

Schwarzer, Sarah A

From: Cox, Marissa R
Sent: Tuesday, April 16, 2013 4:57 PM
To: Schwarzer, Sarah A
Cc: Cox, Marissa R
Subject: B-1443/B-2848 Important emails #1
Attachments: McCarty_fig1before.pdf; McCarty_fig1after.pdf; Prisco_fig1_updated.pdf

Sar,

Per our discussion regarding your research on B-1443/B-2848.

Below is the my last correspondence w/USFWS (apart from me sending the CE docs and a pdf of the survey). Unfortunately, Troy left for a different position before I had a chance to send the "detailed (and quantitative) response" I mention of NCDOT's buffer acquisition to meet our BO requirements.

Here it is for the file:

The BO states:

3. As committed to by the NCDOT within the project description of the BA, the NCDOT will protect and/or restore 100 ft. riparian buffers for at least 3,000 linear ft. of stream within the action area. Given that the conservation area has not been determined or obtained by the NCDOT at the time of the issuance of this Opinion, the Service will continue to review sites that the NCDOT is considering and approve the site that is ultimately acquired.

USFWS (Denise's) methodology for calculating the buffers on the McCarty site were (see below attached email):

Half credit for length along North Toe

Half credit for tributaries

¼ credit if we only have one side of a tributary in the Conservation Easement (CE)

Using the final survey plat for the McCarty-Prisco Site, NCDOT preserved the following amounts of buffered linear feet:

- 474 ft. of Penewinkle Branch on both sides with an average buffer width of 180 ft. (measured from survey plat sheet 3)
- 3624 ft. of one side of the North Toe (based on survey measurements) with an overall average width of 250 ft.*
 - 655 ft. (C90 +C89+C88+C87 on survey plat sheet 1 – this sheet also contains part of L86 but that is added on sheet 2)
 - 1894 ft. (L86+C85+C84 on survey plat sheet 2)
 - 1075 ft. (C83+C18+L17 on survey plat sheet 3)
- 777 ft. of both sides of Lily Branch with an average buffer width of 228 ft. (total lengths of L71-L82)
- 693 ft. of one side of UT to Lily Branch (below road: total length of L59-L70)
- 556 ft. of one side of UT to Lily Branch (above road: total length of L44-L56)

* The North Toe buffers are fairly consistent along the McCarty property. Along Prisco there is more variation. This is where you have some of the widest buffers (average of 500ft wide for approximately 200 ft.) and the narrowest (average 158 ft. wide from L10-L-15 down to southern boundary)

Using the guidance/methodology provided by USFWS, NCDOT obtained the following amounts of credit for the McCarty/Prisco site:

- 237 ft. on Penewinkle Branch (half credit for 474 ft.)
- 1812 ft. on North Toe (half credit for 3606 ft.)
- 386 ft. on Lily Branch (half credit for 777 ft.)
- 173 ft. on Lily Branch (1/4 credit for 693 ft.)
- 139 ft. on Lily Branch (1/4 credit for 556)

This totals 2747 ft. of credit according to the original guidance. 253 ft. short of the BO requirement. However that guidance was based on 100 ft. buffer widths. The NCDOT Conservation Easement areas, which total 32.7 acres, average buffer widths closer to twice that. Also, the BO requirement was 3000 ft. Within the NCDOT CEs, there are over 6100 ft. of buffered streams protected that are either part of the Action Area or flow directly into it.

I tried to write this email and show my calculations so that someone can easily understand how I came to them in the future in the case that we need to provide these calculations and/or justification for the site. Please let me know if any of it is unclear or needs further explanation, etc.

Marissa

ps rest of important emails to follow per our discussion this morning.

-----Original Message-----

From: Rodman, Marissa K
Sent: Tuesday, February 02, 2010 10:56 AM
To: Troy_Wilson@fws.gov
Cc: Williams, Logan
Subject: B-1443/B-2848

Troy,

It was nice talking with you yesterday concerning these bridge projects. I have gone back & reviewed my files since it had been a while since the below attached email correspondence w/Denise. I realized that her email only referred to the McCarty site. NCDOT actually purchased a Conservation Easement not only on 25.75 acres of the McCarty tract but also on 7.011 acres of the adjacent Prisco property. Also, the amounts/widths of riparian buffer preservation increased on the McCarty site during landowner negotiations (shown in attachments).

Attached is the McCarty tract @ the time of Denise's email (labeled before) & after as well as a pdf of the Prisco tract. The Prisco tract continues east of McCarty along the North Toe and also includes the other side of Lily Branch which serves as the property boundary.

As stated in the BA (7.3 Riparian Habitat Protection) and referred to in the BO (Effect of the Take #3) for US 19 these two sites collectively provide 32.7 acres as well as 8535 linear feet of preservation in the Toe watershed, 4576 ft of which is on the North Toe (adjacent to the CSX line).

I still plan to send you both the CE documents and the actual survey plats as pdfs once I convert them as well a more detailed (and quantitative) response to Denise's email based on final acquisition information.

Marissa

Denise'e email:

Marissa,

I am o.k. with NCDOT going ahead and purchasing the McCarty property to offset a portion of the unavoidable impacts from the Toe bridge replacement projects (B-1443 and B-2848). While I believe this property will offer conservation benefit to the Toe River and Appalachian elktoe habitat I do have some concerns about the property that we have discussed and due to these concerns believe that additional buffers need to be acquired by NCDOT to fulfill the requirements in the Biological Opinion. The following are the concerns I have with this property:

- 1) the railroad runs the entire length of the property and CSX Railroad regularly sprays 30 feet from the edge of the railroad
- 2) the railroad owns between 30 feet and 125 feet adjacent to the river, the railroad corridor, and while the railroad only maintains 30 feet this area cannot be owned or restored by the NCDOT
- 3) only one side of the North Toe River will be preserved by this easement.

Given these concerns I am providing an explanation of how many linear feet of additional stream mitigation that I believe is necessary. The current proposal is for 100 feet of riparian buffer preservation along 3,075 linear feet of one side of the North Toe River, a 50 foot buffer along both sides of Pennywinkle Branch for 548 linear feet, and a 50 foot buffer along one side of Lily Branch for 1,134 linear feet. Given that only one half of the North Toe River will have a buffer and the issues with the railroad only one half of this buffer should be considered towards the conservation, a total of 1537 linear feet. The tributaries should be given half the credit since they are not the main river and if only one side of the tributary is buffered, one fourth credit should be given.

So for Pennywinkle half of the credit would be 274 linear feet and for Lily Branch one fourth of the credit would be 284 linear feet. This totals 2,095 linear feet of credit. The B.O. requires 3,000 linear feet of credit therefore an additional 905 linear feet needs to be obtained.

Please let me or Marella know if you have any questions.

Denise

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