

FE 370-07 WWTP
Cond. Approval

51829-6614

MS-9/6/07

MS-8/14/07

MS 7/12/07



Martin O'Malley
Governor

Anthony G. Brown
Lt. Governor

Margaret G. McHale
Chair

Ren Serey
Executive Director

**STATE OF MARYLAND
CRITICAL AREA COMMISSION
CHESAPEAKE AND ATLANTIC COASTAL BAYS**

1804 West Street, Suite 100, Annapolis, Maryland 21401
(410) 260-3460 Fax: (410) 974-5338
www.dnr.state.md.us/criticalarea/

September 6, 2007

Mr. George Mayer
Town of Federalsburg
PO Box 471 Federalsburg, MD 21632

Re: Federalsburg Waste Water Treatment Plant Upgrade – Planting Plan

Dear Mr. Mayer:

We have received a revised planting site plan and have the planting agreement for the Federalsburg wastewater treatment plant upgrade. We have also received a copy of the stormwater management plan review letter recommending approval by the County. All of the conditions for the Critical Area Commission conditional approval have been met.

If you have any questions, please feel free to contact me at 410-260-3479.

Sincerely,

Marshall Johnson
Natural Resources Planner

cc: Jen Smith, DBF

Martin O'Malley
Governor

Anthony G. Brown
Lt. Governor



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August 14, 2007

Mr. George Mayer
Town of Federalsburg
PO Box 471 Federalsburg, MD 21632

Re: Federalsburg Waste Water Treatment Plant Upgrade – Planting Plan

Dear Mr. Mayer:

We have received a planting site plan and planting agreement which were submitted to satisfy a condition associated with the Commission conditional approval for the Federalsburg wastewater treatment plant upgrade. The Buffer mitigation should be planted with the following sizes: shrubs in minimum 2 gallon pots and trees of minimum 2-inch caliper. These size specifications should be stated on the planting plan in the Plant List table, instead of the sizes listed on the submitted plan. Please revise the plan to reflect these specifications. Please also add a note to the plan stating that the Town of Federalsburg will notify the Critical Area Commission once the on and offsite mitigation plantings have been installed.

If you have any questions, please feel free to contact me at 410-260-3479.

Sincerely,

A handwritten signature in black ink, appearing to read "Marshall Johnson".

Marshall Johnson
Natural Resources Planner

cc: Jen Smith, DBF



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Governor

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July 19, 2007

Mr. George Mayer
Town of Federalsburg
PO Box 471 Federalsburg, MD 21632

Re: Federalsburg Waste Water Treatment Plant Upgrade

Dear Mr. Mayer:

The purpose of this letter is to officially notify you of the Critical Area Commission's action on the above referenced project. On July 11, 2007, the Critical Area Commission unanimously approved the Town's proposal and site plan to construct upgrades for the Federalsburg Waste Water Treatment Plant, located at 125 Kerney Street, Federalsburg, Maryland, with the following conditions:

- (1) Prior to commencement of construction, the Town shall submit a planting plan to Commission staff for review and approval for the off-site mitigation. To the extent possible, the mitigation plan shall be located within the 100-foot Critical Area Buffer to Marshy Hope Creek. Any mitigation planting that cannot be located in the Buffer must be located at an off-site area approved by Commission staff.
- (2) Prior to commencement of construction, the Town shall receive final approvals from Caroline County for stormwater management.

Please submit a copy of the sediment and erosion control and stormwater approvals and a final signed copy of the Buffer Management Plan, including a site and planting plan for off site mitigation to meet the condition above. Please also notify the Commission once the on and offsite mitigation plantings have been implemented. Should any changes to the site plan be proposed in the future, additional review and approval by the full Commission will be required. If you have any questions, please feel free to contact me at 410-260-3479.

Sincerely,

Marshall Johnson
Natural Resources Planner

cc: Roby Hurley

Planting Agreement for State/Local Projects

State/Local Agency

Town of Federalsburg

Project Number

FE 370-07

Agency Contact

George Mayer

Phone Number

410-754-8173

Commission Approval Date

11-Jul-07

CAC Planner

Marshall Johnson

Project Name

Federalsburg Waste Water Treatment Plant Upgrade

Project Location

125 Kerney Street, Federalsburg

Square Feet Cleared Outside 100ft Buffer

N/A

Mitigation Ratio for Clearing Outside Buffer

N/A

Mitigation Calculation Outside Buffer

N/A

Square Feet Disturbed/Cleared Within Buffer*

2873

Mitigation Ratio for Disturbance/Clearing Within Buffer*

3:01

15% Afforestation Requirement Met?

Mitigation Calculation Within Buffer

8619

Total Mitigation Requirement

8619

Planting and Natural Regeneration Plan (attach additional sheets if necessary)

RECEIVED
AUG 09 2007

Planting Date

Spring 2009

Year

2009

CRITICAL AREA COMMISSION

First Site Visit Date

GEM

Completed by

Second Site Visit Date

Completed By

Date Mitigation Complete

GEORGE E. MAYER, JR.

Responsible Contact for Mitigation (Print)

George E. Mayer, Jr.

Signature

8/8/07

Date

*See reverse for details

June 26, 2007

CRITICAL AREA BUFFER MANAGEMENT PLAN

The following form should be completed by the property owner, or responsible party, for any disturbance of natural vegetation or construction within the Critical Area Buffer. Once completed, and approved, this form will constitute your Buffer Management Plan and will provide our office with an official record of your proposed Buffer impacts and the way in which you plan to meet any required offsets (mitigation).

Property Background Information

Property Owner (or Contact): ____Town of Federalsburg

Property Owner's address: ____PO Box 471 Federalsburg, MD 21632

Property Owner's (or Contact's) Phone: ____410/754-8173

Project Address (if different): ____125 Kerney St. Federalsburg, MD

Tax Map # ____ Block # ____ Parcel # ____ Section # ____ Lot # ____

Proposed Buffer Disturbance

New development/redevelopment (e.g., new building, addition to home, replacement of structures).

Shore erosion control

Shore access

Other (Please explain)____WWTP Upgrade

Is the property in a designated Buffer Exemption Area (BEA)? Yes ____ No

Are there any special plat notes or restrictions concerning your Buffer (e.g., wetlands, habitat protection areas, conservation easements)? Yes No ____

If yes, please explain:

____This site was previously redeveloped in 1991-2 and is subject to previous buffer mitigation requirements.

Please provide a brief explanation of your proposed project in the space below. Include area and/or number of trees cleared as well as the type of equipment that will be used.

Three examples follow:

- 1) 600 square feet partially cleared for shore access with hand tools; canopy will be maintained; disturbance will be limited to three saplings and several shrubs; and path will consist of wood chips.
- 2) Removal of poison ivy from 2,000 square feet area along shore access path; method of removal includes hand pulling and chemical spraying of individual plants with an approved herbicide; any resulting bare areas will be mulched to prevent soil erosion and to prevent reestablishment of invasives. There will be no removal of trees or shrubs.
- 3) A variance was granted to build a new house on a grandfathered lot in the Buffer. The area permanently impacted in the Buffer will be 4,000 square feet, including the

area of the house and a 15-foot clearing around the house. The lot is entirely forested. A bulldozer will be used for site preparation.

Proposed Project- The Town of Federalsburg is required to upgrade its Waste Water Treatment Plant (WWTP) to biological nutrient removal (BNR) and enhanced nutrient removal (ENR). In so doing improvements to the plant will create some impacts in the Critical Area Buffer. Impacts to the Buffer have been reduced by eliminating impervious surfaces. There is a 22% net reduction of impervious surfaces in the Buffer.

Justification- Redevelopment of the Plant will reduce nutrient loads to the Marshy Hope and Chesapeake Bay.

What are the long-term management plans for this area? - Reestablishment of formerly permitted on site mitigation plantings (2 trees) and establishment of mitigation plantings outlined below will occur within 2 planting seasons. Town staff will insure maximum survivability by monitoring of all Buffer plantings and watering and removal of non native species as needed.

Calculation of Mitigation

The following three-step process is used to compute the amount of mitigation needed for impacts to the Buffer. For the purposes of this Buffer Management Plan, mitigation is defined as plantings or similar offsets which will help to negate the effect of the Buffer disturbance. To determine the amount to mitigation for your Buffer disturbance you need to determine the following:

1. Amount of Buffer disturbed for clearing, grading and placement of new structures, etc.;
2. Mitigation ratio for the type of Buffer impact;
3. Mitigation amount calculated by multiplying the area disturbed by the mitigation ratio.

Step 1 Amount of Buffer disturbance

AREA OF BUFFER CLEARED OR DISTURBED: 2873 SQUARE FEET

- or -

NUMBER OF TREES CLEARED: _____

Step 2 Mitigation Ratios

Different types of Buffer management activities require different mitigation ratios. Higher ratios are used for activities that have a greater impact upon the Buffer. The purpose of the mitigation is to improve the Buffer functions where possible. The table below provides the mitigation ratio for different types of Buffer management activities.

Type of Buffer Disturbance	Mitigation Ratio
New development/redevelopment (non-BEA)	3:1
New development/redevelopment (BEA)	2:1
Shore erosion control	1:1
Shore access	2:1
Non-native replacement	1:1
Other	*

*Please consult with your local government Critical Area Planner if the purpose of your Buffer disturbance is in the "Other" category.

Mitigation Ratio = 3:1 (From the above table)

Step 3 Mitigation Amount

Mitigation Amount = (Sq. ft. or number of trees) x (mitigation ratio) = 8619 Sq. ft. or # trees. This equals 86 trees (or functional equivalent) plus 2 that died from the previous upgrade for a total of 88 trees or 8800 sq. ft.

Buffer Planting Plan

This section is to help you provide more specific details on your mitigation location and plantings.

Planting Location

All mitigation shall be with native species and located within the Critical Area in the following order of preference:

1-On-site within the Buffer- **The Town will plant 6000 sq. ft. in the Buffer on site.**

2-On-site adjacent to existing Buffer-

3-On-site within the Critical Area

4-Off-site(follow order of preference 1-3 above) **The Town will plant 2800 sq. ft. off site in the Buffer.**

5-Fee-in-lieu payment

PLANT SPACING AND MITIGATION CREDITS FOR VARIOUS SIZE TREES AND SHRUBS*

Credit Square Feet	Plant Size	Plant Spacing
100 sq. ft.	1 tree (2-inch caliper)	10-foot center
400 sq. ft.	1 tree (minimum: 2-inch caliper and either balled and burlapped or container grown) and understory vegetation (minimum: 2 small trees or 3 shrubs)	tree- 20-ft. center understory – 10-ft. center
50 sq. ft.	1 tree (seedlings)	7-ft. center
50 sq. ft.	1 shrub	3 – 7ft. center

*Although the Critical Area Commission recognizes natural regeneration as a method for mitigation, not all jurisdictions authorize natural regeneration. If your jurisdiction allows natural regeneration as a method for mitigation of Buffer impacts, consult with the appropriate contact to determine the area to be managed for natural growth.

Schematic Drawing

Please attach a schematic drawing to scale identifying areas of impact to the Buffer, indicate on plan the existing trees and shrubs, if possible, and the proposed location for replanting within the Buffer. Show the location of the Critical Area Buffer. Indicate on the drawing the specific types of vegetation which will be removed and the specific types and amount of native vegetation which will be used for mitigation.

I certify these statements to be true and accurate and that any trees to be removed are on my property. I hereby grant County/Local Jurisdiction officials permission to enter my property for inspections of this Buffer Management Plan.

Applicant Signature George E. Mayle Jr. **Date** 8/8/07

Approval information: FOR OFFICE USE ONLY
This Buffer Management plan is approved as of _____