	NA	NA	2,000

The group discussed catfish habitat enhancement. Only certain species should be targeted, such as flat bullheads and snail bullheads. The group agreed that enhancement for Centrarchids will be the main focus of the TWC.

The group then shifted focus to Parr Reservoir. Jordan showed the group a map with the two foot contours that were captured by aerial photography. The group discussed ways to quantify what types of habitat are located in each contour. Everyone agreed to divide the reservoir into zones of similar habitat. A grid will be overlaid on each zone, and a random 10% of the grid will be



classified by habitat type. The classification will be applied to the entire zone area for each 2' contour.

Action items from this meeting are listed below.

ACTION ITEMS:

- Brandon and/or Caleb will collect information along Monticello Reservoir shoreline and identify and verify possible places to install aquatic habitat structures.
- Kleinschmidt will develop a matrix for aquatic habitat structures in Monticello Reservoir, and a strawman for an Adaptive Enhancement Plan for Monticello Reservoir, and send to TWC for review.
- Kleinschmidt will divide Parr Reservoir into zones for habitat evaluation, and send to TWC for review completed and sent to TWC on 10-05-2015 for review.
- Kleinschmidt will classify substrate habitats within 2' contours along Parr Reservoir shoreline for each zone.

