

TOWN OF SOUTH BETHANY CWQ Committee Meeting MINUTES
Wednesday, May 28, 2015 at 1:00 PM
Location: South Bethany Town Hall

1. Call meeting to order	George Junkin
2. Review minutes from previous three meetings	All
3. Discussion on what we did well during the past year and what we could improve on	All
4. Discussion on recommendations for membership for the next year.	All
5. Presentations made at Citizen Monitoring QA Meeting on 5/15/15	Dave Wilson & George Junkin
6. Discussion on potential grant opportunities to improve circulation in South Bethany Canals	All
7. Grant Status for Sandpaper Pines and Oyster Cages/Floating Wetlands in the York Canal.	George Junkin
8. Community education and outreach topics and tasks	All
9. Planning for public meetings/outreach	All
10. Water Quality Monitoring	Dave Wilson
11. Oyster Gardens	Al Allenspach
12. What else should we be doing?	All
13. Adjournment	

Agenda Item 1. George called the meeting to order at 1:00. Committee members present were; George Junkin, Sue Callaway, Jack Whitney, Dave Wilson, Ron Wuslich, and Al Allenspach. Guests were Frank Weisgerber, Dick Oliver, Tony Caputo, Joel Danshes and Jim Gross. Since there were 4 current members of town council present, George informed Tony and Jim that they could observe but not speak due to FOIA rules. Only the members of council that were on the CWQC could speak. Other guests were allowed to speak.

Agenda Item 2. The committee members had reviewed the previous minutes and there were no comments.

Agenda Item 3.

What the committee did well during the past year.

1. We found out that diffusers did not measurably improve the water quality in our canals so we discontinued running the diffusers. The plan is to remove them from the Petherton Canal and sell them.
2. We were successful in obtaining a grant for Sandpiper Pines to install storm water retrofits that will reduce nutrient and sediment input into the Anchorage Canal.
3. Together with the CIB we installed rain gardens on the east side of Route 1 that will reduce nutrient and sediment input into the South Bethany Canals.

4. We were successful in getting the two year backlog of nutrient samples analyzed by contracting with the University of Maryland. The University of Delaware had been doing the samples for free, however they were understaffed and could not meet our requirements.
5. The Volunteer Water Quality Monitoring Program lead by Dave Wilson has been very successful at documenting the quality of water in the South Bethany Canals.
6. Working with the CIB 100 oyster cages have been installed in the York Canal for a project that will assess the effectiveness of oysters to clean the water in the canals.

What the committee can improve on

1. Circulation in the canals is very bad. The committee must do what is required to obtain a grant to perform a circulation study (Model the canals and prepare a preliminary design to determine if it is feasible to open the ends of Carlyle and York canals to increase circulation and/or connect the ends of dead end canals) to determine what can be done to improve the circulation and to determine what is economically feasible.
2. The forebay at Anchorage has not been cleaned out for a few years and is only about 30% efficient when it is cleaned. The inefficiency is due to the fact that it is too small for the quantity of water that flows through it. The committee must do what is required to get DelDOT to perform yearly clean out. The Committee also agreed that a study (either through a grant or by DelDot) should be done to determine what can be done to improve performance of the Anchorage Forbay and make it more efficient.
 - a. One solution could be to pipe the entire storm water along Ocean Highway to the south in the state park were an adequately sized storm water retention pond could be constructed to treat and process the storm water before it is released into the Back Bay.
 - b. A second solution could be to obtain the Goodie Taylor property where the loop is at the east end of Anchorage where an adequately sized storm water retention pond could be constructed. It was noted that this property is an eyesore now and reflects unfavorably on the Town. Alternately, it is possible storm water not being treated now could be treated underground in the highway median strip. It was noted that Goodie Taylor cannot use the land in question now for any purpose. It is possible he could be persuaded to donate it to the Town in exchange for a tax deduction.
3. Develop a plan (including a funding plan) to manage the algal blooms that are a yearly occurrence in the canals. This could involve procuring or renting the equipment required to perform the task of the algae harvester for removing algae – now being used by DNREC. It was noted that algae is more abundant this year, and that the DNREC harvester is expected to arrive next week. However it has been a problem for more than a month and it took that long to get the DNREC Harvester repaired and available.
4. Reduce the storm water entering the canals by eliminating “grandfathering” of existing roof storm water drain and outside shower pipes entering the canals from homeowners. This could be phased in over a 3-year period of time to allow for this to happen in an orderly manner but it would require approval of a new Town ordinance.
5. Develop a formal PR/outreach program to educate homeowners relative to water quality.

6. Develop a plan to assure that the existing rain gardens in South Bethany are maintained at a level that keeps them performing as designed. This would include work such as cleaning out sediment that fills them.

Agenda Item 4. George solicited the current members to resign up and asked the guests if they were interested in serving on the committee for the coming year. George pointed out that Council will be approving the recommendations for committee chairs and recommendations for committee members at the next workshop meeting. The consensus from the committee for membership is as follows;

- George Junkin, current member and chair
- Al Allenspach, current member and continue to lead the oyster gardening program
- Jack Whitney, current member and has volunteered to lead efforts relative to canal circulation and the forebay issues
- Dave Wilson, current member and continue to lead Citizen Water Quality Monitoring Program under direction of Ed Whereat from the University of Delaware. Joel Danshes also volunteered to assist with weekly monitoring. Chairman Junkin suggested that Frank Weisgruber and Elizabeth Baker may also agree to volunteer for water testing.
- Ron Wuslich, current member and president of the Inland Bays Foundation
- Sue Callaway, current member, continued membership may depend on the next workshop decisions
- Jay Headman, current member
- Frank McNeice, current member
- Joel Danshes, new volunteer who has agreed to assist Jack Whitney
- Tony Caputo, new volunteer who has agreed to work with public relations/community outreach and to assist Al Allenspach

Agenda Item 5. George and Dave presented what was presented at the Citizen Monitoring QA Meeting on 5/15/15. The presentation by Dave showed efforts that have been made to reduce pollution inputs to the canals by constructing bio-retention areas and that the monitoring data shows that nutrient levels have been declining over the last few years. These two topic were covered in the last two Zephyr Newsletters. George present data that showed the diffusers made no measurable improvement to the water quality in the Petherton Canal. Diffusers were effective at reducing stratification. The complete diffuser report is on the CWQC web page.

Agenda Item 6. Jack volunteered to lead the effort to obtain a grant to assess the effectiveness of adding circulation to the canals. George will pass on to him data that he has relative to this effort.

Agenda Item 7. Status for Sandpiper Pines Grant – We are about one month behind schedule, however we have plenty of slack in the schedule for when construction and planting must be done. Pete Boyer from A-Del and Darl Kolar from EA report that, “As it stands now, the Geo-Tech and the surveyor will be on-site one day starting next week and work together with the boring locations and the survey.” and that “Regarding the Conceptual Plan, I [Darl] would like to plan for 2-weeks following

the receipt of the survey, approximately the third week in June. For the progress report, a conservative timeframe might be the month of June for the concept plan.”

Status for the Oyster Cages/Floating Wetland – Approximately 100 oyster cages were filled with two bushels of oysters each and then placed, as planned, into the York Canal on May 14 and 15. The floating wetlands are expected to be installed mid-June. Three continuous monitors have been in place for many months and the data from the monitors can be viewed at <http://inlandbays.dreamhosters.com/> The project lasts through 2016 when everything will be removed. The committee visited the web site during the meeting. Jack passed on that EJ Calabala will update the web site to show where each monitor is located and to give an elevation for where the zero depth point is, so that tide data can be assessed from the depth data.

Agenda Item 8. Topics for education and community outreach. The committee came up with the following suggestions;

- Disconnect outdoor showers and roof top storm water downspouts, so that they do not dump water into the canals
- Inform homeowners not to let grass clipping go into the canals
- Communicate to homeowners the good things (agenda item 3)that the committee is doing to improve water quality in the canals
- Use e-mail news updates
- Use the Wave and Coastal Point
- Encourage homeowners not to have impervious driveways

Agenda Item 9. Planning for public meetings/outreach. Tony Caputo volunteered that he would accept this task.

Agenda Item 10. Water Quality Monitoring. Dave Wilson gave a presentation on the status as shown below.

<p style="text-align: center;">Water Monitoring Team Status</p> <p style="text-align: center;">May 28, 2015</p>	<p style="text-align: center;">Team Activities</p> <ul style="list-style-type: none">• Survey 11 sites from bulkheads every Tuesday morning May-September and 1-2 times/month in the off season<ul style="list-style-type: none">– Dissolved Oxygen– Salinity– Water Temperature– Turbidity– Water samples for bacteria, nutrients, harmful algae blooms• Survey 5 sites in Little Assawoman Bay once a week June-September in George Junkin's boat<ul style="list-style-type: none">– Same parameters as above except water samples replaced with grass samples• Record data on 3 continuous monitors in Petherton, Anchorage, and Brandywine canals• Data sent to U of Delaware Citizen Monitoring Program
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Team Members

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| <ul style="list-style-type: none"> • <u>On Land</u> • Sue Callaway • Glenn Dallas • George Junkin (Continuous Monitors) • Frank McNeice • Dick Oliver • Jack Whitney • Dave Wilson | <ul style="list-style-type: none"> • <u>By Boat</u> • George Junkin • Frank McNeice • Jay Headman • Ron Wuslich |
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Changes for 2015

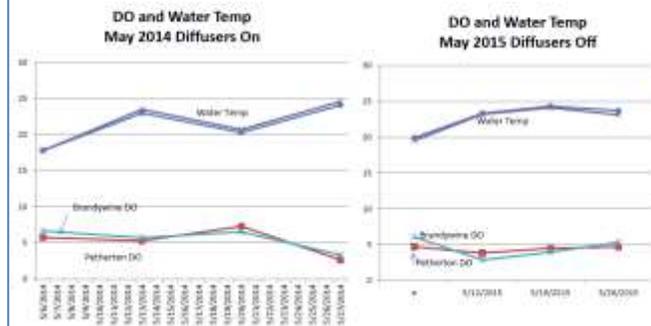
- Diffusers turned off in 2014
 - Reduced DO stratification, but did not increase DO relative to control
- Oysters placed in York canal to determine effect on DO, turbidity, ...
 - 2 probes in York canal, one in Carlisle canal (control)
 - Program under CIB contract with private firm
 - Team continues to monitor York and Carlisle canals from the bulkhead
- Floating gardens planned for June
- Continuous monitors placed in Petherton, Brandywine, and Anchorage canals
 - Data retrieved approximately once/month

Weather to Date Comparable to 2014

	2014	2015
Rain (Jan-May) "in.	13.77	14.33
Avg Temp for May °F	62.6	62.7
#Days >90F	1	1

Source BB Boardwalk Weather Station

Brandywine and Petherton DO Comparable



More Algae in Brandywine and Petherton for 2015 Than 2014 Through May

	2014		2015	
	Brandywine	Petherton	Brandywine	Petherton
1 st Date >10ft	March 11	March 11	April 21	April 21
# Times >10ft	1	1	5	5

Agenda Item 11. Oyster Gardens Al Allenspach will continue to lead this effort with help from Tony Caputo. Bob Collins from the CIB announced in an e-mail “Oyster Gardening Kick-Off, June 4, 2015, 6:00 PM at the Center for the Inland Bays office. The agenda is;

- Introduction by the Project Manager, Bob Collins
- What’s going on with oyster gardening in 2015 (and beyond) – John Ewart, University of Delaware- Delaware Sea Grant Marine Advisory Service will speak
- Oyster Gardening 101
- What Oyster Gardening has taught us in the Inland Bays”

Agenda Item 12. What else should we be doing?

- The committee was very strong in recommending that the Council be asked to get the code changed so that water from outdoor showers and down spouts be no longer “grandfathered.” The suggestion was to allow up to three years to come into compliance. Sue recommended that we also provide consultants to help homeowners with the implementation to meet the requirements.
- Ron Wuslich recommended that Council be asked to get the code changed to outlaw impervious driveways. The committee was not willing to fight this battle at this time.
- Jack Whitney made a very strong recommendation that “South Bethany should include funds in the grant to hire a licensed engineer for these reviews [of the Sandpiper Pines drawings and construction] if there is no DNREC or State assistance - to limit our liabilities.”

Jack Whitney pointed out that provisions are not defined to designate a person or organization who is responsible for the review and approval of the engineering plans and specifications for construction and there is no designated individual or organization responsible to review the in-place construction and certify the work has been performed according to the approved design. This was brought up during the bid evaluation period. To overcome this, Jack introduced information from the DNREC website which provides for DNREC responsibility to review and approve these designs. A copy of the law, the design review submittal checklist and the design review application form was presented to Chairman Junkin for action. Jack suggested that Chairman Junkin direct the Contractor responsible for design submit it to DNREC for approval and that DNREC should be responsible for final certification of the construction. Jack suggested that if Chairman Junkin could not convince DNREC to perform both the design review and construction certification tasks that the Water Quality Committee should ask the Council to approve funds to hire a Delaware licensed professional engineer to perform the design reviews and to verify the construction meets the approved design on behalf of the Town. He presented print outs from the DNREC Delaware Sediment & Stormwater Program relative to this issue.

George agreed to look deeper into this issue.

Agenda Item 13. Adjournment The meeting was adjourned at approximately 3:20.