

MINUTES
WATER QUALITY FEES BOARD
February 16, 2023
Special Meeting

- I. **CALL TO ORDER:** George Woolwine, Chairman, called February 16, 2023, Meeting of the Water Quality Fees Board (WQFB) to order at 9:03 a.m.

Water Quality Fees Board Members in Attendance: Harry Clarke, David Lowe, Aaron Vaught (arrived at 9:11 am) and George Woolwine. Donna Fogle was absent.

Staff Members in Attendance: Greg Lubeck, P.E., Deputy Director, DWQ; Lindsie Nicholas, P.E., DWQ; Frank Mabson, DWQ; Denice Bullock, DWQ; Jeffinisha Cobb, DWQ; Becky Irwin, DWQ; Jennifer Carey, P.E., Director, DES; Heather Wilson, DES; and Evan P. Thompson, Department of Law.

Guests in Attendance: Leandro “Nachie” Braga, Geomancer Permaculture LLC; and Jason Hale, Gresham Smith.

- II. **APPROVAL OF MINUTES:** Mr. Woolwine asked the WQFB to review the minutes of the January 12, 2023, Water Quality Fees Board Meeting.

Mr. Clarke moved to accept the minutes as written; seconded by Mr. Lowe. The motion passed unanimously. Ms. Fogle and Mr. Vaught were absent.

III. **TREE CANOPY PROPOSAL – SCORING MATRIX CHANGES**

Mr. Mabson indicated that during the January 12th meeting, Leandro “Nachie” Braga representing Geomancer Permaculture and the Lexington Tree Board presented materials to the Board in support of adding tree canopy expansion to the scoring matrix for Class B Infrastructure stormwater grants.

Ms. Nicholas and Mr. Mabson briefly explained the Division of Water Quality recommends that the board consider approval of a one (1) year pilot of the request with the following considerations:

- Amend section 1d of the Class B Infrastructure (BI) Scoresheet to value the establishment of tree canopy square footage at a coefficient of 1.5 times the canopy square footage calculated using Article 26 of the LFUCG Zoning Ordinance.
- Apply point allocations to the current ranges (*see revision to Class BI Scoresheet below*).
- To determine which species fit into each size category applicants and division staff to reference the existing LFUCG Planting Manual.
- Amend section 1e of the Class BI Scoresheet to value the drainage area in square feet intercepted by the proposed tree canopy area, not including the canopy area counted in 1d (*see revision to Class BI Scoresheet below*).
- For questions 1f and 1h of the Class BI scoresheet, staff recommends no changes as the captioned questions refer to LFUCG standards (e.g. Stormwater Manual) which currently do not list trees by themselves as BMPs. **NOTE:** The Stormwater Manual does mention trees as a component of certain BMPs including Tree Trenches and Planter Boxes (Chapter 10.3.7), and Riparian Buffer Restoration (Chapter 10.3.10).

The Division of Water Quality also requests the Board to consider adding tree canopy expansion to the scoring matrix for Class A grants for a one (1) year pilot of the request with the following considerations:

- Amend section 1a of the Class A Scoresheet to value the establishment of tree canopy square footage calculated using Article 26 of the LFUCG Zoning Ordinance (no multiplier). (*see revision to Class A Scoresheet below*).
- Amend section 1d of the Class A Scoresheet to value the drainage area in square feet intercepted by the proposed tree canopy area, not including the area counted in 1a (*see revision to Class A Scoresheet below*).

Ms. Nicholas and Mr. Mabson briefly touched on the following items:

Tree Canopy Example with Multiplier for Class BI Scoring

- A group plans to plant 5 Red Maple and 5 Serviceberry trees for a total of 10 trees as part of their tree canopy SQPIGP project
- Red Maple and Serviceberry trees are categorized as Medium Trees in the Planting Manual
- Tree Canopy calculated using Article 26 of the LFUCG Zoning Ordinance would equate to
400 SF * 10 Medium Trees = 4,000 SF
- The recommendation is to multiply this by a multiplier of 1.5
4,000 SF * 1.5 = 6,000 SF
- The 6,000 SF is then used in the current scoring range in 1d), so it would score 10pts

Regulatory

The canopy calculation is for tree canopy establishment above and beyond any new/redevelopment tree canopy requirements. Staff to coordinate with the Division of Environmental Services (currently, Eve Miller) during the application and design phase.

Multiplier

The multiplier for the Class BI Scoresheet is an acknowledgment from the Division of Water Quality of the benefits of trees in the management of stormwater quantity and quality. This includes their role in the interception and evapotranspiration of stormwater, removing notable amounts of water that would otherwise enter the storm/sanitary systems, as well as, providing benefits to water quality, shading/local cooling, habitat provision, and many other social and economic benefits. The Multiplier incentivizes applications proposing tree canopy plantings since these projects will not see a reduction in their Water Quality Management Fee. Impervious removal and associated BMPs depreciate in their ability to treat and infiltrate stormwater without exceptional maintenance efforts, while the stormwater benefits of trees increase with time (see Table 1).

The multiplier to tree canopy area is not recommended for the Class A Scoresheet in order to keep the current SF ranges for point allocations that reference area BMPs (e.g. rain gardens and pavers) on an even playing field with tree canopy area. Class A projects typically propose smaller-sized BMPs which is reflected in the current ranges in item 1a) of the Class A Scoresheet. In addition, since the implementation of a Class A grant does not typically result in the reduction of the Water Quality Management Fee billed to the applicant or to the owner of the property benefiting from the grant project, a multiplier is not needed as an added incentive for tree canopy establishment.

Maintenance

- DWQ recommends the use of the current Class BI depreciation schedule for Class BI tree canopy award recipients.
- DWQ recommends the use of the current Class A Inspection, Operation, and Maintenance Plan to determine maintenance responsibilities for Class A tree canopy award recipients.

Document Updates

- Class A & BI Scoresheets (#1d) *see revision to Class A and BI Scoresheets below*
- Class A & BI Application Packet
- Class BI Application Form (Questions A5 and A7)
- Class BI Scoring Criteria (#1d)

Revision to Class BI Scoresheet for item 1d):

1d) The impervious area (in square feet) to be removed, or retrofitted with pervious surface AND/OR the proposed tree canopy area (in square feet) to be added multiplied by 1.5 (tree canopy calculated using Article 26-5(6)(e)2 of the LFUCG Zoning Ordinance with categories of trees found in Section VII of the LFUCG Planting Manual):

- | | | |
|------|--------------------|-------|
| i. | >15,000 SF | 15pts |
| ii. | 5,001 to 15,000 SF | 10pts |
| iii. | <5,000 SF | 5pts |
| iv. | 0 SF | 0pts |

Revision to Class BI Scoresheet for item 1e):

1e) The drainage area to be treated by the project BMP(s) AND/OR the proposed tree canopy area - not including (1d):

- | | | |
|------|---------------------|-------|
| i. | >40,000 SF | 15pts |
| ii. | 10,001 to 40,000 SF | 10pts |
| iii. | <10,000 SF | 5pts |
| iv. | 0 SF | 0pts |

Revision to Class A Scoresheet for item 1a):

Install a feature that serves to improve water quality. If so, what is the size of the proposed BMP, project area, AND/OR tree canopy where the improvements will occur? (i.e., SF, LF, Gal) Note: The tree canopy is calculated using Article 26-5(6)(e)2 of the LFUCG Zoning Ordinance with categories of trees found in Section VII of the LFUCG Planting Manual.

- | | |
|------|---|
| i. | > 1,000 SF; >1,500 LF; or >1,000 Gal |
| ii. | 501 to 1,000 SF; 751 to 1,500 LF; or 101 to 1,000 Gal |
| iii. | < 500 SF; <750 LF; or <100 Gal |
| iv. | 0 SF; 0 LF; or 0 Gal |

Revision to Class A Scoresheet for item 1d):

1d) Install a feature that serves to reduce stormwater runoff. If so, what is the drainage area to be treated by the project BMP(s) AND/OR the proposed tree canopy area - not including (1a)?:

- | | | |
|------|--------------------|-------|
| i. | >20,000 SF | 15pts |
| ii. | 5,001 to 20,000 SF | 10pts |
| iii. | <5,000 SF | 5pts |
| iv. | 0 SF | 0pts |

Board comments and questions: Mr. Woolwine asked for clarification of the language on Page 2, second paragraph under “Multiplier”, and Page 3, Revision to Class A Scoresheet for item 1a. Ms. Nicholas explained that the language on the scoresheet for 1a does not include the multiplier because Class A projects are typically smaller in scale and so the ranges for square feet/linear feet/gallons for point allocations are also smaller. Removing the multiplier for Class A keeps tree canopy on an equal playing field with other BMPs.

Note: Mr. Vaught arrived at this time.

Mr. Woolwine then asked if the Planting Manual references tree species native to the area. Ms. Wilson replied that not all trees listed are native to the area, but rather the trees that are listed are recommended based on several different criteria.

Mr. Woolwine asked for clarification that there are no invasive species listed in the Planting Manual. Ms. Wilson replied affirmatively.

Law Department: Evan P Thomas asked if a condition will be added to ensure that no plantings will be installed within an existing easement. Mr. Mabson replied affirmatively, indicating there is a standard stipulation that addresses plantings within an existing utility easement.

Board comments and questions: Mr. Lowe asked if there are any other concerns the Board should be aware of should the one (1) year pilot program be approved. Ms. Nicholas said that the one (1) year pilot program would allow the staff time to evaluate the program. She added that the staff does not believe this would cause tree canopy applications to outcompete the impervious/retrofit applications. Mr. Mabson indicated that the pilot program will be evaluated for one (1) year then if anything needs to be changed the staff would present their findings to the Board next year.

Mr. Lowe said that items of concern for the maintenance and easements were discussed, but what other concerns are there that haven’t been mentioned. He asked if the one (1) year pilot program would allow time to evaluate the tree canopy concept. Mr. Mabson agreed, adding that over time the benefits of the tree will increase in its value. Mr. Lowe indicated that everyone needs to be comfortable with a deferred investment such as this proposal.

Mr. Woolwine said that since it does take time to see the benefits of a tree, how the staff will measure the evapotranspiration effectiveness. Ms. Wilson said that <https://mytree.itreetools.org/#/> is a tool for assessing trees and their benefit on the stormwater impacts over time.

Mr. Woolwine clarified that the handout (Table 1) shows the individual tree species, the diameter of that tree, and the amount of runoff that is taken up by that tree over time. Ms. Wilson replied affirmatively.

Mr. Clarke said that should the Board approve this request what system will there be to measure the program’s success under a year. Mr. Mabson said that the administrative part, such as the application process, can be measured. Ms. Nicholas added that the pilot program allows the scoring matrix changes to be evaluated versus the implementation of the tree canopy.

Mr. Woolwine confirmed that the staff would be presenting their findings to the Board during the January 2024 meeting.

Mr. Woolwine said that the pilot program is not precluding the use of trees from Class A Neighborhood grants. Ms. Nicholas said that previously there was no language on the Class A Neighborhood scoresheet for tree canopies, but the pilot program would provide additions to the scoring matrix as a way to determine tree canopies through square footage without a multiplier.

Mr. Clarke asked whether the staff recommendation for Class A Neighborhood is to add language to the current scoring matrix. Mr. Mabson replied affirmatively.

Mr. Clarke confirmed that the multiplier is not recommended for the Class A Neighborhood scoresheet. Ms. Nicholas and Mr. Mabson agreed.

Mr. Woolwine said that there is not a lot of maintenance to a tree. Ms. Wilson said that maintenance of a tree is through mulching, pruning, addressing damage, and so forth; and if there is a drought, then watering is part of the maintenance.

Mr. Thompson asked if maintenance of the tree includes replacing that tree should it die. Mr. Mabson replied affirmatively.

Mr. Woolwine said that there needs to be a timeframe for the maintenance of trees. Ms. Wilson explained that typically there is a one (1) year guarantee on trees but if a tree makes it over 2 years then the odds of that tree surviving are good unless there is an unforeseen weather event or disease. Mr. Mabson said that the program will reference the Class B Infrastructure Maintenance Agreement (aka Attachment B) document and utilize the fifteen (15) year depreciation schedule for trees.

Ms. Nicholas said that the staff did not want to make this too complex. Therefore, regarding tree canopy and depreciation, staff recommends the following:

- For Class BI, DWQ recommends the use of the current Class BI Depreciation Schedule.
- For Class A, DWQ recommends using the Inspection, Operation, and Maintenance Plan to determine responsibilities and other details concerning maintenance for tree canopy for Class A grants.

Ms. Nicholas explained that the depreciation schedule would determine the amount of money that would be returned unless that tree was replaced.

Mr. Woolwine said that if a tree dies within five (5) years of planting then the Grantee would have the option of replanting a tree or refunding the grant program. Mr. Mabson said that the value would be determined by when the trees are placed in services and then removed from service based on the Class BI depreciate schedule. Ms. Wilson said that there are calculations available to determine the value of a tree.

Ms. Carey said that the grant program is based on a depreciating value in case those funds need to be recouped by the Division of Water Quality. Trees appreciate/increase in their value over time, but what went toward those trees will need to be determined should a BMP or tree canopy is removed during its service life.

Mr. Mabson indicated that the unit cost of a tree needs to be considered when looking at the value of the overall canopy. Mr. Woolwine agreed, adding that a tree canopy could have 99 trees but only one needs to be replaced.

Mr. Thompson said that the maintenance agreement should include language for the replacement of a tree or refunding the funds to the grant program.

Audience comments and questions: Jason Hale, Gresham Smith, said as a landscape architect and designer, there are certain trees on Table 1 that would not be ideal to use over pavers where others would be ideal.

Mr. Woolwine said that certain trees listed would not be good for specific situations.

Ms. Nicholas said that Table 1 is only to provide examples of how the calculations are determined using <https://mytree.itreetools.org/#/>. The Planting Manual would need to be referenced for the list of appropriate trees.

Mr. Woolwine said that there could be a tree listed in the Planting Manual that would not be appropriate for certain applications so a different tree would need to be selected. Ms. Nicholas agreed. Mr. Mabson indicated that the staff would be coordinating with Environmental Services to make an appropriate recommendation.

Mr. Lowe moved to approve the one (1) year Tree Canopy Pilot Program for Class A Neighborhood and Class B Infrastructure, as recommended by the staff; seconded by Mr. Clarke. The motion passed unanimously. Ms. Fogle was absent.

IV. SQPIGP CHANGE ORDER APPLICATIONS - FY22 CLASS BI COLT ENGINEERING, INC. D/B/A THOROUGHbred ENGINEERING

Staff Comments: Mr. Mabson indicated that the Grantee has requested the postponement of this item to April 13, 2023, WQFB meeting to allow additional time to work with the staff.

No motion was taken to postpone FY22 Class BI Colt Engineering, Inc. d/b/a Thoroughbred Engineering to April 13, 2023, meeting.

- V. FY 2024 GRANT APPLICATION DOCUMENTS:** Mr. Mabson directed the Board's attention to item #5 of the Memo on Programmatic Changes and FY24 Application Documents Discussion items. He indicated that the Board approved adding the following language to the Application Packet document for all grant classes.

The criteria for the I&E Pool Funds shall be defined as items not currently prescribed in the LFUCG Stormwater Manual, but meet the goals of the Stormwater Quality Projects Incentive Grant Program as defined by Section 16-410 of Code of Ordinance. I&E projects are considered a deviation from previously approved applications and propose new or experimental methods or approaches to stormwater quantity and quality management. The applicant is required to provide the research behind the proposed innovative and/or experimental project element(s) at the completion of the project.

Ms. Nicholas and Mr. Mabson requested approval to remove the language "at the completion of the project" from the criteria for Innovative & Experimental and explained that was staff's intent to have the Grantee provide the information at the beginning of the project, not at the completion of the project to help determine whether the proposal is innovative and/or experimental.

Mr. Clarke replied that he made the motion at the January meeting due to his concern with the type of research being submitted to qualify a proposal as an innovative and/or experimental project. Ms. Nicholas replied that the type of research cannot be defined in the same way that innovative and/or experimental cannot be defined.

Mr. Clarke said that the staff is looking for research to show the project is innovative and/or experimental. Mr. Mabson indicated that the results will also be required as a deliverable at the conclusion of the project.

Mr. Clarke moved to remove "at the completion of the project" from the last sentence to read: "The applicant is required to provide the research behind the proposed innovative and/or experimental project element(s)"; seconded by Mr. Vaught. The motion passed unanimously. Ms. Fogle was absent.

Mr. Woolwine asked if the staff has seen a large number of innovative and/or experimental projects. Mr. Mabson replied that funds from the innovative and/or experimental pool were used to fund the FY20 UKRF change order in the amount of \$143,200. Mr. Woolwine said that the funds are there to help with the possibility of an innovative and/or experimental project.

Ms. Nicholas asked if the Board was comfortable with staff making the associated tree canopy changes to the remaining pages in the FY24 grant application documents.

Mr. Thompson asked if the Board was agreeable to the staff making the appropriate changes to the FY24 grant applications documents without seeing them first.

The Board indicated their agreement to allow the staff to make the appropriate changes as needed to the FY24 grant applications.

VII. OTHER MATTERS:

- VIII. ADJOURNMENT:** The meeting was adjourned at 9:45 a.m.