incorporate "[r]oadside swales or other effective means of stormwater treatment."

- 23. The evidence was not sufficient to demonstrate that the stormwater structures incorporated along 101st Avenue met the stringent criteria for "swales" as set forth in the Applicant's Handbook, Volume II, §§ 5.5.1 and 5.5.2. However, the testimony was convincing that the drainage work incorporated into the road repairs was an "other effective means of stormwater treatment." Dr. Still's testimony as a "citizen scientist" was not sufficient to overcome the expert testimony offered by the County and the District.
- 24. During the initial phases of the work, when the County was acting under the post-Irma emergency orders, the County had not installed silt fences. Dr. Still complained to the County, and silt fences and turbidity curtains were installed. Dr. Still admitted that they "functioned fairly well." The silt fences and turbidity curtains were installed prior to the December 23, 2019, filing of the Petition.
- 25. The turbidity curtains and silt screens met best management practices ("BMPs"). BMPs are generally construction-related practices, and are not designed for the "operation" of a facility after conditions have stabilized. Compliance with BMPs is intended to demonstrate compliance with water quality standards. Ms. Carr directed the County to remove the turbidity control curtains prior to her last inspection since the area had stabilized.
- 26. While photographic evidence depicted differences in the appearance of water in the roadside ditches from that flowing under the road from forested areas to the west, the photographs were not sufficient to establish violations of state water quality standards for turbidity. A turbidity violation is, by definition, a reading of 29 Nephelometric Turbidity Units (NTUs) over background as measured by a meter. Fla. Admin. Code R. 62-302.530(69). Ms. Carr testified credibly that one cannot gauge water quality from a picture, and that the photographs she took on her December 20, 2018, site