**Assignment Discussion.**

Based on analysis of observation data for Northern Diamondback Terrapins, construction of the bike path would be most detrimental to the terrapin species as well as other observed. The data revels seasonal patterns in terrapin activity. Observations peak dramatically during summer months, with June showing the highest count of observations. This timing corresponds with their breeding and nesting season. The yearly observation shows consistent terrapin activity in the area showing a stable, slowly increasing population that relies on the salt marsh habitat for their lifecycle.

The proposed 7-foot concrete seawall would create a barrier that all wildlife would be unable to pass through, specifically adult females trying to lay eggs. This would force females to seek alternative nesting sites, increasing road crossings and mortality. Nests laid along where the path would be would also be destroyed during construction. This would cause a drastic change in future nesting habitats.

Juvenile terrapins would also suffer from construction. They depend on shallow marsh areas that would be disrupted during construction and potentially permanently altered by changes in water flow patterns caused by the seawall since juveniles can’t cover as far of a distance as an adult terrapin can.

The 7ft seawall design would also completely change the ecosystem of the salt marsh. This would change the flow of water when the tides coming in and cause possible wash out of the marsh due to its full concrete design.

I decided to review data on other salt marsh species such as the Atlantic blue crab and Eastern Mudsnails. The data clearly demonstrates that the current design and timeline for the bike path would not only affect the terrapin population but the broader salt marsh ecosystem. A raised concrete pathway that prevents movement of terrapins, crabs, mudsnails, and other wildlife.

Based on my expertise from my time here at ML Wildlife, I do not agree with the contraction of the bike path. However, if the bike path project must go through, then construction should be completed in winter when terrapin activity is minimal. And design should be changed to let wildlife possibly pass underneath.