

**EAST GOSHEN TOWNSHIP
BOARD OF SUPERVISORS MEETING
1580 PAOLI PIKE
WEDNESDAY, NOVEMBER 29, 2017
FINAL MINUTES**

Present: Chairman Marty Shane; Vice Chairman Carmen Battavio, Supervisors Charles (Chuck) Proctor and Mike Lynch; Township Manager Rick Smith; Conservancy Board members Erich Meyer, Andy Tyler, and Walter Wujick

Call to Order & Pledge of Allegiance

Marty called the meeting to order at 7:00 p.m. and led the pledge of allegiance.

Moment of Silence

Carmen called for a moment of silence to honor our troops and the victims of the recent shootings in other states.

Bow Tree Ponds

Marty announced that East Goshen Township has six ponds and the Board has contracted with Natural Lands to perform an assessment and provide recommendations on what can be done to improve the health of each of the ponds.

The Township is in receipt of the draft pond study, which is being presented at three separate meetings at which public comments will be solicited. Once all comments have been received, Natural Lands will prepare the final study which will be sent to the Conservancy Board for their review and recommendation. Marty expected that the Board of Supervisors would be in a position to make a decision on how to move forward in the second quarter of 2018.

He concluded by stating the purpose of tonight's meeting was for a presentation by Rick Tralies of Natural Lands on the three ponds in the Bow Tree neighborhood.

Rick Tralies stated he was a landscape architect with Natural Lands, which is a non-profit organization that manages over 43 nature preserves, the closest being the Willisbrook Preserve in Willistown Township. He noted that for this project, Natural Lands subcontracted with Toth Brothers, Clearing and Dredging, Inc. to assess the levels of sediment in the ponds, and with Aquascapes Unlimited for plantings. In addition, the Township hired the Brandywine Science Center to perform water tests.

Rick Tralies noted that: 1) ponds do not occur naturally in this area, 2) all of the ponds accept stormwater runoff, and 3) some algae on a pond is natural.

He showed a slide which depicted the typical water cycle on an undeveloped and on a developed property, noting that development increases surface water runoff. Rick Tralies commented the past stormwater management practice of collecting all of the runoff, putting it into a big retention basin, and metering it out slowly does not work very well.

Rick Tralies then described three general recommendations which would improve the health of the Township's ponds:

- Reduce Phosphorous and Nitrogen Levels
- Increase Dissolved Oxygen Levels
- Reduce Sediment Levels

These recommendations can be accomplished by installing a vegetated buffer around the ponds, converting turf grass to meadows in areas that drain to the ponds, planting additional trees and shrubs around the ponds, installing inlet filter bags, limiting fertilizer usage, planting aquatic plants in the ponds, installing rain gardens and rain barrels, installing a forebay at each pond, reducing the geese population, and educating residents on what they can do to improve the health of the pond.

Rick Trailes noted that since most of the ponds are filled with sediment, the reduction of the sediment levels in the ponds can only be accomplished by dredging. However, he emphasized that the above steps need to be taken in conjunction with the dredging for the overall health of the ponds going forward.

Rick Tralies had the following comments and recommendations for the three ponds in Bow Tree:

Bow Tree 1 Pond – The sediment washing into this pond has created an island; over 96 inlets convey stormwater to the basin; and the drainage basin includes part of the Pin Oaks development. He suggested that this pond be dredged and that the open space area be converted to a meadow with a rain garden, and that trees and shrubs be planted around the pond with aquatic plants planted in the pond.

He also commented that this area would make a very nice park, but recommended that additional public meetings be conducted to seek public input.

Bow Tree 2 & 3 Pond and Bow Tree 2 & 3 Basin – He noted the pond drains to the basin via a concrete spillway. The pond, which has aerators, does not need to be dredged now, but it should be revisited in five years. He recommended the basin be dredged, but with the caveat that steps be taken to reduce the amount of sediment and nutrients going into the pond and basin. He suggested delineating the property boundary, planting shrubs along the water's edge, creating a rain garden, and creating a meadow on the Township property that slopes to the basin. In addition, the owners of properties that drain toward the pond and basin should be provided educational materials about the benefits of rain gardens.

In response to a question, Rick Tralies noted that at Bow Tree 1 Pond, it may be possible to spread the dredged sediment on site.

Carmen asked about converting the Bow Tree 2 & 3 Basin to a wetland. Rick Tralies advised they initially considered converting several of the ponds to wetlands;

however, given the size of the ponds and their stormwater management function, they determined it would be appropriate to maintain them as ponds.

Mike noted East Bradford recently converted a pond to a wetland at the Stroud Preserve.

Sheryl Ferguson, 1618 Eldridge Drive, noted that some of the homes around the Bow Tree 2 & 3 Pond do not drain towards it and she was not in favor of converting the Bow Tree 2 & 3 Basin to a wetland.

Joe Buonanno, 1606 Herron Lane, noted that the sediment coming into the Bow Tree 1 Pond was coming from the “dry ditch” behind his house.

Carmen suggested adding a forebay at the Bow Tree 1 Pond to capture the sediment before it got to the pond.

Carol Conway, 1633 Achom Way, asked about dredging the stream. Rick Tralies advised that it would not help the situation.

Joe Buonanno asked about armoring the banks of the stream with boulders. Rick Tralies said this may increase channelization of the stream and noted that healthy streams are typically very shallow and overtop their banks during small storms. This allows the water to spread out and slow down, which reduces erosion.

Mike commented that the ponds are part of a complex system.

Andy Tyler, Conservancy Board, asked what residents can do. Rick Tralies noted that re-grading to allow the stream to overtop its banks would be the best solution, but such projects are very expensive. For a typical homeowner, he would recommend planting trees and shrubs along the stream bank to stabilize them.

Susan Hudson, 1631 Bow Tree Drive, asked if installing a rain garden on her property would help. Rick Tralies advised that it would and added that Philadelphia has embarked on a program to install small rains gardens at vacant lots throughout the city.

Nate Cline, 1635 Bow Tree Drive, speaking as a resident and not the Township Engineer, stated he supports the recommendations in the study and encouraged the Board to move forward.

Adjournment

There being no further business the meeting adjourned at 9:00 pm.

Respectfully submitted,
Rick Smith
Township Manager