

MARYLAND PARK SERVICE PROJECT INFORMATION FORM

Project Name: Flow Management Device (Beaver Baffle)
Project Number: 2020DNR314
Applicant Name: Shannon Davis
Mailing Address: PO Box 480, 2813 Jerusalem Road, Kingsville, MD
Site Address: 8400 North Point Road, Baltimore, MD 21219
Land Unit: North Point State Park
County: Baltimore County
Region: Central
Project Lead: Shannon Davis
Project Type: Project Review
Customer Type: DNR
Request Type: Structure/Infrastructure, New (DNR)
Critical Area: Yes
Date Prepared: 12/1/20
Prepared By: Shannon Davis
Contact Phone: 443-388-3814 (c), 410-477-0757 (o)
Contact E-Mail: shannonm.davis@maryland.gov
Review Due: 12/21/20

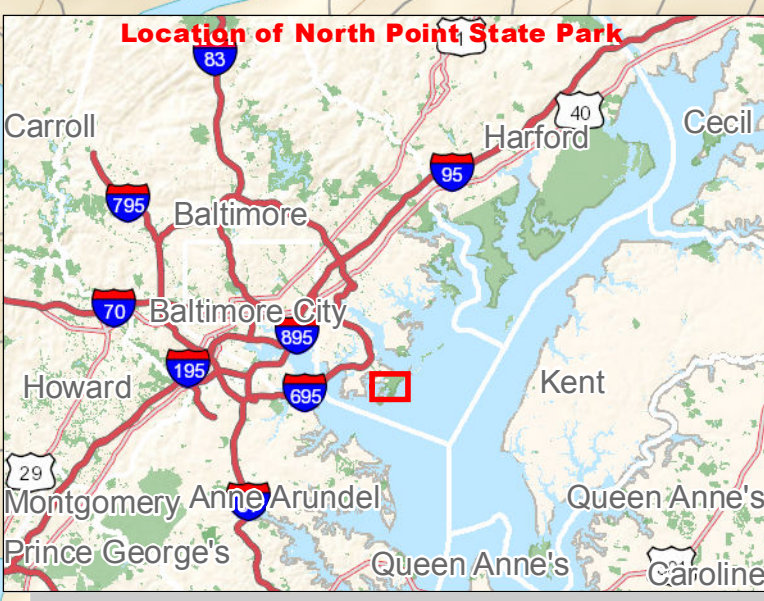
Project Description: Located on an old trolley roadbed, a hiking trail passes between two bodies of water which used to be much shallower. Due to beaver activity the water level has increased and it often flows over the trail and onto the other side. The flow of the water over the trail bed and standing water (caused by the dam) are eroding the trail. The constant water on the trail and muddy conditions are also making it difficult to traverse the trail. In addition, now that the water level is often even with the trail, beaver have dug several channels in the trail bed to enable them to swim to the other side. This has created more damage to the trail and results in even more water crossing the trail. The trail is getting narrower each year due to the beaver activity and the number of days the trail is impassable are increasing.

In order to mitigate damage to trails caused by the beaver, Ecotone Inc. will install a flow management device to prevent flooding of the Black Marsh and Observation Trails. The flow device will be installed next to an existing drainage pipe located along the Observation Trail. A section of the beaver dam will be removed, the pipe (with the flow leveler on one end) laid down, and then the dam debris will be replaced. The flow device consists of a 12" HDPE pipe with a fence surrounding one end. The fence prevents the beaver from blocking the pipe. Water is able to pass through the dam without breaching it. The height of the pipe determines the water level of the pond. The water level will only need to be lowered about one foot. It is a simple project and should take two days to complete (which includes fabrication off site).

This project causes no harm to the beaver and lowering the water level back to the previous level will save the trail and make the trail safer for visitors. An interpretive sign explaining the project and giving information about beaver will be installed nearby.

General Site Conditions: This project is located in the Black Marsh Wildlands Area, a tidal marsh area. It is a flat area on the coastal plain. Access to the site is easily obtainable by using the existing trail which used to be an old trolley roadbed. Ecotone will install the flow device next to an existing drainage pipe located along the observation trail. A section of the dam will be removed, the pipe (with the flow leveler on one end) laid down, and then be dam debris will be replaced.

Project Considerations: This is a popular hiking and birding area. The park often receives complaints on the condition of the trails in this area. A local hiking group has encouraged the park to pursue a grant they offer to mitigate the trail problem and help hikers access the area. This project will be paid for by the grant and the work will be completed by Ecotone.



North Point State Park

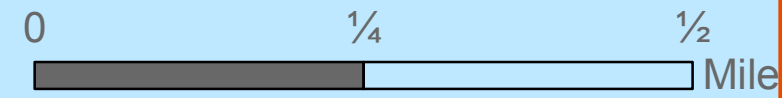
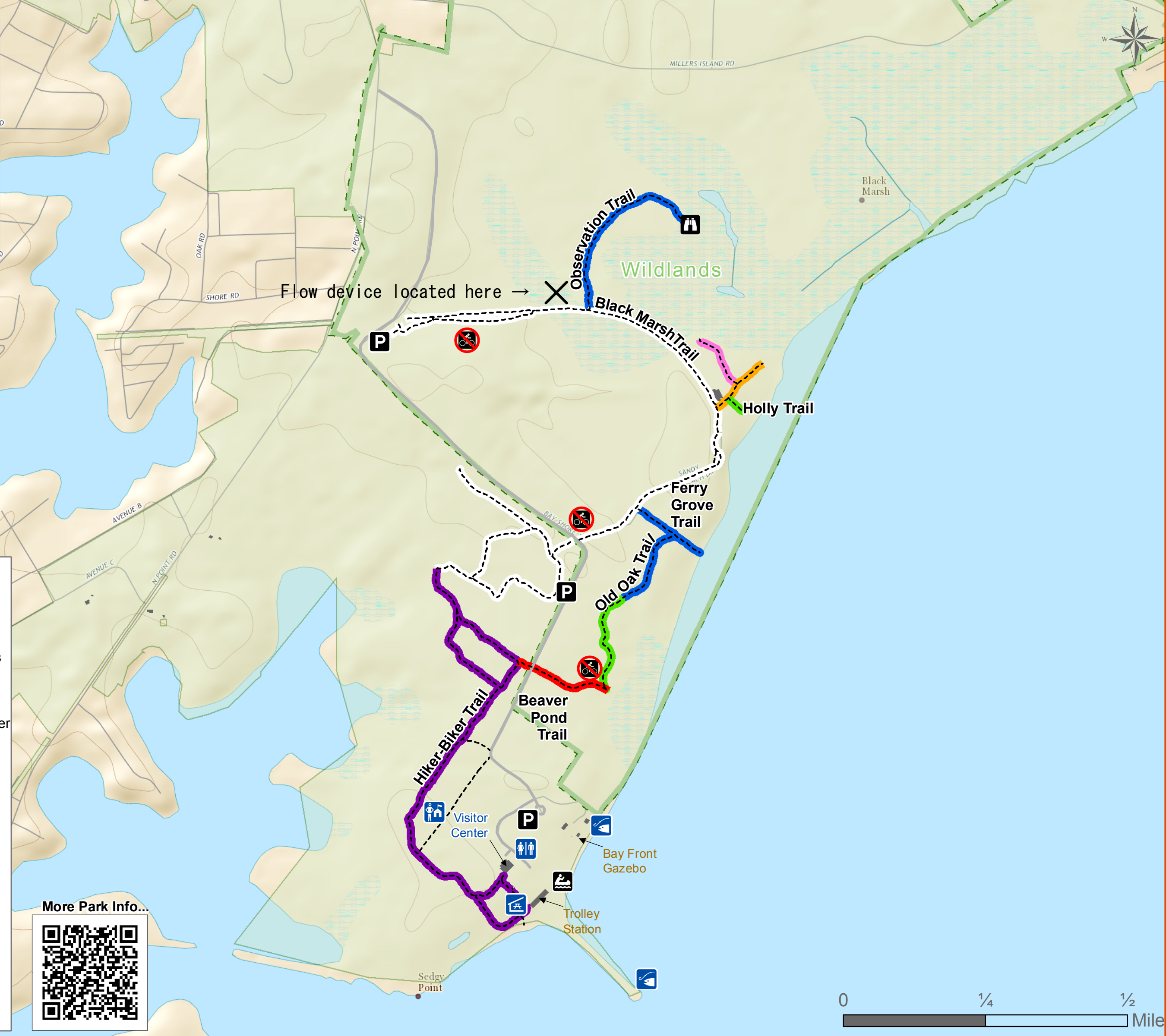
Park Address:
 8400 North Point Rd.
 Edgemere, MD 21219
 Contact: 410-477-0757 Emergencies: 410-260-8888

- Parking
- Scenic Overlook
- Shelter
- Fishing
- Restroom
- Park Office/Visitors Center

- Accessible Features
- Trail (color indicates Blaze)
- Park Boundary (Approx.)
- Wildlands Boundary (Approx.)
- Park Road
- 10' Contour Interval (from USGS)



Last Updated Jul 2015
 North Point State Park website: dnr.maryland.gov/publiclands/Pages/central/northpoint.aspx



North Point State Park
Beaver Flow Device Project Information Form

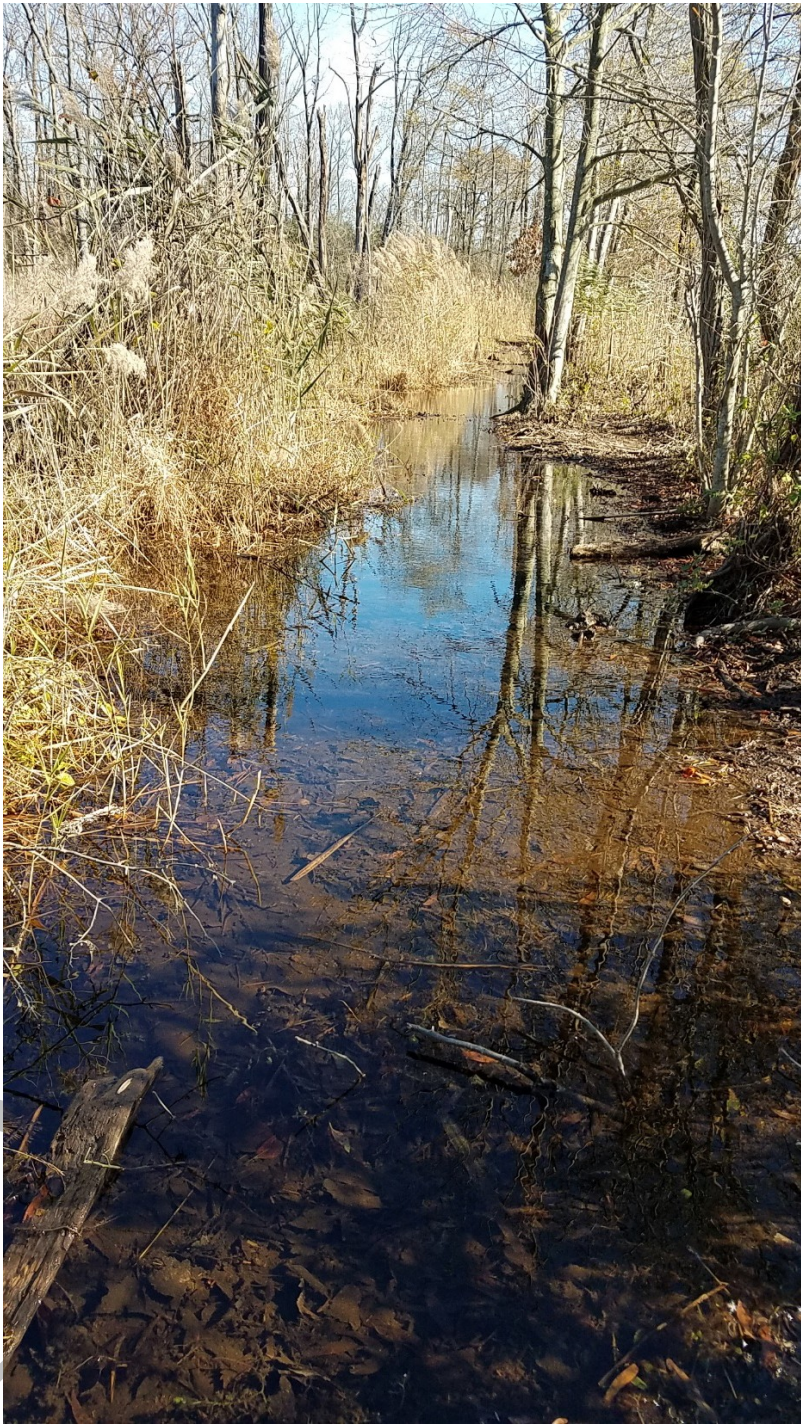


Beaver Dam and area where flow device will be installed



Channel
created by
beaver to
swim to other
side of trail

Flooded trail



Flooded trail



November 23, 2020

Maryland Department of Natural Resources - North Point State Park
ATTN: Ms. Shannon Davis
2813 Jerusalem Rd.
Kingsville, MD 21087

RE: Ecotone Proposal #20263 - Flow Device at North Point State Park

Dear Ms. Davis,

Ecotone, Inc. (Ecotone) is pleased to submit this proposal to the Maryland Department of Natural Resources (Client) for installation and maintenance services of a new pond leveler at North Point State Park. Ecotone offers proven project management, construction, and maintenance services with the specialized technical skills and staffing capacity necessary to meet project goals in a cost-effective and timely fashion.

SCOPE OF WORK

Work will include the installation of a flow management device to prevent flooding caused by beaver activity on the Black Marsh Trail. Ecotone will mobilize all tools and equipment to the site and begin by clearing woody debris from the flow path. Next, the flow management device will be installed in place, and woody material will be returned to the channel to naturalize the worksite. Ecotone will then schedule a meeting with the Client to receive final acceptance. Following acceptance, Ecotone will demobilize from the site.

Following installation, Ecotone will coordinate with the Client to determine the design and location of an MPS Wayside interpretive sign. Following client approval of the design, Ecotone will furnish and install the sign at the approved location.

Ecotone will provide one year of maintenance services for the flow management device. This fee is included in the installation cost and can be renewed annually each year. Materials needed for repair of installed devices are included in the annual maintenance fee. Maintenance will include flow management device inspection, repair, and any adjustments when needed to insure proper function. Installation of new parts or devices will require an additional proposal and fee.

FOREST HILL

129 Industry Lane
Forest Hill, MD 21030

www.ecotoneinc.com

CONTRACTING PROVISIONS

Fee and Payment

Flow Management Device Installation Cost: \$1,650.00

Design, Furnish, and Install 24" x 24" Wayside Sign: \$3,040.37

Design, Furnish, and Install 6" x 12" Wayside Sign: \$1,507.00

Annual Maintenance Fee for the Flow Management Device: \$600.00*

* Payment of the maintenance fee is due on or before the anniversary of the device installation date beginning after the first year of maintenance ends. Checks can be made out to "Ecotone, Inc." and credit cards accepted *over* the phone.

Assumptions

The following assumptions were made in developing this proposal:

- There is no Bid Bond or Performance & Payment bonds associated with this proposal.
- Access to and through the project area will be provided by the Client.
- Ecotone will be allowed to use a small UTV to *move* the flow device as close as possible to the project site .
- All necessary and applicable permits have been obtained by the Client.
- Private utilities will be clearly identified and marked by the Client. Ecotone will additionally contact Miss Utility and have area surveyed before construction mobilization.
- Costs associated with any project-related meetings other than those listed specifically above which are requested by the Client with the Client, engineer, Federal, State, or local government staff, or any other parties are outside of this scope and will be billed on a time and materials basis.
- Ecotone is not responsible for vandalism, other contractors, or acts of God including but not limited to extreme weather events such as hurricanes or extreme storms that may result in damage to the project.
- Ecotone is not responsible for any incidental damage to existing structures, landscaping, road, sidewalk, or curb. Any repairs required by the Client after Ecotone completes the work will incur additional charges.
- Ecotone assumes no more than one (1) mobilization. If additional mobilizations are required, additional costs will be incurred by the Client.
- No verbal commitments by Ecotone will be considered binding and all agreements must be in writing and approved by both parties.
- No wage rates were assumed in the estimation of this proposal.
- If the Client elects not to renew the annual maintenance service, Ecotone will not be responsible for any damage done to the flow management device, or damage to the property resulting from the flow management device, effective one year from the last received payment for maintenance services.

PERIOD OF COMMITMENT

This proposal will remain effective for 30 days after which time it can be withdrawn or modified. Should the term of this contract exceed one year from the date of execution, the Fee and Payment section of this contract may be negotiated to reflect additional costs.

Our company information is as follows:

Ecotone, Inc.
129 Industry Ln.
Forest Hill, MD 21050
Phone: (410) 420-2600
Fax: (410) 420-6983
Web site: www.ecotoneinc.com
E-mail: info@ecotoneinc.com
FED ID#: 52-2099637

Thank you for the opportunity for this project and we look forward to working with you. If you have any questions and would like to discuss our proposal, please reach out to me at your earliest convenience.

Sincerely,



Scott McGill
President & CEO

ACCEPTANCE

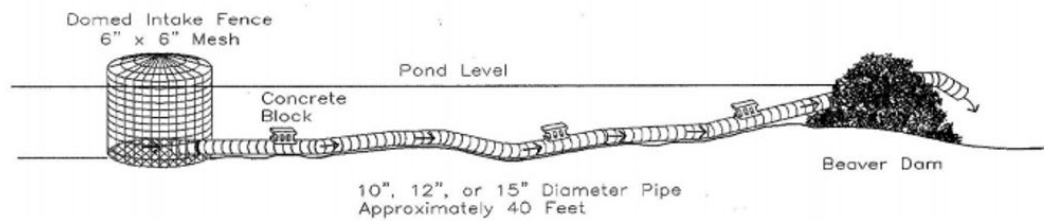
The Maryland Department of Natural Resources, in consideration of the terms and conditions of the proposal which are fully set forth herein, does hereby accept this proposal as the complete and final Agreement with Ecotone, Inc. for the performance of the work authorized below and described herein, and does hereby further agree to comply with all covenants in this Agreement. The undersigned further authorizes Ecotone, Inc. to begin the work as covered by this Agreement.

Authorized Representative

Flow Management Device / Pond Leveler / “Beaver Deceiver”



When flooding from a beaver dam threatens human property, health or safety, a Beaver Solutions Flexible Pond Leveler™ pipe system can be a very effective solution. This flow device will create a permanent leak through the beaver dam that the beavers cannot stop. This eliminates the need for repeated trapping despite the presence of beavers.



FOREST HILL

129 Industry Lane
Forest Hill, MD 21050

RE: Ecotone Proposal #20263 – Flow Device at North Point State Park



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EXAMPLE