

MEETING NOTES

SOUTH CAROLINA ELECTRIC & GAS COMPANY Rare, Threatened and Endangered Species TWC Meeting

May 16, 2013

Final KDM 06-17-13

ATTENDEES:

Bill Marshall (SCDNR)
David Eargle (SCDHEC)
Justin Lewandowski (SCDNR)
Shane Boring (Kleinschmidt)
Alan Stuart (Kleinschmidt)
Kelly Miller (Kleinschmidt)
Gerrit Jobsis (American Rivers)
Vivianne Vejdani (SCDNR)

Bill Argentieri (SCE&G)
Milton Quattlebaum (SCANA)
Steve Summer (SCANA)
Randy Mahan (SCANA)
Karla Reece (NOAA) via conference call
Bill Stangler (Congaree Riverkeeper)
Sam Stokes (SCDNR)

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

Alan opens the meeting with introductions and a review of the agenda. Alan explains that Tom McCoy of the USFWS will not be able to join us for the meeting, but did send a list from the USFWS of rare, threatened and endangered species from Newberry and Fairfield Counties. Steve asks why blueback herring is on the USFWS list for Fairfield County, and Alan says that this is considered an at-risk species. Alan asks Bill M. if he sees any species that are missing from the list from a SCDNR perspective. Shane has a list of the SCDNR RT&E species, and says that the federally listed species match between the two lists. Bill M. mentions that Dick Christie gave him a list of species, mostly aquatic, and of varying levels of concern. The list includes the Newberry burrowing crayfish, a species with which the group does not seem familiar. Steve mentions that he knows Arnie Eversole, who may have more information on this particular species.

Alan asks the group what species they want to be studied. Bill M says that all of the species listed by Dick Christie need to be looked for during any studies completed for the Project. Gerrit says that American Rivers has an interest in the Project's 401 water quality certification, and thusly any species that may be associated with water quality. Alan asks the group if, with regards to a literature based survey, do all of the species listed need to be included in the survey? Bill A. begins a comprehensive list of species to be studied by combining the state conservation priority species from Dick's list with the species on the USFWS inventory, provided by Tom.

Alan asks if Steve and Milton are still doing fish surveys for the new nuclear project. Milton says they are within the Parr Reservoir.

Bill A. asks for clarification on how a "literature based study" will be performed. Shane explains that during a literature based study, a target species list is created based on consultation with the

agencies, where then this list of species' preferred habitats are compared to the habitats present within a specific study area, to eventually determine which species are likely to occur within that study location.

Alan suggests that we include all of the RT&E species from the lists provided in the literature based study, and then tie the aquatic species back into the IFIM study, to prove that there is adequate and appropriate habitat for them. In regards to the bald eagle, it is easily observed that they are living in the area, and that they have plentiful and appropriate habitat. Shane adds that it will be important to show how SCE&G has implemented guidelines allowing for a healthy population of bald eagles on their land.

For clarification purposes, Alan asks again if there are other species that SCDNR would like to be studied. Bill M. says that he will talk with Dick to determine if there are any terrestrial species that need to be included. Bill M. asks if SCE&G documents any terrestrial species on their property. Steve says they do not generally do studies on terrestrial species, but there have been some surveys performed over the years on small mammals and plants. Sam Stokes says that since the Project area has been a disturbed site for many years, it wouldn't be typical to perform a terrestrial survey. He notes that terrestrial surveys are typically performed at undisturbed sites.

Steve remembers a plant species, known as Columbo that he and Milton surveyed for years ago. Bill M. says this species is on the list as a G5 and an S2, so it is added to the list of plant species to be studied. Steve notes that this plant needs to be studied in the springtime, as it dies back and is difficult to identify during other times of the year. The group agrees to just identify the species as being one known to occur within the Project Boundary. Steve says that this species is unlikely to occur near the Project shoreline, so it probably won't need to be addressed by the Shoreline Management Plan (SMP). Bill M. says that there are most species on the list provided by Dick, and they should be acknowledged as being within the PBL, if in fact they are.

A list is eventually fleshed out and is included at the end of these notes. Shane makes the point that these lists will be our starting point for inclusion in the study plan, and that it will then be up to the agencies to decide if any other species need to be included in the study.

Alan then focuses the group on the mussel and snail surveys. Steve notes that water quality monitoring is still being performed for the new nuclear project, which includes some macro and fish surveys in the Parr Reservoir and the area immediately downstream of the Parr Dam. Sediment, metals and other water quality parameters are also being studied in the area of the future new nuclear discharge, in the Parr Reservoir. John Alderman also performed a mussel survey in the fall of 2012, where he identified approximately nine different mussel species in the area from the powerhouse to about halfway down the first island downstream of the Parr Dam. Alan asks if the study looked for snails also, and Steve says he remembers two species of snails being identified as occurring within the study area, however snails were not looked for specifically.

Alan asks the group to identify what else we need to study, if anything, in terms of properly evaluating the affects of project operations. Do we need more studies done on mussels and snails, beyond what has already been completed? In addition to the Alderman study mentioned above, Jennifer Price completed a macroinvertebrate study in 2010. Bill A. suggests he and Alan talk with Tom McCoy to see what the USFWS's interest is in preparing another study on this matter. Bill M.

suggests everyone thoroughly review the two current studies to better understand what was found, and what may be lacking.

Gerrit points out that the data we have is already five years old and that by the time the license is due for renewal, it will be at least ten-year-old data. He wants to know if updated information will be needed, in case a new species is uncovered, or the presence of previously thought-to-be “rare” mussels are identified in greater numbers in a certain area. He mentions this as something for the group to think about.

The group decides that the mussel experts at SCDHEC and Tom at USFWS need to decide if another study is needed. We will reconvene to discuss this further, since no one is exactly sure yet if another study is needed or not.

The group then shifts its focus to the Rocky Shoals Spider Lily (RSSL). Bill S. says he conducted a presence/absence survey from the Parr Dam downstream to the Columbia Dam. He noted only two locations with the RSSL, one at Bookman Island, and another at a small island near Harbison State Park. He says there are only two seen locations, but other than a visual confirmation, nothing has been formally documented at this point. David Eargle mentions that he has seen a population at Haliwanger Island however, Bill S. is not aware of this particular one. He says he will try to conduct another informal visual survey during the blooming season this year. Shane tells the group that the main point for discussion is identifying what the potential projects affects are that need to be addressed regarding the RSSL populations. He points out that the populations tend to move around some, depending on higher flows.

Gerrit tells the group that he is aware that there was a concern in August of predation to the RSSL by deer, so stakeholders examined wading depth as a measure of protection. They determined a flow that would provide a depth of water high enough to prevent deer from being able to graze on the plants, without keeping the plants submerged. Flow recommendations need to be made with consideration of this possibility.

Overall, we are aware of where the populations are located (with the need for a simple survey to be conducted by Bill S. upon his availability over the next three months), so now the group needs to identify ideal flow ranges for the plants. Deer predation is a valid issue, along with competition with other plant species. Inundation is acceptable for short periods of time however the plants do need to immerse at some point. It will be ideal for the plants to have flows mimic those of natural events.

The group decides that the proposed study should include field verification, in which basic metrics are collected, including location, basal area, and year to year basal change. Gerrit suggests the survey should be conducted two years in a row, while Shane suggests maybe a year should be skipped in between. Alan and Bill A. say that from a scheduling standpoint, the study will have to be completed during two consecutive years.

The group then discusses the possibility of a crayfish study. Everyone agrees that Alan and Bill will meet with Tom McCoy to scope out this study, as the USFWS holds the most interest with this issue. There are currently no crayfish studies underway, as part of the nuclear plant expansion.

Bill M. asks if eels are going to be studied. Alan mentions that these are being covered as part of the Instream Flows TWC. We are waiting for the fisheries study to be completed before meeting to discuss the eels further.

Karla Reece then joins the meeting via conference call to discuss the issue of sturgeon passage. She tells the group she just received confirmation from Bill Post that sturgeon are passing through Granby, however, they may not be able to pass through the Columbia Dam. If the sturgeon are not able to pass through Columbia, there will not be a need for a study at Parr. She says that she will regroup internally and reconvene with the TWC to let us know what she finds out. Bill A. asks for clarification on whether we are discussing Shortnose Sturgeon, or Atlantic Sturgeon, and Karla says both.

Regarding Section 7 consultation, the National Marine Fisheries Service (NMFS) will only require consultation if sturgeon are able to pass up to Parr Dam. Gerrit says that we know we have Shortnose Sturgeon below the Columbia Dam, and that there has been spawning in the area. He asks how do flows affect the species, and what are the species' needs regarding flows? Karla says she will look into that, to determine if flows from Parr are having any affect on the sturgeon spawning downstream. If so, this will affect the possibility of Section 7 consultation.

Bill A. asks if we need to include sturgeon in the IFIM study consideration, along with the other target species identified at the meeting. Gerrit mentions that the time frame would be different for sturgeon than for the shad and other target species for the IFIM. Alan asks Karla to provide us with as much information as she can, as soon as she can for us to move forward. He points out that we do not need anything formal at this point, since the relicensing process hasn't officially begun.

The group agrees to meet again in late June/early July to discuss Karla's findings.

Alan tells the group that we are planning to issue a draft PAD to the group for review in the fall of 2014, to allow for everyone to see if anything has been missed before the package goes to FERC for approval. With this, the meeting is adjourned. Action items stemming from this meeting are listed below.

ACTION ITEMS:

- A small group including Alan and Bill A. will meet with Tom McCoy to get the USFWS' input on the issues/studies discussed during the meeting.
- Bill S. will survey the area downstream of the Parr Dam to identify and confirm all possible Rocky Shoals Spider Lily populations.
- Karla will find out as much information on the sturgeon issues within the Project Area as soon as she can and will report back to the group by late June/early July.
- David Eargle will have the mussel experts at DHEC review the two current macroinvertebrate studies and determine whether another study in the Project Area is needed.

- Shane will begin developing study plans for the literature-based RT&E study and the RSSL study.

RT&E Meeting Issues

RT&E Survey (literature based)

Species to be investigated in addition to USFWS list:

State conservation priority species:

Newberry burrowing crayfish - highest

Robust redbhorse – highest

Piedmont darter - high

Seagreen darter - high

Highfin carpsucker - highest

Quillback - high

Santee chub - high

Striped bass – high

Bald eagle – State Threatened

Terrestrial (Vascular Plants):

Frasera caroliniensis (Columbo)

Additional plant species in the database

Develop study plan to address what species will be evaluated and how our literature search will be conducted.

Mussel & snail survey

Jennifer Price study

Alderman study (NND)

Rocky Shoal Spider Lily:

Sufficient flows recommendations on low flow (deer perdition), high flows (inundation)

Upstream of Bookman Island

Upstream of shoals above I-20

Field verification:

Shoals at upstream of islands (Haltiwanger – Frost Shoals)

Metric:

Location

Basal area

2 year survey

Crayfish:

Discuss with Tom McCoy

Sturgeon – Shortnose / Atlantic:

Karla will re-group with other NMFS to discuss status of SNS and Atlantic sturgeon downstream of Parr-Hydro

Provide to the group with any information needs by June/ July time frame