



HOWARD COUNTY COUNCIL
RECEIVED

2019 JAN 32 PM 1:31

CMBRS MS TW

January 28, 2019

The Honorable Christiana Rigby, Chair
Howard County Council
3430 Courthouse Drive
Ellicott City, MD 21043

RE: Council Bill 3-2019

Dear Chairperson Rigby:

We, the undersigned business leaders and professionals of Howard County, respectfully request that the County Council table Council Bill 3-2019 pending the conclusion of an ongoing ethics investigation regarding Historic Preservation Commission ("HPC" or "Commission") Board Member Drew Roth. While this legislation may have been filed with good intentions, information made available subsequent to its introduction has raised significant questions about the propriety of giving the Commission more power over the approval of development projects.

On December 6, 2018, HPC-18-63 regarding a 17-home subdivision to be located at 5819 Lawyers Hill Road was presented to the Commission. At that time, the Petitioner notified the Board that Board Member Drew Roth owned property adjoining the proposed subdivision and asked that he recuse himself. Mr. Roth refused and the Office of Law declined to intervene. Over the course of the hearing, Mr. Roth expressed clear opposition to the subdivision and sought modifications outside of the scope of the HPC. Notably, in the absence of Council Bill 3, the HPC is limited to advisory comments to be considered by the Planning Board in any approval or denial of the subdivision. Council Bill 3 would authorize the Commission to defeat the subdivision entirely.

Under Maryland law, an adjoining or abutting property owner is "presumptively aggrieved" by the development of a neighboring parcel. Such property owners have equal standing before administrative bodies as the petitioner. Undoubtedly, if the situation were reversed and Mr. Roth were the petitioner as opposed to a presumptive protestant, this Council would be reticent



to give him more authority over the approval of projects on his land. The analysis is no different here.

We are sympathetic to the pressures put on the Council to support legislation that impedes residential growth. Existing constituencies routinely oppose any and all measures that will add new homes and, presumptively, lower property values. Nevertheless, the exclusionary policies that were adopted last year and the popular will that directs it has set Howard County on a dangerous path. Council Bill 3 represents a bridge too far. Regardless of intention, its effect on the processing of the Lawyer's Hill subdivision would be nothing short of blatant corruption.

That leads to the motivation behind this letter. None of the undersigned have an interest in this project. This is a matter of good government. This bill, and anyone who votes for it, is telling the business community that corruption is acceptable so long as it is targeted at the right party. We believe this legislation should be defeated entirely, but in the absence of that we would strongly urge the Council to table the bill pending the resolution of an ethics complaint that has been filed against Mr. Roth regarding his refusal to recuse himself from voting on this project.

Sincerely,

A handwritten signature in blue ink, appearing to be "RW", written over a faint circular stamp.

Robert Weickgenannt
Weick Properties LLC
8835 Columbia 100 Pkwy
Columbia, MD 21045

HOWARD COUNTY COUNCIL
RECEIVED

CARROLL REAL ESTATE CONSULTING, INC.

8318 Forrest Street – Suite 101

Ellicott City, MD 21043

PHONE: 443-220-6387

FAX: 800-878-6033

EMAIL: ggamber@earthlink.net

2019 JAN 29 AM 11:32
CMBRS TW MS

January 28, 2019

The Honorable Christiana Rigby, Chair
Howard County Council
3430 Courthouse Drive
Ellicott City, MD 21043

RE: Council Bill 3-2019

Dear Chairperson Rigby:

As a business professional doing business in Howard County, I respectfully request that the County Council table Council Bill 3-2019 pending the conclusion of an ongoing ethics investigation regarding Historic Preservation Commission (“HPC” or “Commission”) Board Member Drew Roth. While this legislation may have been filed with good intentions, information made available subsequent to its introduction has raised significant questions about the propriety of giving the Commission more power over the approval of development projects.

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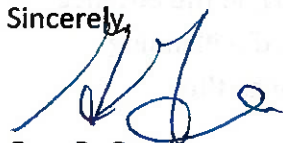
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That leads to the motivation behind this letter. As a real estate consultant and Maryland Licensed Real Estate Sales Person, I have no financial interest in this particular project. This is a matter of good government and the appearance of impropriety, which impacts not just on the future of sound quality development in Howard County and the increase to the tax base; but, more importantly the process in itself.

This bill, and anyone who votes for it, is saying to our business community that impropriety, or the appearance of impropriety, is acceptable so long as it is targeted at the right party. I believe this legislation should be defeated entirely, but in the absence of an outright defeat and dismissal, I strongly urge the Council to table the bill pending the resolution of an ethics complaint that has been filed against Mr. Roth regarding his refusal to recuse himself from voting on this project.

Honorable Justice Antonin Scalia on the “Appearance of Impropriety” Ethical Standard- “If there’s anything vaguer than that I can’t imagine what it might be.”

Sincerely,



Gary R. Gamber
President

HOWARD COUNTY COUNCIL
RECEIVED

January 28, 2019

2019 JAN 30 PM 1:09

AMBERS MS TW

The Honorable Christiana Rigby, Chair
Howard County Council
3430 Courthouse Drive
Ellicott City, MD 21043

RE: Council Bill 3-2019

Dear Chairperson Rigby:

We, the undersigned business leaders and professionals of Howard County, respectfully request that the County Council table Council Bill 3-2019 pending the conclusion of an ongoing ethics investigation regarding Historic Preservation Commission ("HPC" or "Commission") Board Member Drew Roth. While this legislation may have been filed with good intentions, information made available subsequent to its introduction has raised significant questions about the propriety of giving the Commission more power over the approval of development projects.

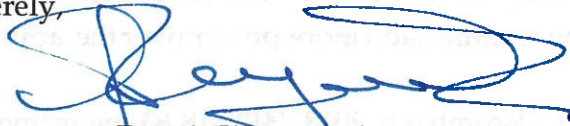
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We are sympathetic to the pressures put on the Council to support legislation that impedes residential growth. Existing constituencies routinely oppose any and all measures that will add new homes and, presumptively, lower property values. Nevertheless, the exclusionary policies that were adopted last year and the popular will that directs it has set Howard County on a dangerous path. Council Bill 3 represents a bridge too far. Regardless of intention, its effect on the processing of the Lawyer's Hill subdivision would be nothing short of blatant corruption.

That leads to the motivation behind this letter. None of the undersigned have an interest in this project. This is a matter of good government. This bill, and anyone who votes for it, is telling the business community that corruption is acceptable so long as it is targeted at the right party. We believe this legislation should be defeated entirely, but in the absence of that we would strongly urge the Council to table the bill pending the resolution of an ethics complaint that has been filed against Mr. Roth regarding his refusal to recuse himself from voting on this project.

Sincerely,



Patraic Weymouth

January 28, 2019

HOWARD COUNTY COUNCIL
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2019 JAN 30 PM 1:10

The Honorable Christiana Rigby, Chair
Howard County Council
3430 Courthouse Drive
Ellicott City, MD 21043

RE: Council Bill 3-2019

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I am sympathetic to the pressures put on the Council to support legislation that impedes residential growth. Existing constituencies routinely oppose any and all

measures that will add new homes and, presumptively, lower property values. Nevertheless, the exclusionary policies that were adopted last year and the popular will that directs it has set Howard County on a dangerous path. Council Bill 3 represents a bridge too far. Regardless of intention, its effect on the processing of the Lawyer's Hill is a clear conflict of interest.

That leads to the motivation behind this letter. I have no interest in this project. This is a matter of good government. This bill, and anyone who votes for it, is telling the business community that personal objectives acted upon by someone in a position of authority is acceptable so long as they are targeted at the right party. I believe this legislation should be defeated entirely, but in the absence of that I would strongly urge the Council to table the bill pending the resolution of an ethics complaint that has been filed against Mr. Roth regarding his refusal to recuse himself from voting on this project.

Sincerely,



Nicholas Johnson
Owner, Su Casa Furniture

HOWARD COUNTY COUNCIL
RECEIVED

2019 JAN 22 PM 2:39
LW TW MS



The Stables Building
2081 Clipper Park Road
Baltimore, MD 21211

January 17, 2019

The Honorable Liz Walsh, District 1
George Howard Building, 1st Floor
3430 Courthouse Drive
Ellicott City, MD 21043

RE: Council Bill No. 4-2019

Subject: Necessary disturbance for ecological restoration and water quality enhancement projects

Dear Councilwoman Walsh:

As an ecological planning and design firm, we applaud your efforts to tighten regulations regarding the protection of sensitive natural resources. Since 2013, we have been a consult for the County's Storm Water Management (SWM) Division, where we design and oversee the construction of numerous projects that seek to enhance water quality and natural environments, such as the Dorsey Hall Village Water Quality Retrofits, Bonnie Branch Bank Stabilization and Rockburn Branch Park Stream Restoration and Water Quality Retrofits in District 1. Unfortunately, these beneficial projects are subject to the same development regulations as subdivisions and other projects even though they allow the land to revert back to a natural and hopefully better condition. It is through the "Necessary Disturbance Exemption" that the Department of Planning and Zoning authorizes these activities with minimal administrative burden and within a timeframe that supports SWM Division's objectives and permit requirements. We are writing to request an amendment to CB4-2019 to allow ecological restoration and water quality enhancement projects to be permitted under Section 16.116. "Protection of wetlands, streams, and steep slopes" as a necessary disturbance or other alternative compliance. Furthermore, it may be worth considering exemptions for redevelopment projects that result in a net ecological uplift, like some of the redevelopment work in Downtown Columbia, or new developments meeting the County's criteria for Green Neighborhoods. With these amendments, we feel that Howard County can continue to lead in environmental protection and encourage projects to further enhance the natural environments throughout the County.

Sincerely,
Biohabitats, Inc.

Michael Trumbauer
Sr. Restoration Ecologist / Project Manager



Sayers, Margery

From: Lynn B. Clark <lbclark@verizon.net>
Sent: Wednesday, January 30, 2019 9:21 PM
To: CouncilMail
Subject: CB3 and CB4

[Note: This email originated from outside of the organization. Please only click on links or attachments if you know the sender.]

We support CB3 and CB4

We have lived on Lawyers Hill RD (LHRD) since 1998 when we bought a 1950's cape cod style house near the intersection with Montgomery RD. Although our home is not in the designated Historic Residential District, it is tied to a family that has many generations on "The Road"(LHRD) [including Old LHRD]. Families that have moved away for various reasons return even in succeeding generations. Despite the distance between many of the homes, especially the designated historic ones that are sheltered by stands of grand old trees, much of the sense of community springs from the historic Meeting Hall near the intersection of LHRD and Old LHRD. It was the center of the original Summer retreat homes for wealthy families from Baltimore. This was before electricity, air-conditioning/heating, and indoor plumbing. Of course, the historic homes' amenities have been upgraded interior-wise. The Meeting Hall retains many of these limitations to reflect the historic site designation but it is used as much as possible, weather permitting. It is where the social activities such as parties, dances, plays, musicals, and picnics occurred. Also, many of the battles began there to protect the area such as the splitting of the community by the building of Interstate 95 as all of the agreements to reduce the highway noise met the bedrock! It only took 50+ years of fighting for the community to have the noise barrier built!

We are now fighting for the integrity of all of the designated historic district's properties. A developer is trying apply a zoning rating for the surrounding area (RED) to override the zoning for a designated historic property to build homes that do not meet any of the printed Guidelines for this specific historic district's buildings and landscaping. Modern **interior** amenities are allowed. This developer has no intention of following the exterior Guidelines. He plans to strip the land's dense 100+ year-old trees and foliage that serve as a vital animal refuge and "plant 1 fruit tree in the back yard" of the 17 closely aligned lots. Nothing resembles the guidelines for the only historic residential district in our county.

Members of the LHRD community and the Gables community (adjoining part of the historic district) have met with this developer to discuss his plans and to give him input in relation to the Guidelines, the importance of the existence of the valuable trees and impact on the root systems of trees on nearby properties if clearance is too close to some property lines. Rainwater flow, nature of the landscape, and already existing traffic issues on LHRD and the Gables' through road (both from RT 1) were presented to him and were essentially ignored. He is doing everything to negate the property's existing zoning protections.

We recognize the significant financial gains for the landowner, developer, and potential builder of the proposed homes, but overriding this historic district designation will impact the future of all other historic properties in the district, leaving them subject to exploitation instead of preserving our history. This is why we support **CB3**.

Additionally, we support **CB4** in relation to the above property, and much of LHRD because of the rainwater flow from the east of many properties down a steep slope from RT1, despite the existing drainage systems and all of the trees and foliage. The record rainfall of 2018 indicates need for special additional rainwater control.

Lynn Burns Clark and Howard Douglas Keith
6541 Lawyers Hill RD
Elkridge, MD 21075

Sayers, Margery

From: Stephanie Tuite <Stephanie@fcc-eng.com>
Sent: Wednesday, January 30, 2019 12:01 PM
To: CouncilMail; Ball, Calvin
Subject: [WARNING: AMP - ATTACHMENT(S) MAY CONTAIN MALWARE]Testimony against CB3-2019
Attachments: Stephanie Tuite.vcf; Testimony against CB3 Tuite.pdf

[Note: This email originated from outside of the organization. Please only click on links or attachments if you know the sender.]

Please see attached for your consideration.

Stephanie Tuite



January 30, 2019

By Email: Howard County Council (CouncilMail@howardcountymd.gov)
County Executive Calvin Ball (CalvinBall@howardcountymd.gov)
The Honorable Christiana Rigby, Chair

RE: Testimony against Council Bill 3-2019

Dear Chairperson Rigby, Council Members and County Executive Ball:

As a business leader, business owner, resident in Mr. Yungman's district, and professional of Howard County, I respectfully request that the County Council table Council Bill 3-2019 pending the conclusion of an ongoing ethics investigation regarding Historic Preservation Commission ("HPC" or "Commission") Board Member Drew Roth. I do believe that this legislation was filed with good intentions, but considering information made available subsequent to its introduction has raised significant questions about the propriety of giving the Commission, or any entity other than the Department of Planning and Zoning, more power over the approval of development projects.

On January 17, 2019, HPC-18-63 regarding a 17-home subdivision to be located at 5819 Lawyers Hill Road was presented to the Commission. At that time, the Petitioner notified the Board that Board Member Drew Roth owned property adjoining the proposed subdivision and asked that he recuse himself. Mr. Roth refused and the Office of Law declined to intervene. Over the course of the hearing, Mr. Roth expressed clear opposition to the subdivision and sought modifications outside of the scope of the HPC. Notably, in the absence of Council Bill 3, the HPC is limited to advisory comments to be considered by the Planning Board in any approval or denial of the subdivision. Council Bill 3 would authorize the Commission to defeat the subdivision entirely.

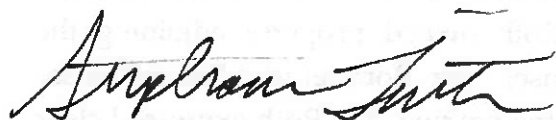
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We are sympathetic to the pressures put on your respective office to support legislation that impedes residential growth. Existing constituencies routinely oppose any and all measures that will add new homes. Nevertheless, the exclusionary policies that were adopted last year and the popular will that directs it has set Howard County on a dangerous path. Council Bill 3 represents a bridge too far. Regardless of intention, its effect on the processing of the Lawyer's Hill subdivision would be nothing short of blatant corruption.

That leads to the motivation behind this letter. This is a matter of good government. This is a fight for the balance or impartiality that is essential to due process. This bill, and anyone who votes for it, is telling the business community that corruption is acceptable so long as it is targeted at the right party. We believe this legislation should be defeated entirely, but in the absence of that, we would strongly urge the Council to table the bill pending the resolution of the above-described ethics complaint.

To be clear, I believe that the HPC continues to provide valuable input on many matters, but the HPC's position is only one piece of the approval puzzle. It should continue to be the responsibility of the Department of Planning and Zoning to consider the needs and input of the HPC, as well as all citizens, businesses, and the County at-large.

Sincerely,

A handwritten signature in black ink, appearing to read "Stephanie Tuite". The signature is fluid and cursive, with a horizontal line above the name.

Stephanie Tuite

Sayers, Margery

From: Frank Manalansan II <frankm@fcc-eng.com>
Sent: Wednesday, January 30, 2019 10:17 AM
To: CouncilMail; Ball, Calvin B
Subject: Testimony Against CB3-2019
Attachments: SKMBT_C554e19013010150.pdf

[Note: This email originated from outside of the organization. Please only click on links or attachments if you know the sender.]

Chairperson Rigby, Council Members, and County Executive Ball-

Please see attached for your consideration.

Regards,

Frank Manalansan II, L.S.

Fisher Collins and Carter Inc.

Centennial Square Office Park
10272 Baltimore National Pike
Ellicott City, Maryland 21042
(410) 461-2855 Ext. 1839

January 28, 2019

By Email: Howard County Council (CouncilMail@howardcountymd.gov)
County Executive Calvin Ball (CBBall@howardcountymd.gov)
The Honorable Christiana Rigby, Chair

RE: Testimony against Council Bill 3-2019

Dear Chairperson Rigby, Council Members and County Executive Ball:

As a business leader, business owner and professional of Howard County, I respectfully request that the County Council table Council Bill 3-2019 pending the conclusion of an ongoing ethics investigation regarding Historic Preservation Commission ("HPC" or "Commission") Board Member Drew Roth. I do believe that this legislation was filed with good intentions, but considering information made available subsequent to its introduction has raised significant questions about the propriety of giving the Commission, or any entity other than the Department of Planning and Zoning, more power over the approval of development projects.

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We are sympathetic to the pressures put on your respective office to support legislation that impedes residential growth. Existing constituencies routinely oppose any and all measures that will add new homes. Nevertheless, the exclusionary policies that were adopted last year and the popular will that directs it has set Howard County on a dangerous path. Council Bill 3 represents a bridge too far. Regardless of intention, its effect on the processing of the Lawyer's Hill subdivision would be nothing short of blatant corruption.

That leads to the motivation behind this letter. This is a matter of good government. This is a fight for the balance or impartiality that is essential to due process. This bill, and anyone who votes for it, is telling the business community that corruption is acceptable so long as it is targeted at the right party. We believe this legislation should be defeated entirely, but in the absence of that, we would strongly urge the Council to table the bill pending the resolution of the above-described ethics complaint.

To be clear, I believe that the HPC continues to provide valuable input on many matters, but the HPC's position is only one piece of the approval puzzle. It should continue to be the responsibility of the Department of Planning and Zoning to consider the needs and input of the HPC, as well as all citizens, businesses, and the County at-large.

Sincerely,

A handwritten signature in blue ink that reads "Mark John Manslow II". The signature is written in a cursive style with a horizontal line at the end.

Sayers, Margery

From: Earl Collins <collins@fcc-eng.com>
Sent: Wednesday, January 30, 2019 9:34 AM
To: CouncilMail
Subject: Council Bill 3-2019
Attachments: Earl Collins.vcf; Council Bill 3-2019.pdf

[Note: This email originated from outside of the organization. Please only click on links or attachments if you know the sender.]

Please see attachment,
Thanks,



January 28, 2019

By Email: Howard County Council (CouncilMail@howardcountymd.gov)
County Executive Calvin Ball (CBBall@howardcountymd.gov)
The Honorable Christiana Rigby, Chair

RE: Testimony against Council Bill 3-2019

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Sincerely,



Sayers, Margery

From: Terry Fisher <tfisher@fcc-eng.com>
Sent: Wednesday, January 30, 2019 9:24 AM
To: CouncilMail; Ball, Calvin B
Subject: FW: Testimony Against CB3-2019
Attachments: Council Bill 3-2019.pdf

[Note: This email originated from outside of the organization. Please only click on links or attachments if you know the sender.]

Chairperson Rigby, Council Members, and County Executive Ball-
Thank you for your consideration.
Best regards-
Terry Fisher

January 28, 2019

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County Executive Calvin Ball (CBBall@howardcountymd.gov)
The Honorable Christiana Rigby, Chair

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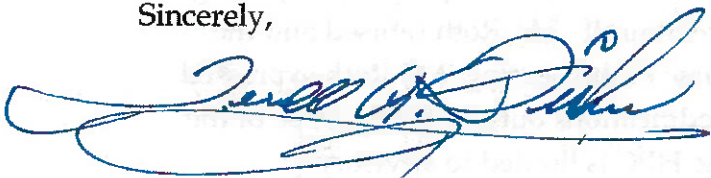
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Sincerely,

A handwritten signature in blue ink, appearing to read "David G. Dill", with a large, sweeping flourish underneath.

Sayers, Margery

From: Mike McCann <mike.mccann@fcc-eng.com>
Sent: Tuesday, January 29, 2019 11:29 AM
To: CouncilMail; Ball, Calvin B
Subject: Testimony Against CB3-2019
Attachments: SKMBT_C554e19012911160.pdf

[Note: This email originated from outside of the organization. Please only click on links or attachments if you know the sender.]

Chairperson Rigby, Council Members, and County Executive Ball-
Thank you for your consideration.
Best regards-
Mike McCann

January 28, 2019

By Email: Howard County Council (CouncilMail@howardcountymd.gov)
County Executive Calvin Ball (CBBall@howardcountymd.gov)
The Honorable Christiana Rigby, Chair

RE: Testimony against Council Bill 3-2019

Dear Chairperson Rigby, Council Members and County Executive Ball:

As a business leader, business owner and professional of Howard County, I respectfully request that the County Council table Council Bill 3-2019 pending the conclusion of an ongoing ethics investigation regarding Historic Preservation Commission ("HPC" or "Commission") Board Member Drew Roth. I do believe that this legislation was filed with good intentions, but considering information made available subsequent to its introduction has raised significant questions about the propriety of giving the Commission, or any entity other than the Department of Planning and Zoning, more power over the approval of development projects.

On December 6, 2018, HPC-18-63 regarding a 17-home subdivision to be located at 5819 Lawyers Hill Road was presented to the Commission. At that time, the Petitioner notified the Board that Board Member Drew Roth owned property adjoining the proposed subdivision and asked that he recuse himself. Mr. Roth refused and the Office of Law declined to intervene. Over the course of the hearing, Mr. Roth expressed clear opposition to the subdivision and sought modifications outside of the scope of the HPC. Notably, in the absence of Council Bill 3, the HPC is limited to advisory comments to be considered by the Planning Board in any approval or denial of the subdivision. Council Bill 3 would authorize the Commission to defeat the subdivision entirely.

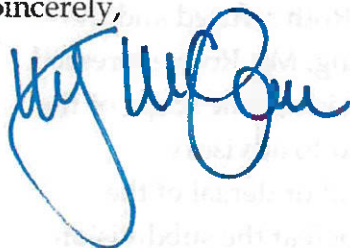
Under Maryland law, an adjoining or abutting property owner is "presumptively aggrieved" by the development of a neighboring parcel. Such property owners have equal standing before administrative bodies as the petitioner. Undoubtedly, if the situation were reversed and Mr. Roth were the petitioner as opposed to a presumptive protestant, this Council would be reticent to give him more authority over the approval of projects on his land. The analysis is no different here.

We are sympathetic to the pressures put on your respective office to support legislation that impedes residential growth. Existing constituencies routinely oppose any and all measures that will add new homes. Nevertheless, the exclusionary policies that were adopted last year and the popular will that directs it has set Howard County on a dangerous path. Council Bill 3 represents a bridge too far. Regardless of intention, its effect on the processing of the Lawyer's Hill subdivision would be nothing short of blatant corruption.

That leads to the motivation behind this letter. This is a matter of good government. This is a fight for the balance or impartiality that is essential to due process. This bill, and anyone who votes for it, is telling the business community that corruption is acceptable so long as it is targeted at the right party. We believe this legislation should be defeated entirely, but in the absence of that, we would strongly urge the Council to table the bill pending the resolution of the above-described ethics complaint.

To be clear, I believe that the HPC continues to provide valuable input on many matters, but the HPC's position is only one piece of the approval puzzle. It should continue to be the responsibility of the Department of Planning and Zoning to consider the needs and input of the HPC, as well as all citizens, businesses, and the County at-large.

Sincerely,

A handwritten signature in blue ink, appearing to read "W. J. [unclear]". The signature is fluid and cursive, with a large loop at the end.

Sayers, Margery

From: Mark Robel <robel@fcc-eng.com>
Sent: Tuesday, January 29, 2019 10:24 AM
To: CouncilMail; Ball, Calvin B
Subject: Testimony Against Council Bill 3-2019
Attachments: SKM_C554e19012910130.pdf

[Note: This email originated from outside of the organization. Please only click on links or attachments if you know the sender.]

January 28, 2019

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County Executive Calvin Ball (CBBall@howardcountymd.gov)
The Honorable Christiana Rigby, Chair

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Sincerely,

Mark L. Bobel
(Property Line Surveyor #339)

Sayers, Margery

From: Paul Kriebel <pkriebel@fcc-eng.com>
Sent: Tuesday, January 29, 2019 10:24 AM
To: CouncilMail
Cc: Ball, Calvin B
Subject: COUNCIL BILL 3-2019 : TESTIMONY AGAINST
Attachments: SKMBT_C554e19012910550.pdf

[Note: This email originated from outside of the organization. Please only click on links or attachments if you know the sender.]

TO : THE HOWARD COUNTY COUNCIL & THE HOWARD COUNTY EXECUTIVE : PLEASE SEE THE ATTACHMENT.....
.....THANKS.....PAUL W. KRIEBEL

January 28, 2019

By Email: Howard County Council (CouncilMail@howardcountymd.gov)
County Executive Calvin Ball (CBBall@howardcountymd.gov)
The Honorable Christiana Rigby, Chair

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Sincerely,



Sayers, Margery

From: Lisa Markovitz <lmarkovitz@comcast.net>
Sent: Sunday, January 27, 2019 6:25 PM
To: CouncilMail
Subject: Submerged Gravel Wetlands info (CB3)

[Note: This email originated from outside of the organization. Please only click on links or attachments if you know the sender.]

I was asked what I knew about the type of stormwater management feature Mr. Reuwer described, as a submerged gravel wetland system proposed for the Lawyer's Hill project. There is a lot of good information online describing these systems, where they work best, what type of issues to watch out for, especially regarding on-going maintenance, etc. Here are some links that give some good details. One issue to remember on this subject is that this system is about quality of water, and not amount running off, and requires flat, zero slope areas to be beneficial.

FYI

Lisa Markovitz

https://www.njstormwater.org/pdf/tech_man_6_2_constructed_stormwater_wetlands.pdf

<https://www.annapolis.gov/DocumentCenter/View/9598/Submerged-Gravel-Wetlands-Fact-Sheet-PDF?bidId=>

<https://www.unh.edu/unhsc/sites/unh.edu.unhsc/files/presentations/NJASLA%20subsurface%20gravel%20wetland.pdf>

CONSTRUCTED STORMWATER WETLANDS

Definition

Constructed stormwater wetlands are wetland systems designed to maximize the removal of pollutants from stormwater runoff through settling and both uptake and filtering by vegetation. Constructed stormwater wetlands temporarily store runoff in relatively shallow pools that support conditions suitable for the growth of wetland plants. There are two types of constructed wetlands for stormwater runoff treatment: standard wetlands and subsurface gravel wetlands. Standard constructed wetlands direct flow through an open vegetated marsh system. Subsurface gravel wetlands, also direct flow through a surface marsh which then discharges to a permanently ponded subsurface gravel bed. The TSS removal rate for constructed stormwater wetlands is 90.

Purpose

Constructed stormwater wetlands are used to remove a wide range of stormwater pollutants from land development sites as well as provide wildlife habitat and aesthetic features. Constructed stormwater wetlands can also be used to reduce peak runoff rates when designed as a multi-stage, multi-function facility.

Conditions Where Practice Applies

Standard constructed wetlands require sufficient drainage areas and dry weather base flows to function properly. The minimum drainage area to a constructed stormwater wetland is 10 to 25 acres, depending on the type of wetland. The depth to the SHWT must be considered as part of the water budget evaluation. See E below for additional information.

Subsurface gravel wetlands (SGW) do not have a minimum drainage area requirement. They are well suited for retrofit applications since draindown through the subsoil is not required to provide water quality treatment and the hydraulic head requirement is smaller than that of standard wetlands. In addition, gravel wetlands are not dependent on the depth to the seasonal high water table (SHWT.) SGW can be placed within the footprint of an existing stormwater BMP to enhance the water quality function of the BMP, and is particularly effective in nitrogen removal.

Constructed wetlands should not be located within natural wetland areas since they will typically not have the same full range of ecological functions. While providing some habitat and aesthetic values, constructed stormwater wetlands are designed primarily for pollutant removal.

Finally, a constructed stormwater wetland must have a maintenance plan and, if privately owned, should be protected by easement, deed restriction, ordinance, or other legal measures that prevent its neglect, adverse alteration, and removal.

Design Criteria

The basic design parameters for any type of constructed wetland are the storage volumes within its various zones. In general, the total volume within these zones must be equal to the design runoff volume. An exception to this requirement is the standard wetlands with extended detention. In addition, the character, diversity, and hardiness of the wetland vegetation must be sufficient to provide adequate pollutant removal. Selected of vegetation must be non-invasive and based on the anticipated water depth within the wetlands. (Additional information is provided in Chapter XX: Landscaping.)

A constructed wetland must be able to maintain its permanent pool level. If the soil at the surface of a wetland site is not sufficiently impermeable to prevent excessive seepage, construction of an impermeable liner or other soil modifications will be necessary. Details of these and other design parameters are presented below.

A. Standard Wetlands

Standard wetlands typically consist of three zones: pool, marsh, and semi-wet. Depending upon their relative size and the normal or dry weather depth of standing water, the pool zone may be further characterized as a pond, micropond, or forebay. Similarly, the marsh zone may be further characterized as either high or low marsh based again upon the normal standing water depth in each.

Depending on the presence and relative storage volume of the pool, marsh, and semi-wet zones, a standard wetland may be considered to be one of three types: pond wetland, marsh wetland, or extended detention wetland. As described in detail below, a pond wetland consists primarily of a relatively deep pool with a smaller marsh zone outside it. Conversely, a marsh wetland has a greater area of marsh than pool zone. Finally, an extended detention wetland consists of both pool and marsh zones within an extended detention basin.

Table 6.2-1 below presents pertinent design criteria for each type of standard constructed wetland. As shown in the table, each type (i.e., pond, marsh, and extended detention wetland) allocates different percentages of the total stormwater quality design storm runoff volume to its pool, marsh, and semi-wet zones. In a pond wetland, this volume is distributed 70 percent to 30 percent between the pool and marsh zones. Conversely, in a marsh wetland, the total runoff volume is distributed 30 percent to 70 percent between the pool and marsh zones. Both of these zone volumes are based on their normal standing water level.

However, in an extended detention wetland, only 50 percent of the stormwater quality design storm runoff volume is allocated to the pool and wetland zones, with 40 percent of this amount (or 20 percent of the total stormwater quality design storm runoff volume) provided in the pool zone and 60 percent (or

30 percent of the total runoff volume) provided in the marsh zone. The remaining 50 percent of the stormwater quality design storm runoff volume is provided in the wetland's semi-wet zone above the normal standing water level, where it is temporarily stored and slowly released similar to an extended detention basin. As noted in Table 6.2-1, the detention time in the semi-wet zone of an extended detention wetland must meet a minimum of 24-hour detention time, which is the time from when the maximum storage volume is achieved until only 10 percent of the maximum volume remains in an extended detention wetland. The minimum diameter of any outlet orifice in all wetland types is 2.5 inches.

The components of a typical standard stormwater wetland are illustrated in Figure 6.2-1. Pertinent design criteria for each component are presented in Table 6.2-1. Additional details of each type of constructed stormwater wetland and the components of each are described below.

1. Pool Zone

Pools have standing water depths of 2 to 6 feet and primarily support submerged and floating vegetation. Due to their depths, support for emergent vegetation is normally limited. As noted above, the pool zone consists of a pond, micropond, and/or forebay, depending on their relative sizes and depths. Descriptions of the pond and micropond are presented below. See C. Forebays for a discussion of the forebay zone.

a. Pond

Ponds have standing water depths of 4 to 6 feet and, depending on the type, can comprise the largest portion of a constructed stormwater wetland. Ponds provide for the majority of particulate settling in a constructed stormwater wetland.

b. Micropond

Microponds have a standing water depth of 4 to 6 feet, but are smaller in surface area than a standard pond. A micropond is normally located immediately upstream of the outlet from a constructed stormwater wetland. At that location, it both protects the outlet from clogging by debris and provides some degree of particulate settling. Since a micropond does not provide the same degree of settling as a standard pond, it is normally combined with a larger area of marsh than a standard pond.

Table 6.2–1: Design Criteria for Standard Constructed Wetlands

Wetland Design Feature	Type of Standard Constructed Wetland		
	Pond	Marsh	Extended Detention
Minimum Drainage Area (Acres)	25	25	10
Minimum Length to Width Ratio	1:1	1:1	1:1
Allocation of Stormwater Quality Design Storm Runoff Volume (Pool / Marsh / Semi-Wet*)	70 / 30 / 0	30 / 70 / 0	20 / 30 / 50*
Pool Volume (Forebay / Micropond / Pond)	10 / 0 / 60	10 / 20 / 0	10 / 10 / 0
Marsh Volume (Low / High)	20 / 10	45 / 25	20 / 10
Sediment Removal Frequency (Years)	10	2 to 5	2 to 5
Outlet Configuration	Reverse-Slope Pipe or Broad Crested Weir	Reverse-Slope Pipe or Broad Crested Weir	Reverse-Slope Pipe or Broad Crested Weir
* In an Extended Detention Wetland, 50 percent of the stormwater quality design storm runoff volume is temporarily stored in the semi-wet zone. Release of this volume must meet the 24 hour detention time requirement. (see text above).			

2. Marsh Zone

Marshes have shallower standing water depths than ponds, generally ranging from 6 to 18 inches. At such depths, they primarily support emergent wetland vegetation. As noted above, a marsh is classified as either a high or low marsh, depending on the exact depth of standing water.

a. Low Marsh

A low marsh has a standing water depth of 6 to 18 inches. It is suitable for the growth of several emergent wetland plant species.

b. High Marsh

A high marsh has a maximum standing water depth of 6 inches. Due to its shallower depth, it will have a higher standing water surface area to volume ratio than a low marsh. It will

normally support a greater density and diversity of emergent wetland species than a low marsh.

3. Semi-Wet Zone

The semi-wet zone in a constructed stormwater wetland is located above the pool and marsh zones and is inundated only during storm events. As a result, it can support both wetland and upland plants.

4. Types of Standard Constructed Wetlands

a. Pond Wetlands

Pond wetlands consist primarily of ponds with standing water depths ranging from 4 to 6 feet in normal or dry weather conditions. Pond wetlands utilize at least one pond component in conjunction with high and low marshes. The pond is typically the component that provides for the majority of particulate pollutant removal. This removal is augmented by a forebay, which also reduces the velocity of the runoff entering the wetland. The marsh zones provide additional treatment of the runoff, particularly for soluble pollutants.

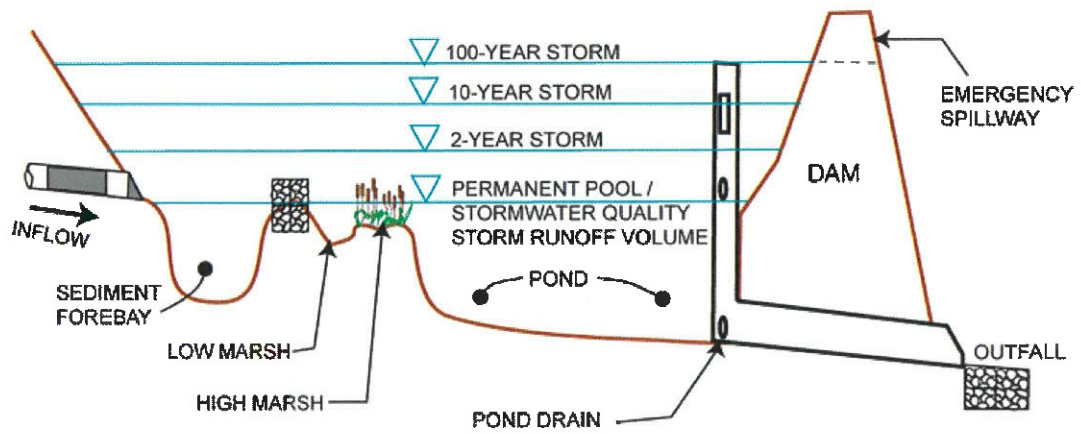
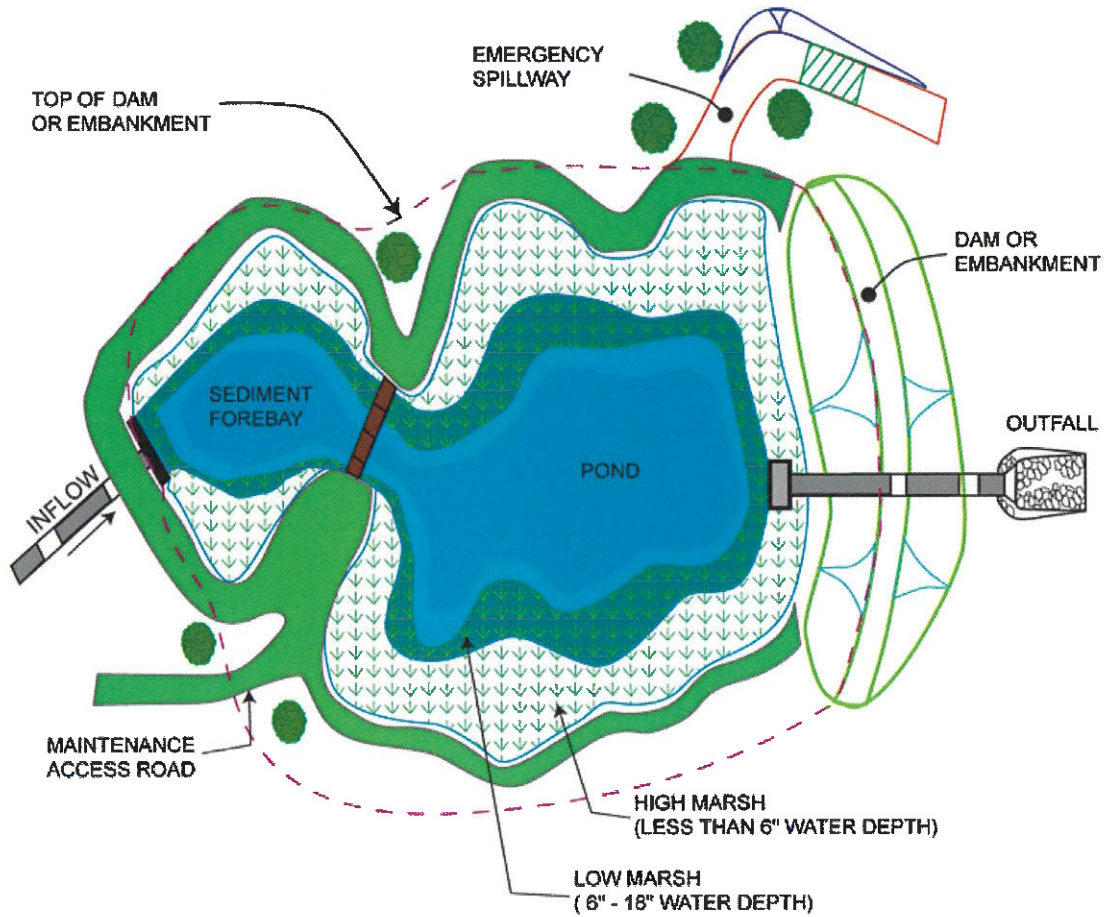
Pond wetlands require less site area than marsh wetlands and generally achieve a higher pollutant removal rate than the other types of constructed stormwater wetland. See Table 6.2-1 for the relative stormwater quality design storm runoff volumes to be provided in each wetland component.

b. Marsh Wetlands

Marsh wetlands consist primarily of marsh zones with standing water depths ranging up to 18 inches during normal or dry weather conditions. These zones are further configured as low and high marsh components as described above. The remainder of the stormwater quality design storm runoff volume storage is provided by a micropond. See Table 6.2-1 for the relative stormwater quality design storm runoff volumes to be provided in each wetland component.

Marsh wetlands should be designed with sinuous pathways to increase retention time and contact area. Marsh wetlands require greater site area than other types of constructed stormwater wetlands. In order to have the base and/or groundwater flow rate necessary to support emergent plants and minimize mosquito breeding, marsh wetlands may also require greater drainage areas than the other types. This is due to the relatively larger area of a marsh wetland as compared with either a pond or extended detention wetland. This larger area requires greater rates of normal inflow to generate the necessary flow velocities and volume changeover rates.

Figure 6.2-1: Components of a Standard Constructed Wetland



c. **Extended Detention Wetlands**

Unlike pond and marsh wetlands, an extended detention wetland temporarily stores a portion of the stormwater quality design storm runoff volume in the semi-wet zone above its normal standing water level. This temporary runoff storage, which must be slowly released in a manner similar to an extended detention basin, allows the use of relatively smaller pool and marsh zones. As a result, extended detention wetlands require less site area than pond or marsh wetlands. See Table 6.2-1 for the relative stormwater quality design storm runoff volumes to be provided in each wetland component. The detention time in the semi-wet zone of an extended detention wetland must meet a minimum of 24-hour detention time. The detention time is determined based on time of the maximum basin storage volume above the permanent pool to the time when a minimum of 10 percent of the maximum storage volume remains above the permanent pool. The minimum diameter of any outlet orifice in all wetland types is 2.5 inches.

Due to the use of the semi-wet zone, water levels in an extended detention wetland will also increase more during storm events than pond or marsh wetlands. Therefore, the area of wetland vegetation in an extended detention wetland can expand beyond the normal standing water limits occupied by the pool and marsh zones. Wetland plants that tolerate intermittent flooding and dry periods should be selected for these areas.

B. Subsurface Gravel Wetlands

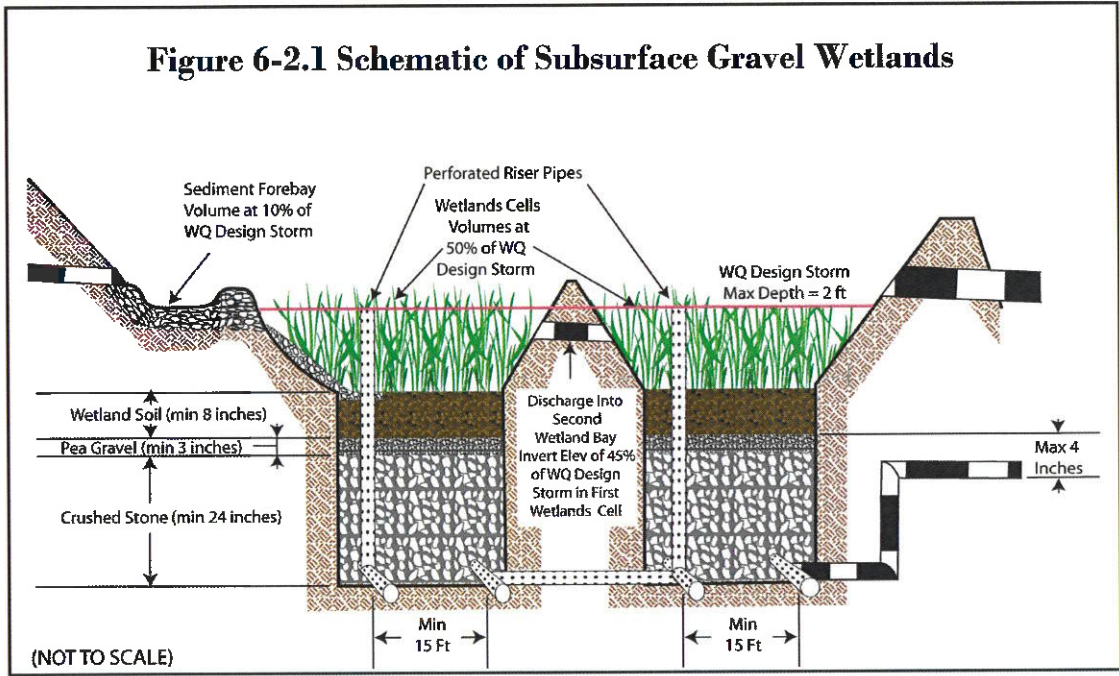
A gravel wetland is a combination of a standard constructed wetlands, described above, and a subsurface system that moves flow horizontally across saturated gravel. The components of a typical gravel wetland are shown in Figures 6.2-2 and Table 6.2-2 below. As shown in the table, the design of a gravel wetland system is based on the runoff volume from the water quality design storm: 10% in the forebay and 50% on the elevation above the wetlands soil in each wetland cell. (Note: The volume of the forebay is not deducted from the sizing of the wetlands cells.)

Gravel wetlands include a sediment forebay at the inflow area, for settling coarse particles and as a location more frequent maintenance. The discharge from the forebay enters the first of two wetland cells. A perforated riser conveys flow into the first subsurface gravel cell, which is maintained in a saturated condition to provide anaerobic transformations particularly necessary for the denitrification process. Underdrains capture the flow and then discharge it at an elevation that is a maximum of 4 inches below the bottom of the wetland soil.

At the elevation based on the volume of 45% of the water quality design storm, a cross-drain conveys flow from the first wetlands cell to a second wetlands cell. All rainfall events up to the water quality design storm are conveyed through perforated riser pipes into subsurface gravel bays. (As a result, some of the runoff from the WQ design storm and many smaller storm events will pass through a minimum of 30 feet of gravel during annual storm events and some of the runoff volume will only pass through a minimum of 15 feet of gravel.) At the down gradient end of the gravel cells, a perforated pipe conveys the runoff into a discharge pipe.

Note: Gravel wetlands rely on a fully saturated gravel layer. Caution must be taken that the outlet structure does not function as a siphon that will drain the gravel bed by ensuring that the outlet for the water quality design storm is vented or does not discharge in a submerged condition.

The drawdown time is controlled by a combination of the surface storage and the elevation difference (driving head) of the water surface elevation within the wetlands and the outlet pipe. The stormwater quality design storm runoff volume must take a minimum of 24 hours and a maximum of 36 hours to drain from the maximum elevation of the water quality design to the top of the wetlands soil, using the discharge from the gravel beds as the only outlet. In addition to the assessment of the draindown, the hydraulic capacity of the perforated riser pipes and underdrains must exceed that of the discharge pipe.



1. Wetlands Areas

Water quality treatment in the wetland surface is similar to that discussed for the constructed wetlands with surface flow, discussed above. In a gravel wetland, a minimum soil depth of eight inches must be provided for the vegetation. The wetlands soils must have low hydraulic conductivity (0.005 to 0.05 in/hour) and can be mixed using a combination of compost, sand, silt, and clay, with the clay component not exceeding 15% by volume. The soil mix must provide sufficient growing media and meet the permeability rates described above since it is the flow into the gravel media must pass through the pipe and not through the wetlands soil.

The wetlands soils must be continuously inundated at a depth of four inches from ground surface in order to support wetland vegetation and to maintain anaerobic conditions in the gravel cells below. This is controlled by the primary outlet, which has an invert four inches above the bottom of the wetland soil. A three inch pea gravel layer is required between the wetland soil and the subsurface gravel cells. This layer is necessary to prevent the finer portion of the wetland soil from migrating down into the gravel cells. This size of the gravel must be evaluated to ensure that the wetland soil does not migrate to the gravel cell below. Pea gravel must be used instead of filter fabric because the fine components of the wetland soil may clog the filter fabric and restrict root growth.

Selection of vegetation must be based on the duration of inundation. Additional information is provided in Chapter XX: Landscaping.

Table 6.2-2 Design Criteria for Gravel Wetlands

Wetland Design Feature	Size
Minimum wetland soil depth	8 inches
Minimum pea gravel depth	3 inches
Minimum crushed stone depth	24 inches
Minimum distance flow length in gravel substrate cell	15 ft (for each cell)
Drain time of wetlands cells	30 to 48 hours
Forebay Volume	10% of WQV
Temporary Wetlands Volume (Per Cell)	50% of WQV
Height of outlet invert depth below bottom of wetland soil	4 inches

2. Submerged Gravel Cells

A number of different processes occur in the gravel cells beneath the wetland surface including microbially mediated transformation, particularly denitrification. The gravel cells must be a minimum of 24 inches deep filled with ¾-inch crushed stone. It is essential that the gravel cells remain submerged in order for denitrification to occur. In addition, sufficient time in the anaerobic environment is necessary and is provided by the minimum 15-foot distance between the inflow and outflow of the each gravel bed.

3. Other Components

The bottom of the gravel wetlands does not require a separation from the SHWT. However, if the bottom of the gravel bed or any components of the gravel wetlands is within 2 feet of the SHWT, the area must be enclosed with a liner or other impervious material to prevent the migration of the

stormwater into the adjacent groundwater table and to prevent the drawdown of the existing adjacent groundwater.

In addition, berms between the wetland cells must be constructed out of material that prevents seepage or piping through the material.

C. Forebay

Forebays are required in any type of constructed stormwater wetland and are located at points of concentrated inflow. They serve as pretreatment measures by removing coarser sediments, trash, and debris. Forebays can be earthen, constructed out of riprap, or made out of concrete.

The designer has the option to use a manufactured treatment device instead of a forebay provided the device is designed for the New Jersey Water Quality Design storm with a TSS removal rate of at least 50%. Information on manufactured treatment devices is presented in *Chapter 6.7 –Manufactured Treatment Devices*.

D. Drainage Area and Water Budget

Constructed Wetlands with Surface Flow: The minimum drainage area to a constructed stormwater wetland generally varies from 10 to 25 acres, depending on the type of constructed wetland. Smaller drainage areas may be permissible if detailed analysis indicates that sufficient base or groundwater inflow is available. The detailed analysis must include a water budget demonstrating the availability of water to sustain the stormwater wetland. The water budget must demonstrate that the water supply to the stormwater wetland is greater than the expected loss rate. Drying periods of longer than two months have been shown to adversely affect plant community richness, so the water balance should confirm that drying will not exceed two months (Schueler 1992). (See also A-4. Types of Constructed Stormwater Wetlands with Surface Flow above.)

Gravel Wetlands with Subsurface Flow: Gravel wetlands do not have a minimum drainage area requirement. While a specific water budget is not necessary for gravel wetlands, the gravel beds remain permanently ponded with water to the elevation of the invert of the primary outlet.

E. Outlet Structure

Surface flow constructed wetlands should be equipped with a bottom drain pipe, sized to drain the permanent pool within 40 hours so that sediments may be removed when necessary. Constructed wetlands should be equipped with drains to allow the draindown or backflush of the wetlands cell if necessary. Such drains must be controlled by a lockable valve that is readily accessible from the top of the outlet structure. Additional information regarding outlet structures can be found in N.J.A.C.7:8-6, Soil Erosion and Sediment Control Standards for New Jersey and the NJDEP Stormwater Management Facilities Maintenance Manual.

F. Overflows

All constructed stormwater wetlands must be able to convey overflows to downstream drainage systems in a safe and stable manner. Constructed stormwater wetlands classified as dams under the NJDEP Dam Safety Standards at N.J.A.C. 7:20 must also meet the overflow requirements of these Standards.

G. Tailwater

The design of all hydraulic outlets must consider any significant tailwater effects of downstream waterways or facilities. This includes instances where the lowest invert in the outlet or overflow structure is below the flood hazard area design flood elevation of a receiving stream.

H. On-Line and Off-Line Systems

Constructed stormwater wetlands may be constructed on-line or off-line. On-line systems receive upstream runoff from all storms, providing runoff treatment for the stormwater quality design storm and conveying the runoff from larger storms through an outlet or overflow. Multi-purpose on-line systems also store and attenuate these larger storms to provide runoff quantity control. In such systems, the invert of the lowest stormwater quantity control outlet is set at or above the normal permanent pool level. In off-line constructed stormwater wetlands, most or all of the runoff from storms larger than the stormwater quality design storm bypass the basin through an upstream diversion. This not only reduces the size of the required basin storage volume, but reduces the basin’s long-term pollutant loading and associated maintenance. In selecting an off-line design, the potential effects on wetland vegetation and ecology of diverting higher volume runoff events should be considered.

I. Safety Ledges

Safety ledges must be constructed on the slopes of all constructed stormwater wetlands with a permanent pool of water deeper than 2.5 feet. Two ledges must be constructed, each 4 to 6 feet in width. The first or upper ledge must be located between 1 and 1.5 feet above the normal standing water level. The second or lower ledge must be located approximately 2.5 feet below the normal standing water level.

Maintenance

Effective constructed stormwater wetland performance requires regular and effective maintenance. *Chapter X: Maintenance of Stormwater Management Measures* provides information and requirements for preparing a maintenance plan for stormwater management facilities, including constructed stormwater wetlands. Specific maintenance requirements for constructed stormwater wetlands are presented below. These requirements must be included in the wetland’s maintenance plan.

A. General Maintenance

All constructed stormwater wetland components expected to receive and/or trap debris and sediment must be inspected for clogging and excessive debris and sediment accumulation at least twice annually

and as needed. Such components may include forebays, bottoms, trash racks, outlet structures, and riprap or gabion aprons.

Because the forebay in gravel wetlands provides part for of the aerobic treatment for nitrogen removal, the forebay must be cleaned when it accumulates to either 10% of the forebay volume, to a depth of six inches, or if it remains wet 72 hours after the end of a storm event.

Disposal of debris, trash, sediment, and other waste material must be done at suitable disposal/recycling sites and in compliance with all applicable local, state, and federal waste regulations.

B. Vegetated Areas

Mowing or trimming of vegetation must be performed on a regular schedule based on specific site conditions. Grass should be mowed at least once a month during the growing season. Vegetated areas must be inspected at least annually for erosion and scour. Vegetated areas should also be inspected at least annually for unwanted growth, which should be removed with minimum disruption to the remaining vegetation.

When establishing or restoring vegetation, biweekly inspections of vegetation health should be performed during the first growing season or until the vegetation is established. Once established, inspections of vegetation health, density, and diversity should be performed at least twice annually during both the growing and non-growing seasons. The vegetative cover must be maintained at 85 percent. If vegetation has greater than 50 percent damage, the area must be reestablished in accordance with the original specifications and the inspection requirements presented above.

The types and distribution of the dominant plants must also be assessed during the semi-annual wetland inspections described above. This assessment should be based on the health and relative extent of both the original species remaining and all volunteer species that have subsequently grown in the wetland. Appropriate steps must be taken to achieve and maintain an acceptable balance of original and volunteer species in accordance with the intent of the wetland’s original design.

All use of fertilizers, mechanical treatments, pesticides and other means to assure optimum vegetation health should not compromise the intended purpose of the constructed stormwater wetland. All vegetation deficiencies should be addressed without the use of fertilizers and pesticides whenever possible.

C. Structural Components

All structural components must be inspected for cracking, subsidence, spalling, erosion, and deterioration at least annually.

D. Other Maintenance Criteria

The maintenance plan must indicate the approximate time it would normally take to drain the maximum design storm runoff and return the various wetland pools to their normal standing water levels. This drain or drawdown time should then be used to evaluate the wetland’s actual performance. If significant increases or decreases in the normal drain time are observed, the wetland’s outlet structure, forebay, and groundwater and tailwater levels must be evaluated and appropriate measures taken to comply with the maximum drain time requirements and maintain the proper functioning of the wetland.

Note: The Considerations and Recommendations sections below are provided to assist the designer in enhancement of constructed stormwater wetlands. However, consistency with these recommendations and considerations is not required in order to receive the TSS nor the Nitrogen removal rate for this BMP.

Considerations

Constructed stormwater wetlands are limited by a number of site constraints, including soil types, depth to groundwater, contributing drainage area, and available land area at the site.

A. Construction

The following minimum setback requirements should apply to stormwater wetland installations:

- Distance from a septic system leach field = 50 feet.
- Distance from a septic system tank = 25 feet.
- Distance from a property line = 10 feet.
- Distance from a private well = 50 feet.

A seven-step process is recommended for the preparation of a surface constructed wetland bed prior to planting (Claytor and Schueler 1992).

1. Prepare final pondscaping and grading plans for the stormwater wetland. At this time order wetland plant stock from aquatic nurseries.
2. Once the stormwater wetland volume has been excavated, the wetland should be graded to create the major internal features (pool, safety ledge, marshes, etc.).
3. After the mulch or topsoil has been added, the stormwater wetland needs to be graded to its final elevations. All wetland features above the normal pool should be stabilized temporarily.
4. After grading to final elevations, the pond drain should be closed and the pool allowed to fill. Usually nothing should be done to the stormwater wetland for six to nine months or until the next planting season. A good design recommendation is to evaluate the wetland elevations during a standing period of approximately six months. During this time the stormwater wetland can experience storm flows and inundation, so that it can be determined where the pondscaping zones are located and whether the final grade and microtopography will persist overtime.
5. Before planting, the stormwater wetland depths should be measured to the nearest inch to confirm planting depth. The pondscape plan may be modified at this time to reflect altered depths or availability of plant stock.
6. Erosion controls should be strictly applied during the standing and planting periods. All vegetated areas above the normal pool elevation should be stabilized during the standing period, usually with hydroseeding.

7. The stormwater wetland should be de-watered at least three days before planting since a dry wetland is easier to plant than a wet one.

Topsoil and/or wetland mulch is added to the stormwater wetland excavation. Since deep subsoils often lack the nutrients and organic matter to support vigorous plant growth, the addition of mulch or topsoil is important. If it is available, wetland mulch is preferable to topsoil.

B. Site Constraints

Medium-fine texture soils (such as loams and silt loams) are best to establish vegetation, retain surface water, permit groundwater discharge, and capture pollutants. At sites where infiltration is too rapid to sustain permanent soil saturation, an impermeable liner may be required. Where the potential for groundwater contamination is high, such as runoff from sites with a high potential pollutant load, the use of liners is recommended. At sites where bedrock is close to the surface, high excavation costs may make constructed stormwater wetlands infeasible.

C. Design Approach

A pondscaping plan should be developed for each constructed stormwater wetland. This plan should include hydrological calculations (or water budget), a wetland design and configuration, elevations and grades, a site/soil analysis, and estimated depth zones. The plan should also contain the location, quantity, and propagation methods for the wetland plants. Site preparation requirements, maintenance requirements, and a maintenance schedule are also necessary components of the plan.

D. Effectiveness

A review of the existing performance data indicates that the removal efficiencies of surface constructed stormwater wetlands are higher than those of conventional pond systems, e.g. as wet ponds or dry extended detention ponds. Of the three designs described above, the pond/wetland system has shown the most reliable terms of overall performance.

Studies have also indicated that removal efficiencies of constructed stormwater wetlands decline if they are covered by ice or receive snow melt. Performance also declines during the non-growing season and during the fall when the vegetation dies back. Until vegetation is well established, pollutant removal efficiencies may be lower than expected.

E. Regulatory Issues

A constructed stormwater wetlands, once constructed, may be regulated by the Freshwater Wetlands Protection Act, and require additional permits for subsequent maintenance or amendment of the constructed stormwater wetland.

Recommendations

A. Vegetation

Establishment and maintenance of the wetland vegetation is an important consideration when planning a stormwater wetland. The following is a series of recommendations (Horner et al. 1994) for creating constructed stormwater wetlands.

In selecting plants, consider the prospects for success more than selection of native species. Since diversification will occur naturally, use a minimum of adaptable species. Give priority to perennial species that establish rapidly. Select species adaptable to the broadest ranges of depth, frequency and duration of inundation (hydroperiod). Give priority to species that have already been used successfully in constructed stormwater wetlands and that are commercially available. Match site conditions to the environmental requirements of plant selections. Avoid using only species that are foraged by the wildlife expected on site.

Establishment of woody species should follow herbaceous species. Add vegetation that will achieve other objectives, in addition to pollution control. Monoculture planting should be avoided due to increased risk of loss from pests and disease. When possible field collected plants should be used in lieu of nursery plants. Plants collected from the field have already adapted and are acclimated to the region. These plants generally require less care than greenhouse plants. If nursery plants are used they should be obtained locally, or from an area with similar climatic conditions as the eco-region of the constructed wetland. Alternating plant species with varying root depths have a greater opportunity of pollutant removal.

Stormwater wetland vegetation development can also be enhanced through the natural recruitment of species from nearby wetland sites. However, transplanting wetland vegetation is still the most reliable method of propagating stormwater wetland vegetation, and it provides cover quickly. Plants are commercially available through wetland plant nurseries.

The plant community will develop best when the soils are enriched with plant roots, rhizomes, and seed banks. Use of wetlands mulch enhances the diversity of the plant community and speeds establishment. Wetlands mulch is hydric soil that contains vegetative plant material. The upper 6 inches of donor soil should be obtained at the end of the growing season, and kept moist until installation. Drawbacks to using constructed stormwater wetlands mulch are its unpredictable content.

During the initial planting precautions should be undertaken to prevent and prohibit animals from grazing until plant communities are well established. Such precautions could be deer fencing, muskrat trapping, planting after seasonal bird migrations, or attracting birds of prey and bats to control nutria populations.

B. Wetlands Area

The constructed wetlands should have a minimum surface area in relation to the contributing watershed area. The reliability of pollutant removal tends to increase as the stormwater wetland to watershed ratio increases, although this relationship is not always consistent. Above ground berms or high marsh wedges should be placed at approximately 50 foot intervals, at right angles to the direction of the flow to increase the dry weather flow path within the stormwater wetland.

C. Outlet Configuration

A hooded outlet with an invert or crest elevation at least 1 foot below the normal pool surface should be considered to prevent the discharge of floating oils and grease and to reduce the temperature of the discharge. However, the bottom elevation of the hood should be above the anticipated maximum sediment depth in the pond.

References

- Horner, R.R., J.J. Skupien, E.H. Livingston and H.E. Shaver. August 1994. Fundamentals of Urban Runoff Management: Technical and Institutional Issues. In cooperation with U.S. Environmental Protection Agency. Terrene Institute, Washington, D.C.
- Livingston E.H., H.E. Shaver, J.J. Skupien and R.R. Horner. August 1997. Operation, Maintenance, & Management of Stormwater Management Systems. In cooperation with U.S. Environmental Protection Agency. Watershed Management Institute. Crawfordville, FL.
- New Jersey Department of Agriculture. November 1999. Standards for Soil Erosion and Sediment Control in New Jersey. State Soil Conservation Committee. Trenton, NJ.
- New Jersey Department of Environmental Protection and Department of Agriculture. December 1994. Stormwater and Nonpoint Source Pollution Control Best Management Practices.
- Ocean County Planning and Engineering Departments and Killam Associates. June 1989. Stormwater Management Facilities Maintenance Manual. New Jersey Department of Environmental Protection. Trenton, NJ.
- Schueler, T.R. July 1987. Controlling Urban Runoff: A Practical Manual for Planning and Designing Urban BMPs. Metropolitan Washington Council of Governments. Washington, D.C.
- Schueler, T.R., Anacostia Restoration Team. October 1992. Design of Stormwater Wetland Systems – Guidelines for Creating Diverse and Effective Stormwater Wetland Systems in the Mid-Atlantic Region. Metropolitan Washington Council of Governments. Washington, D.C.
- Schueler, T.R., P.A. Kumble and M. Heraty. March 1992. A Current Assessment of Urban Best Management Practices. Metropolitan Washington Council of Governments. Washington, D.C.
- Schueler, T.R. and R.A. Claytor. 2000. Maryland Stormwater Design Manual. Maryland Department of the Environment. Baltimore, MD.
- The University of New Hampshire Stormwater Center. March 2010. Investigation of Nutrient Removal Mechanisms of a Constructed Gravel Wetland Used for Stormwater Control in a Northern Climate. http://www.unh.edu/erg/cstev/pubs_specs_info/2009_unhsc_report.pdf, accessed on February 4, 2011.
- The University of New Hampshire Stormwater Center. June 2009. Subsurface Gravel Wetland Design Specifications. http://www.unh.edu/erg/cstev/pubs_specs_info/unhsc_gravel_wetland_specs_6_09.pdf, accessed on February 4, 2011.

Subsurface Gravel Wetlands for the Treatment of Stormwater

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PE, PhD, James Houle, CPSWQ, Alison Watts, Ph.D., Tim Puls,
University of New Hampshire Stormwater Center

NJASLA 2012 Annual Meeting and Expo
Atlantic City, NJ
29-31 January 2012





UNIVERSITY OF NEW HAMPSHIRE
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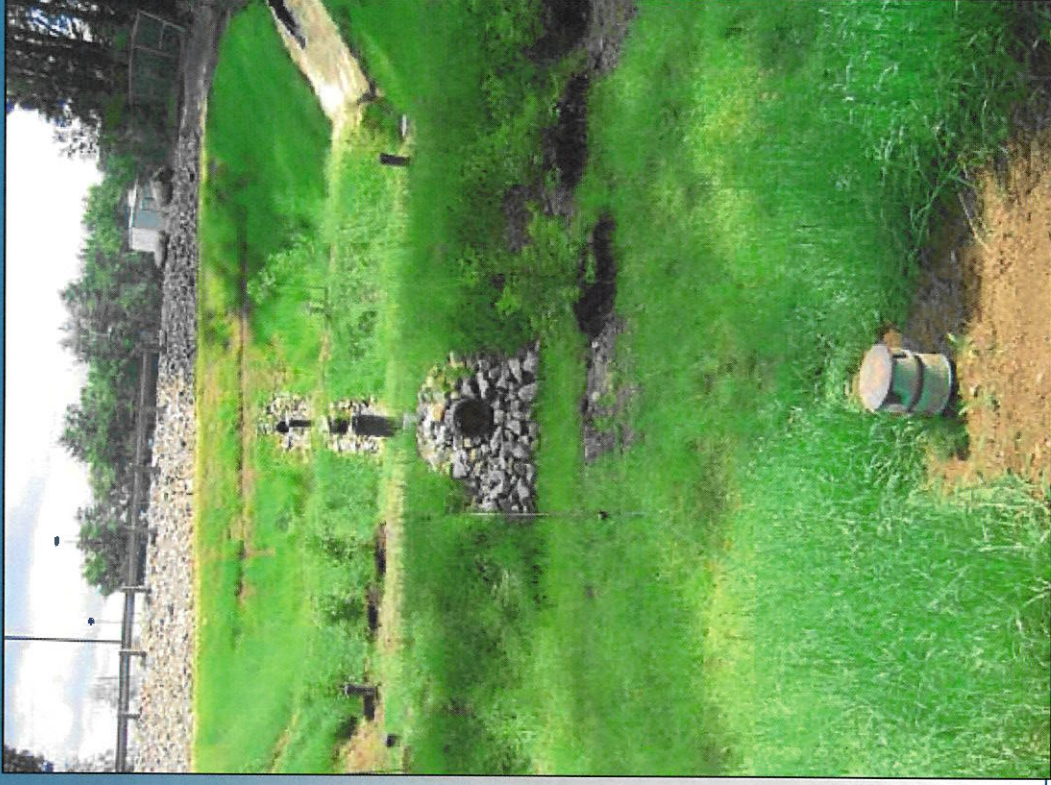
Dedicated to the protection of water resources through effective stormwater management

- Research and development of stormwater treatment systems
- To provide resources to stormwater communities currently involved in design and implementation of Phase II requirements

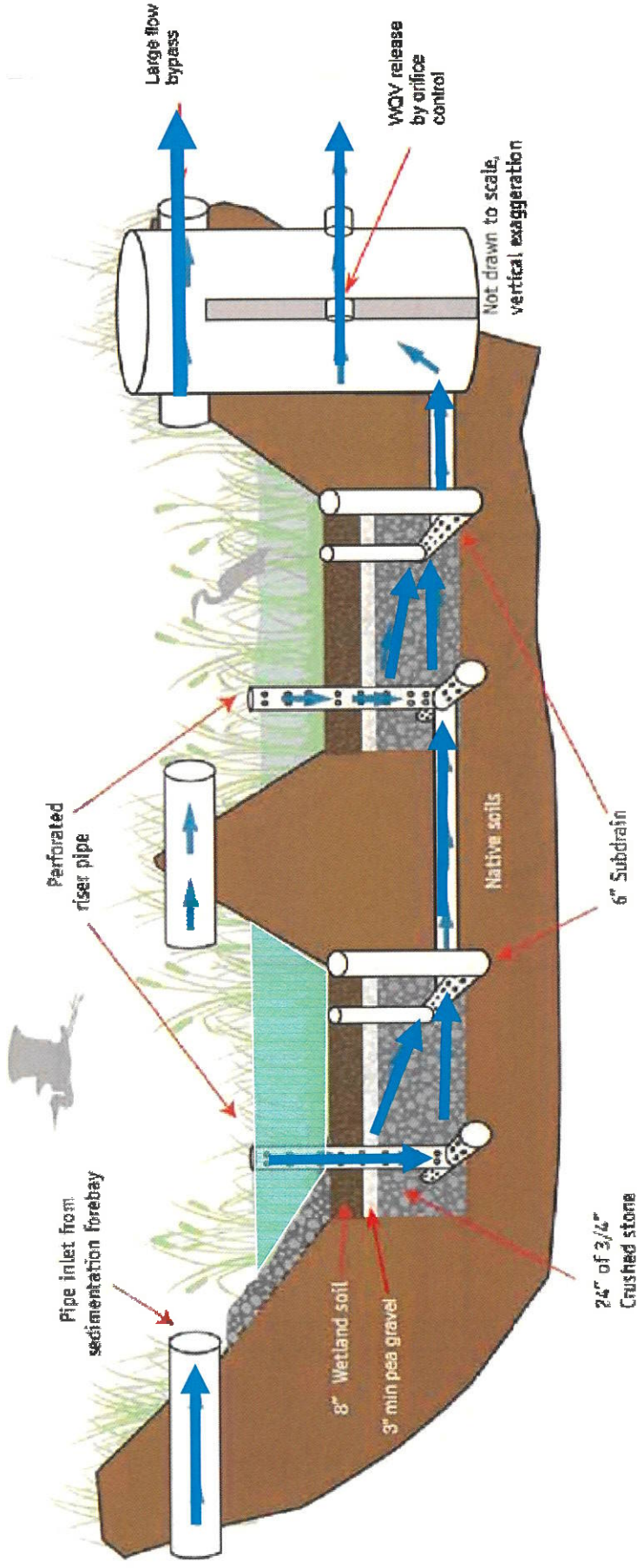


- Brief introduction to subsurface gravel wetlands and their hydraulic performance.
- Water quality performance, especially nutrient nitrogen
- Design aspects
- Plants
- Costs and comparisons
- Case studies

Gravel Wetland

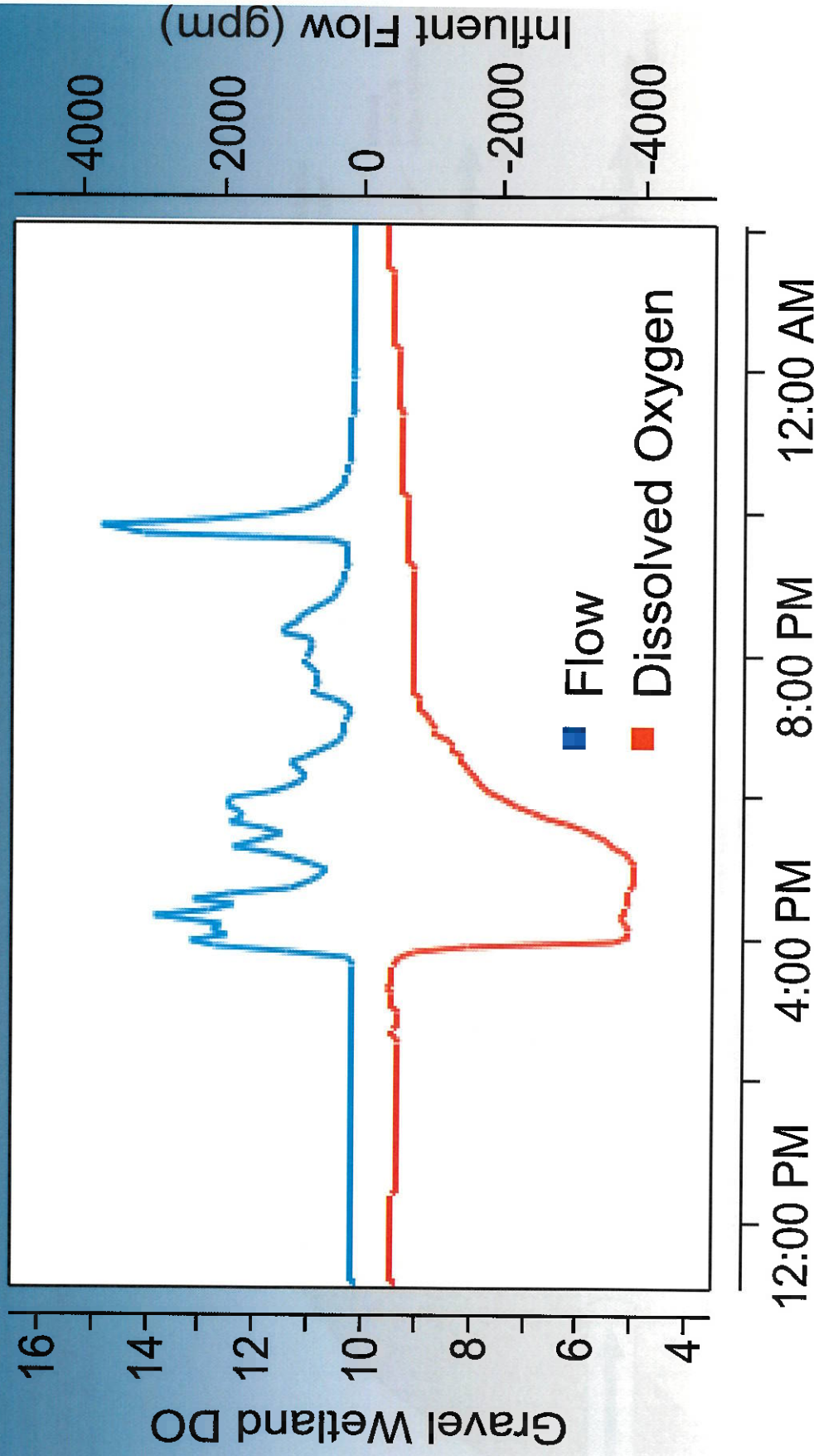


Subsurface Gravel Wetland

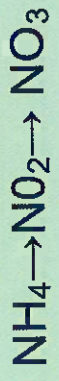


Design Sources:
Claytor, R. A., and Schueler, T. R. (1996). Design of Stormwater Filtering Systems, Center for Watershed Protection, Silver Spring, MD.
Georgia Stormwater Management Manual, Volume 2: Technical Handbook, August 2001, prepared by AMEC Earth and Environmental, Center for Watershed Protection, Debo and Associates, Jordan Jones and Goulding, Atlanta Regional Commission.

Dissolved Oxygen in Gravel Wetland Effluent

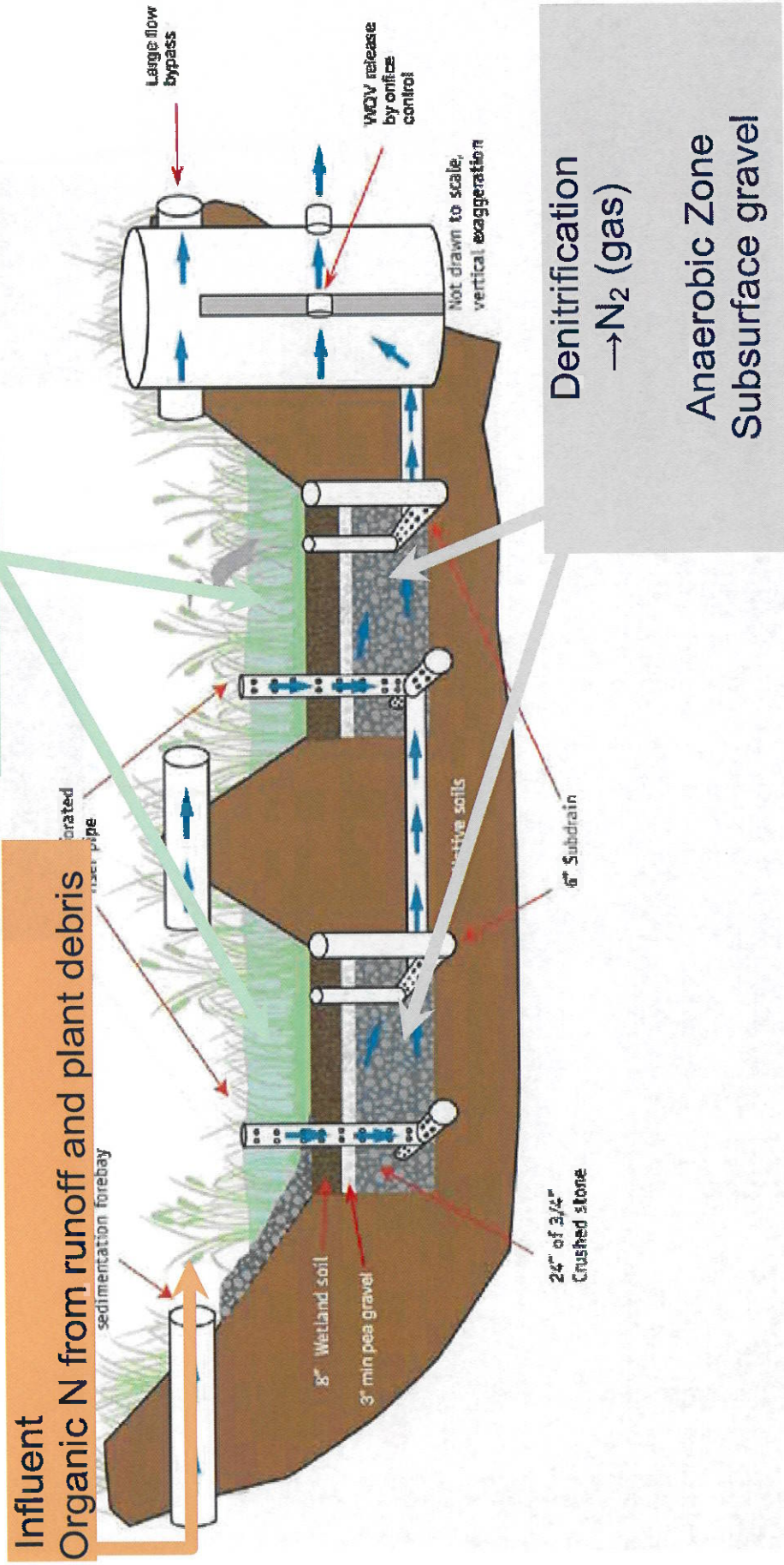


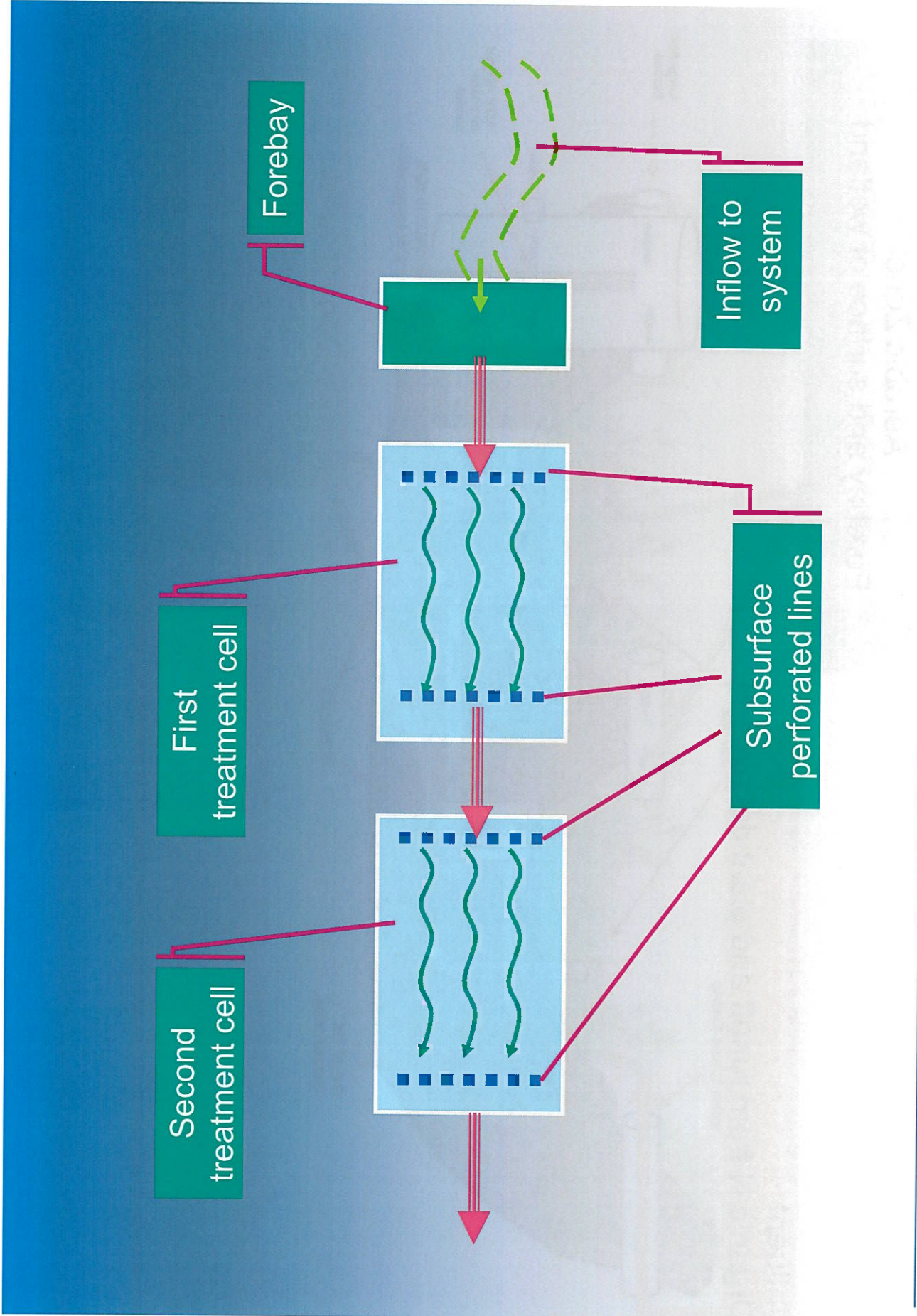
Nitrification



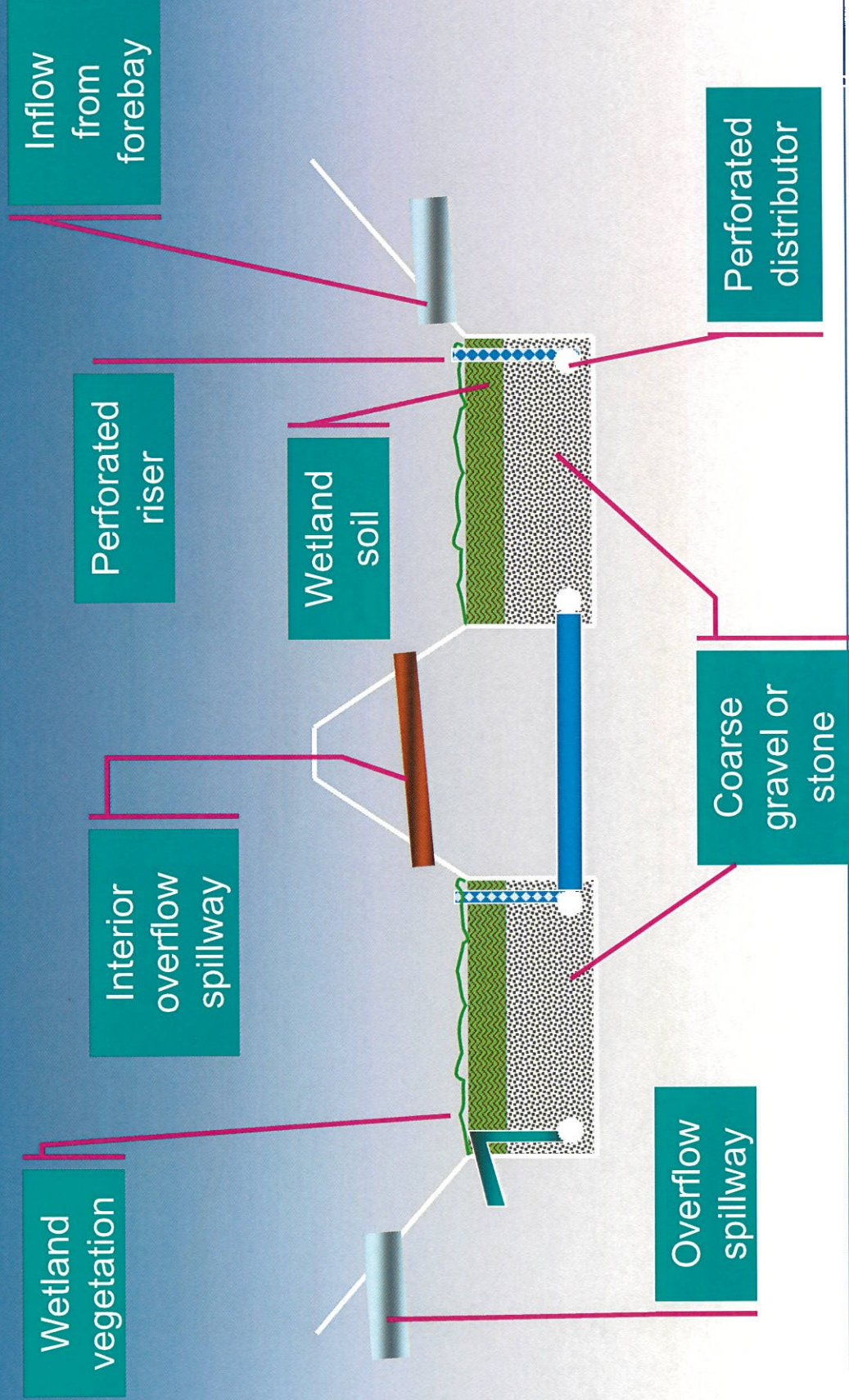
Aerobic Zone

Forebay and surface of wetland

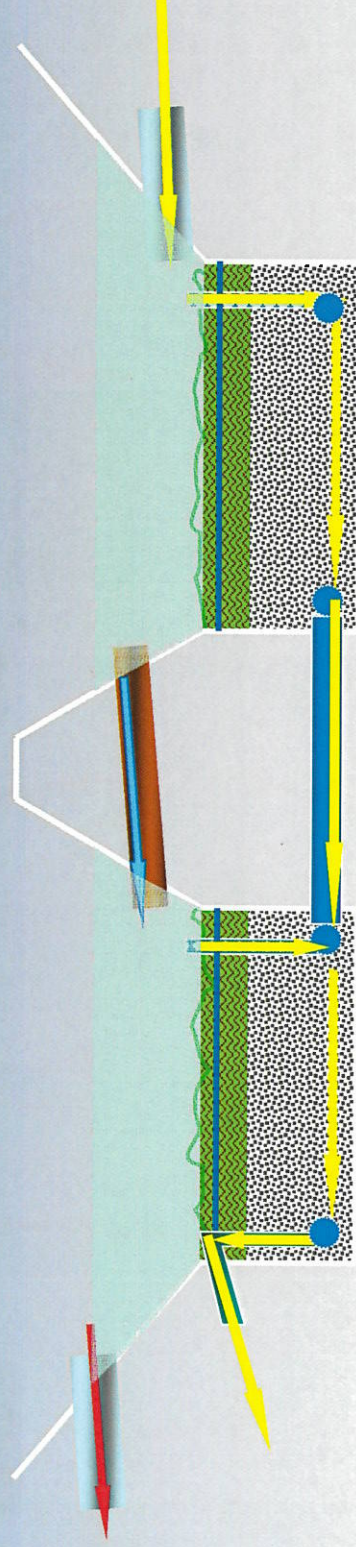




The UNH SC Subsurface Gravel Wetland Design



Flow Through the Subsurface Gravel Wetland Design

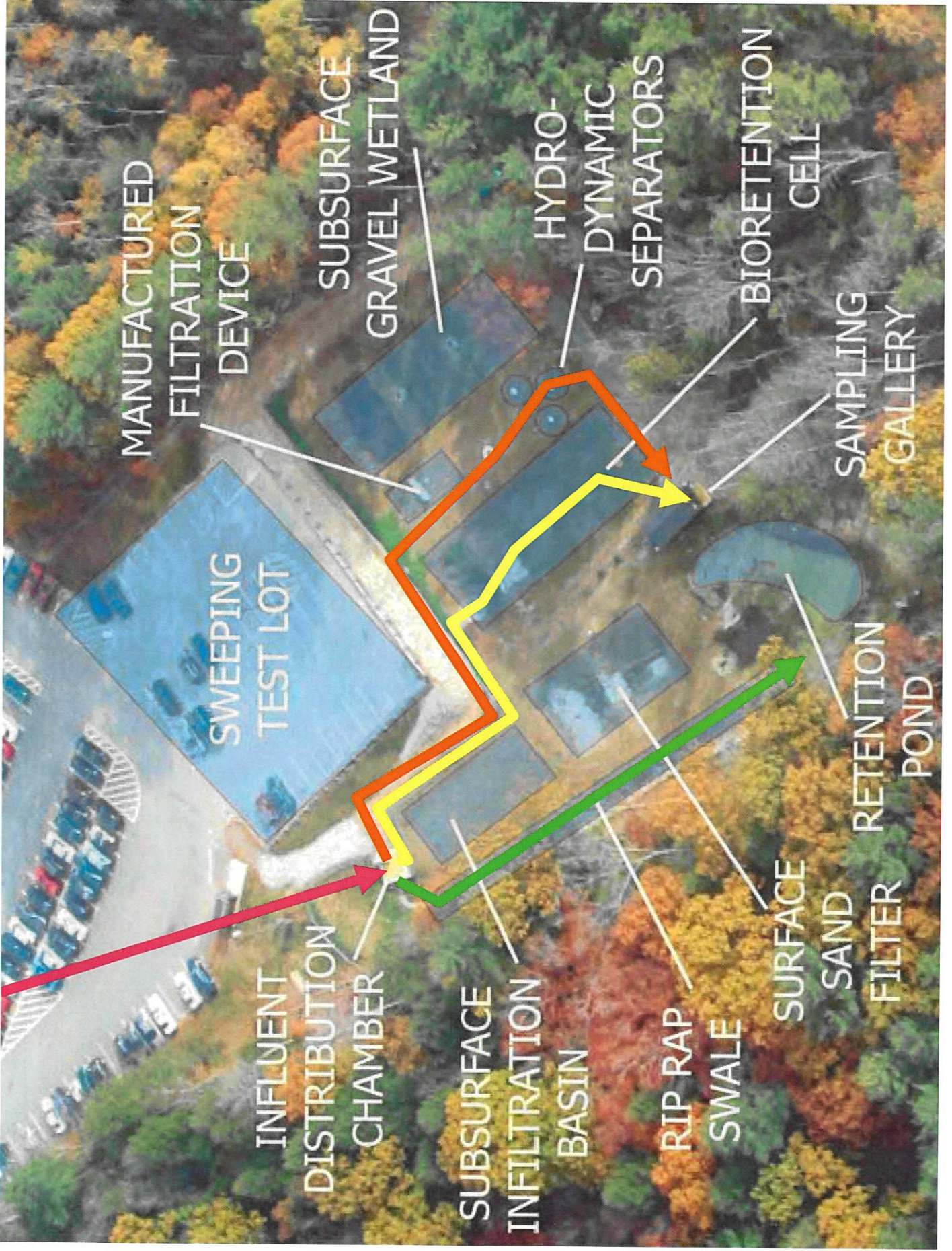


BMP Performance Monitoring

Research Field Facility at UNH

Tc ~ 19 minutes





MANUFACTURED
FILTRATION
DEVICE

SUBSURFACE
GRAVEL WETLAND

HYDRO-
DYNAMIC
SEPARATORS

BIORETENTION
CELL

SAMPLING
GALLERY

SWEEPING
TEST LOT

RETENTION
POND

INFLUENT
DISTRIBUTION
CHAMBER

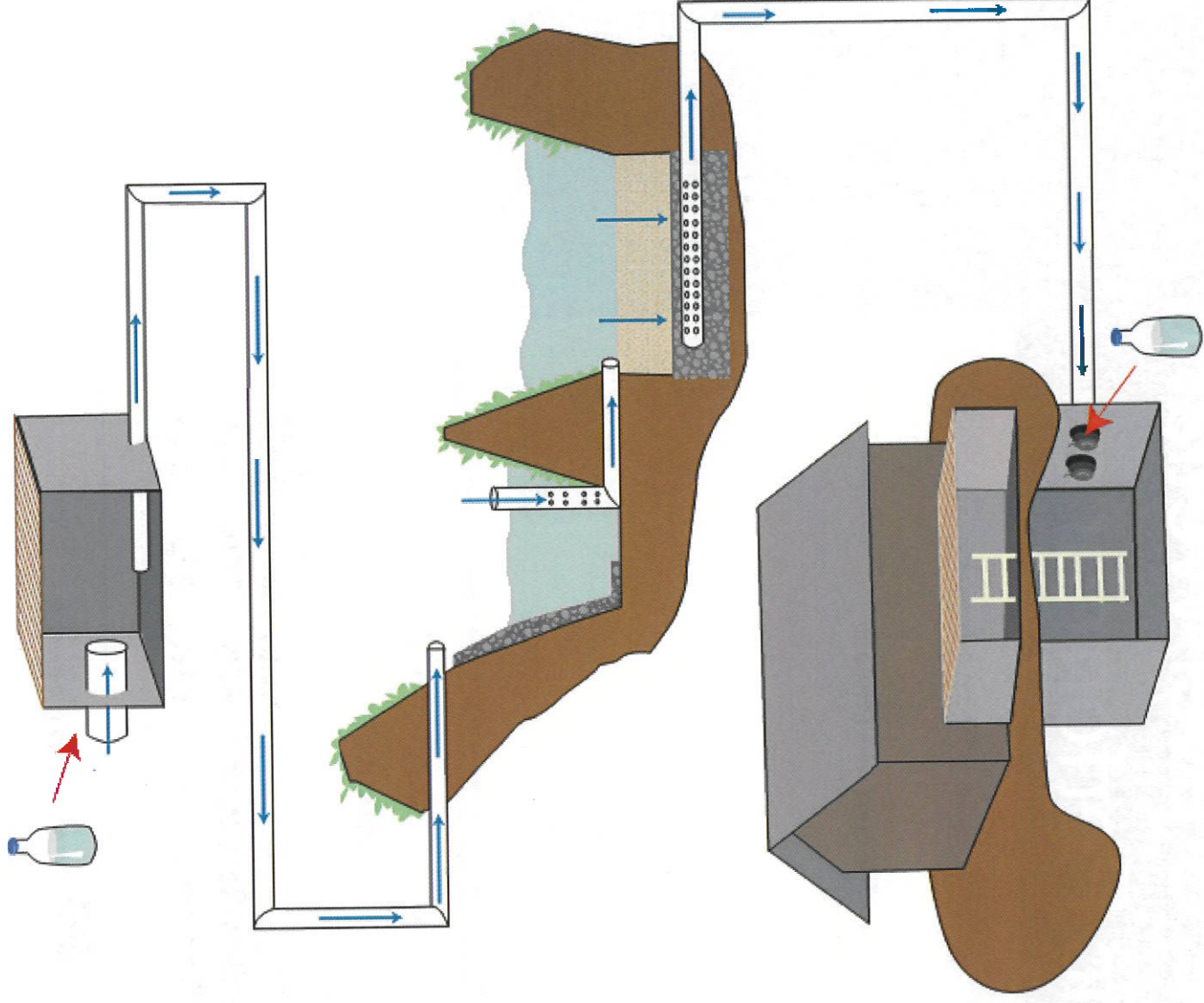
SUBSURFACE
INFILTRATION
BASIN

RIP RAP
SWALE

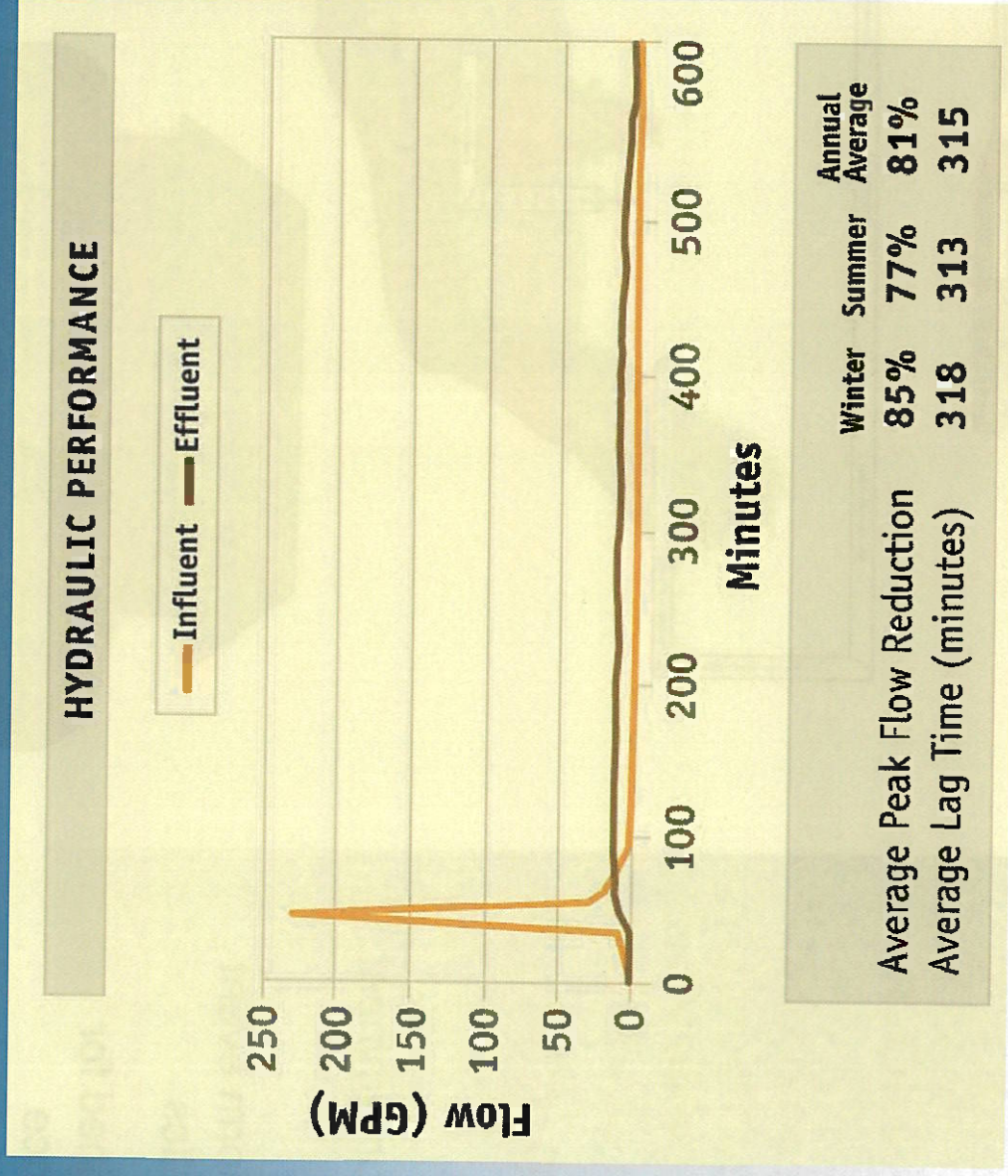
SURFACE
SAND
FILTER

Parallel Performance Evaluation

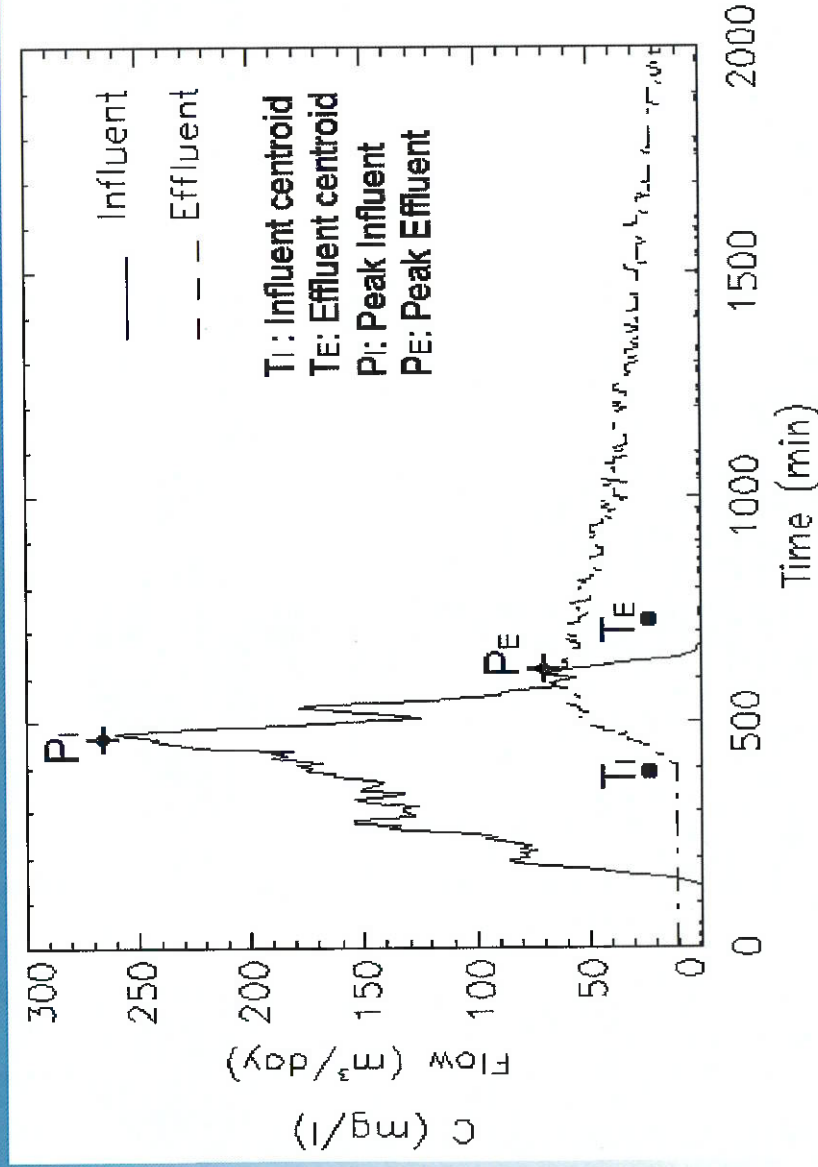
- Each system uniformly sized to treat 1" runoff for 1 acre of impervious area
- $WQV=3300$ cf
- $Q_{wqv}=1$ cfs
- Uniform contaminant loading
- Uniform storm event characteristics
- Systems lined for mass balance
- Long term record of hydrology and contaminants



Subsurface Gravel Wetland Hydraulic Performance



Hydraulic Efficiency



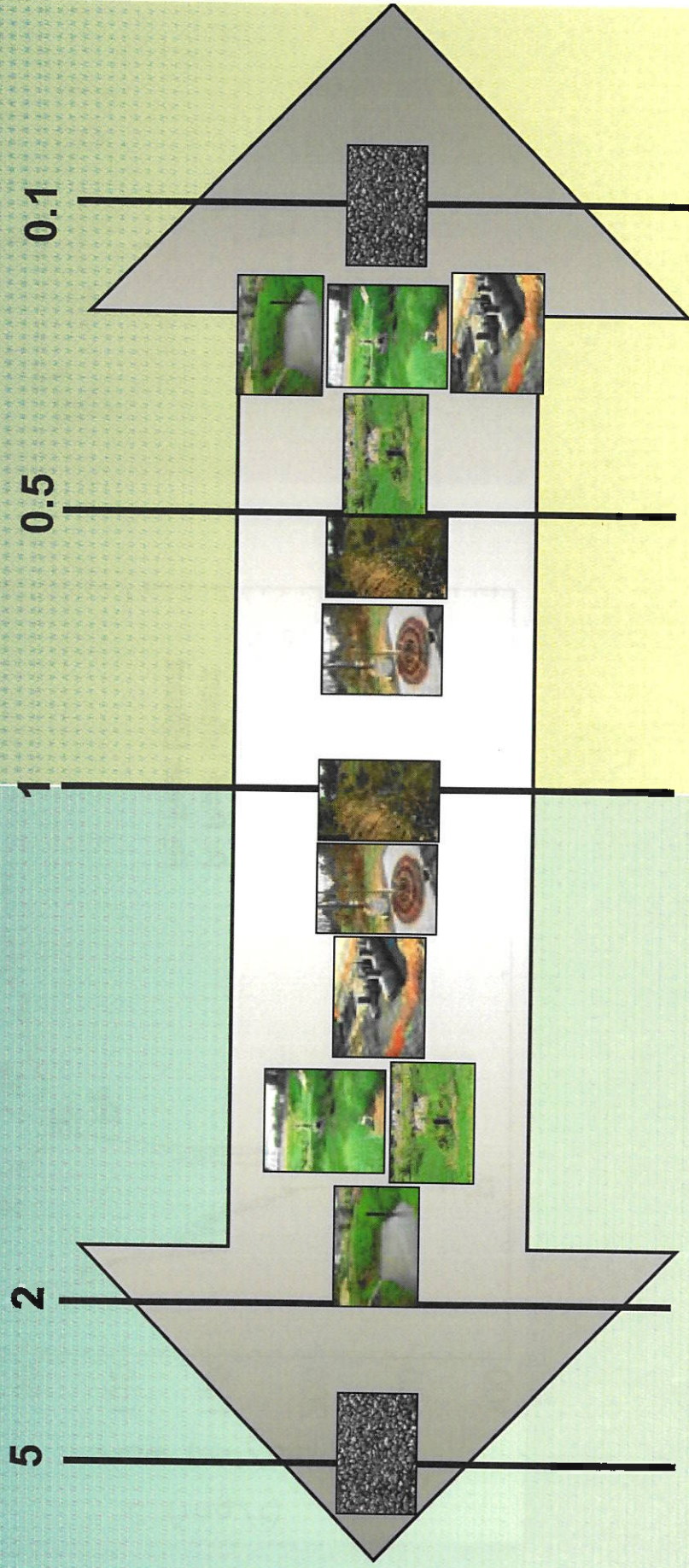
$$k_p = \frac{P_E}{P_I} \leq 1$$

$$k_L = \frac{T_E}{T_I} \geq 1$$

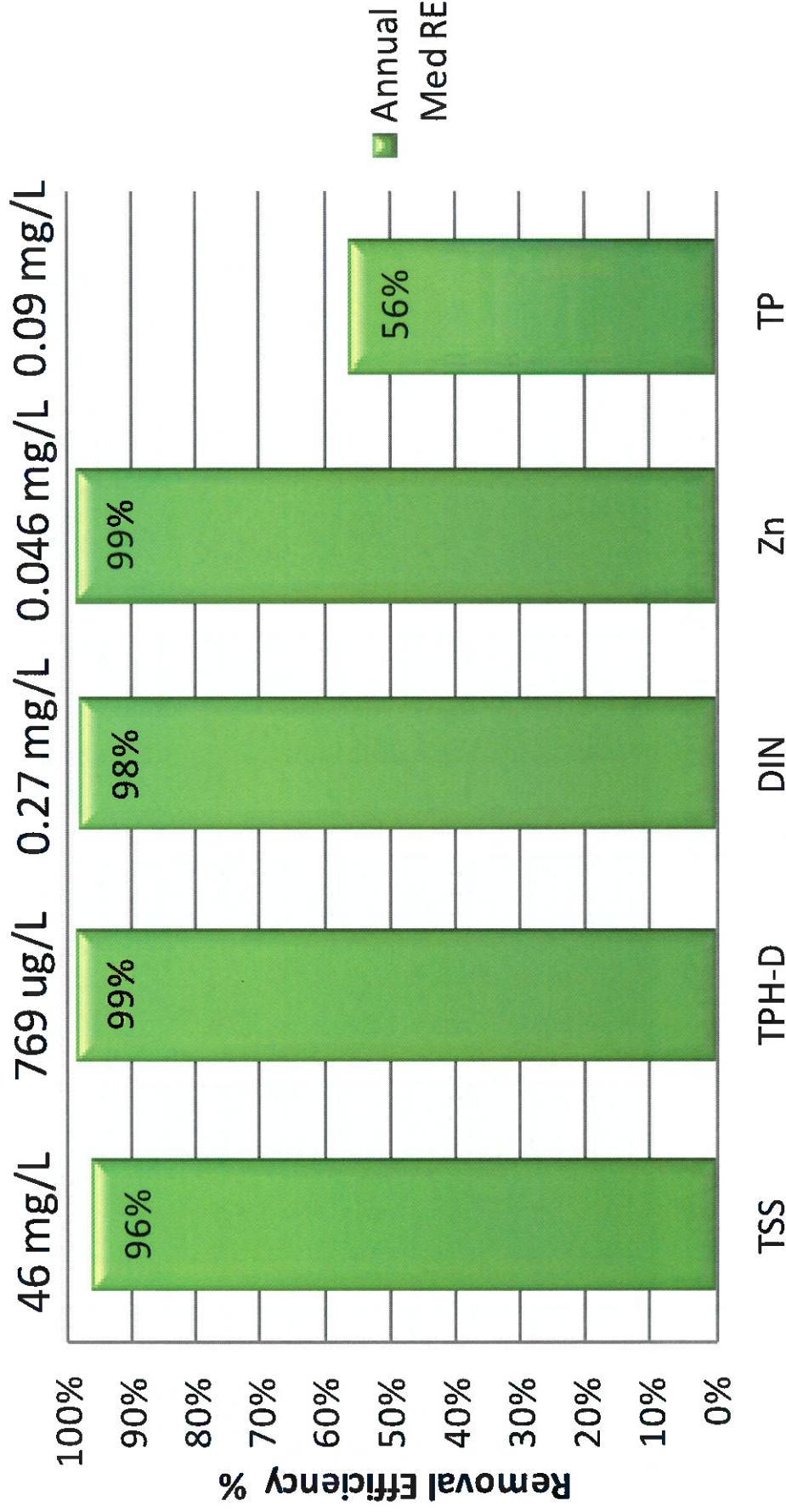
Hydraulic Performance

Lag Time (k_L)

Peak Reduction (k_P)

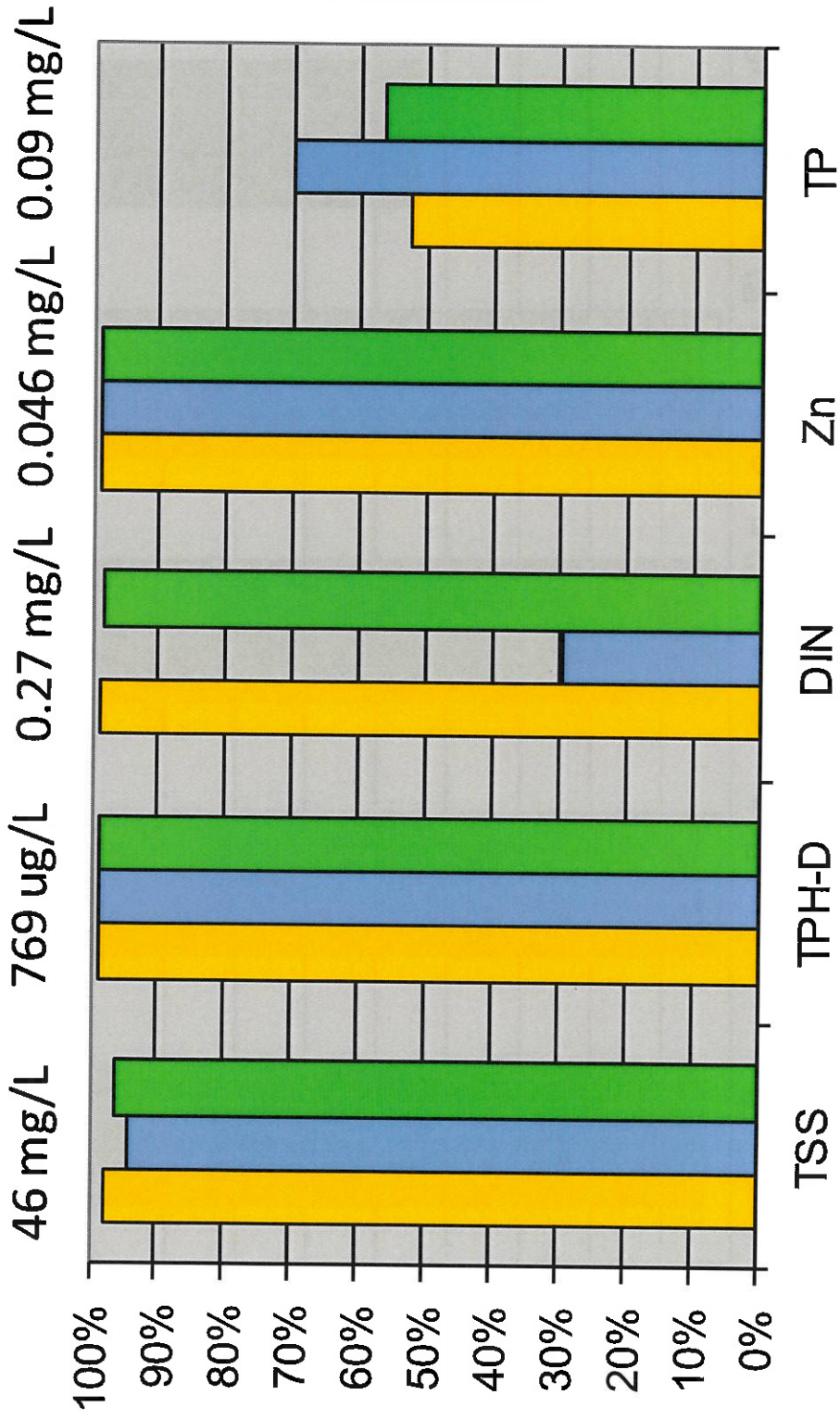


Gravel Wetland Performance

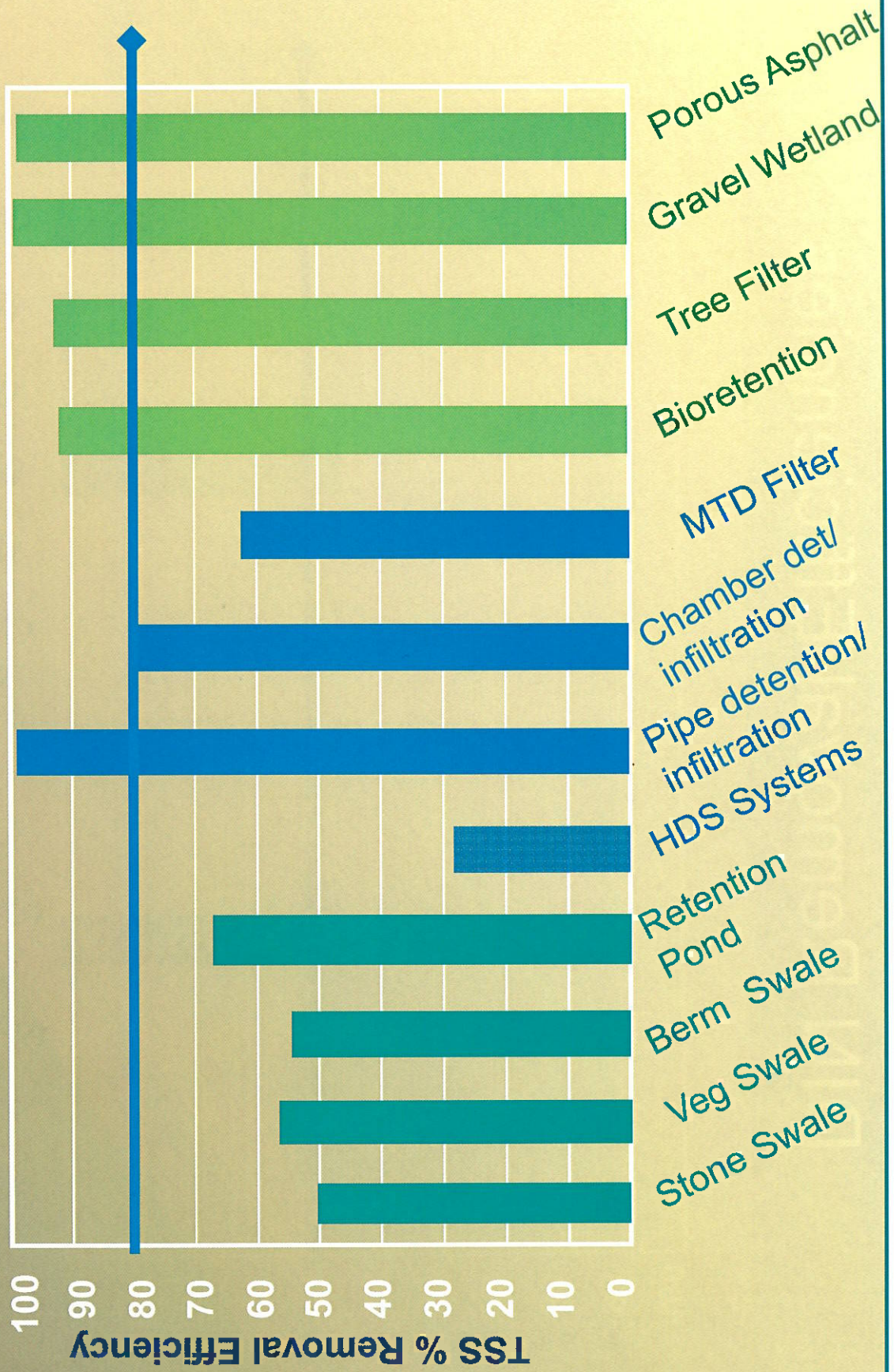


Seasonal Performance

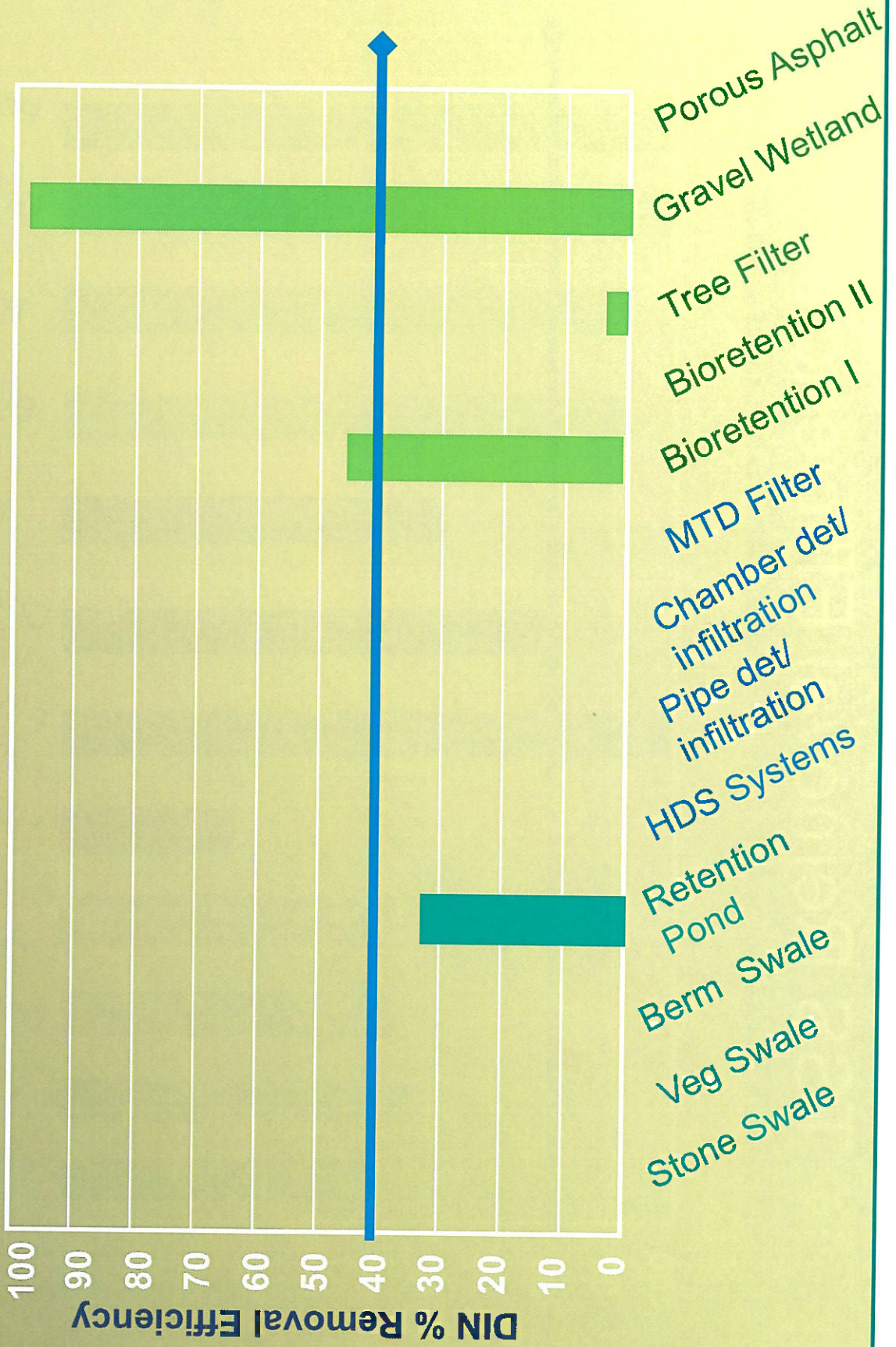
Gravel Wetland Performance



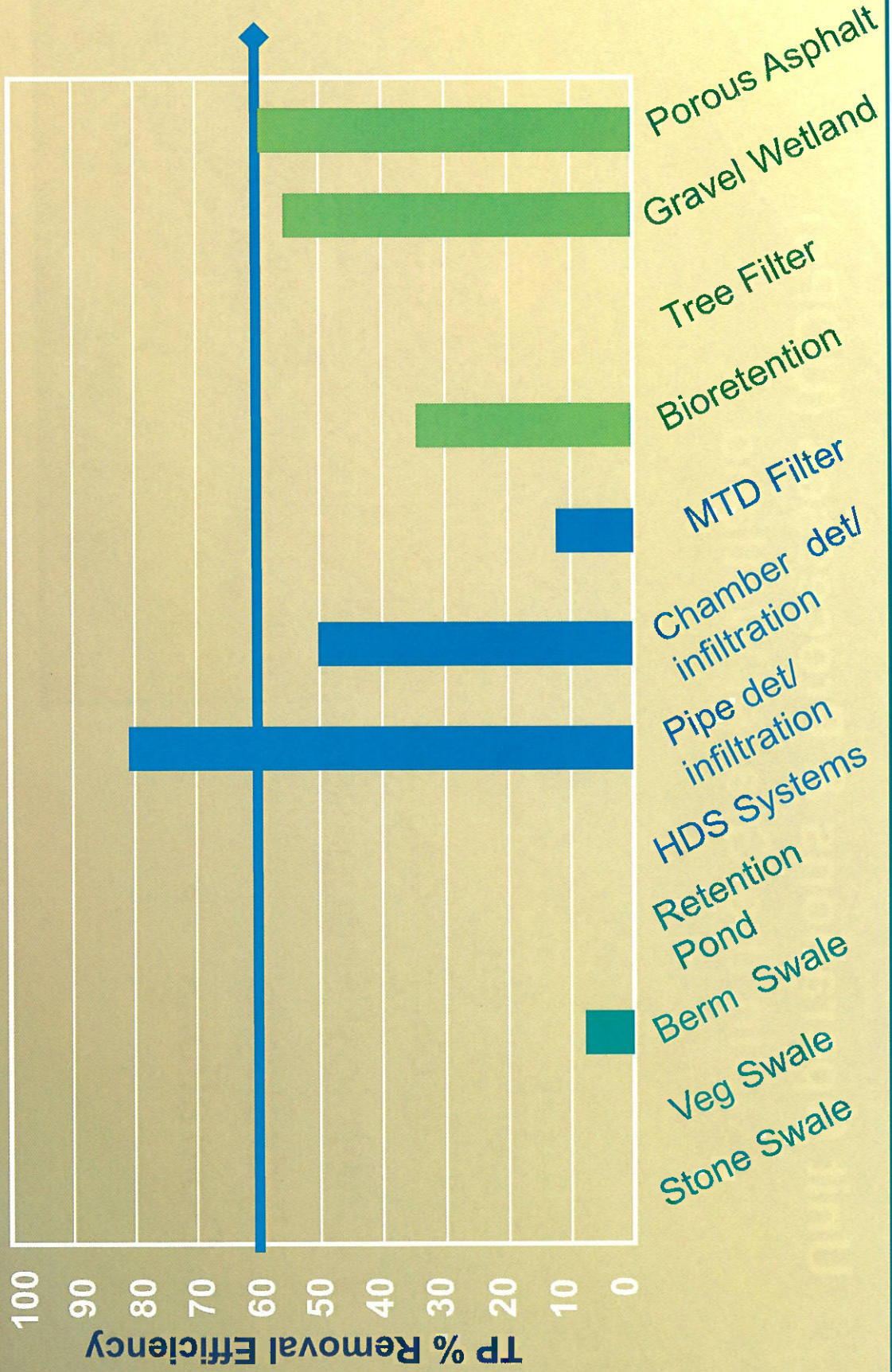
TSS Removal Efficiencies



DIN Removal Efficiencies



TP Removal Efficiencies



Unit Operations & Processes (UOPs) in the Gravel Wetland

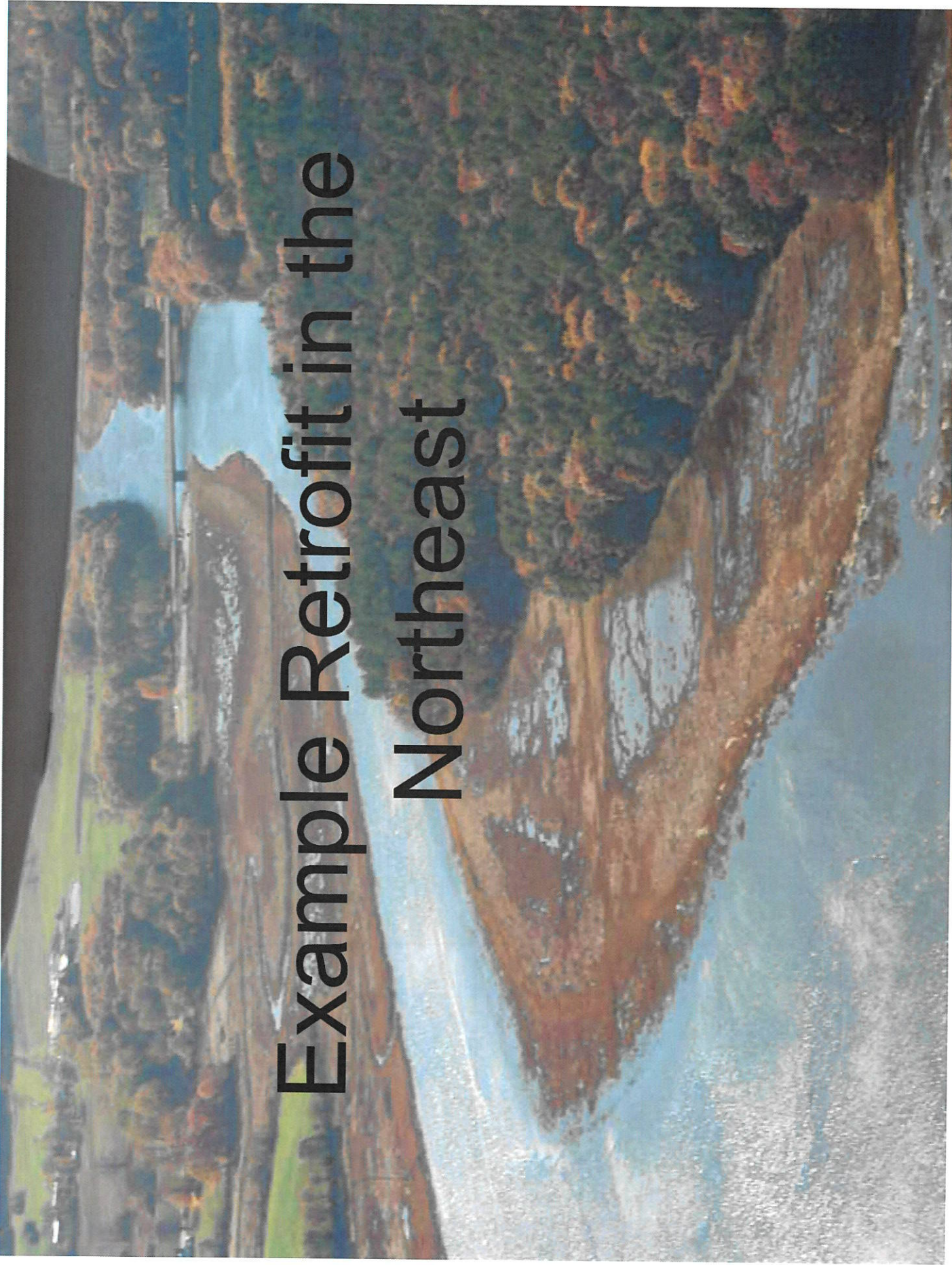
- Physical Operations
- Biological Processes
- Chemical Processes
- Hydrologic
Operations



Gravel Wetland Report Card

category	uop	target	"grade"
hydrologic	flow alteration	divert flow	✓
	volume reduction		
physical	sedimentation	sediment	✓
	enhanced sedimentation	sediment	
biological	filtration	sediment	✓
	microbial	nitrogen	✓+
chemical	vegetative	nitrogen phosphorus	✓+
	sorption	phosphorus	✓

Example Retrofit in the Northeast

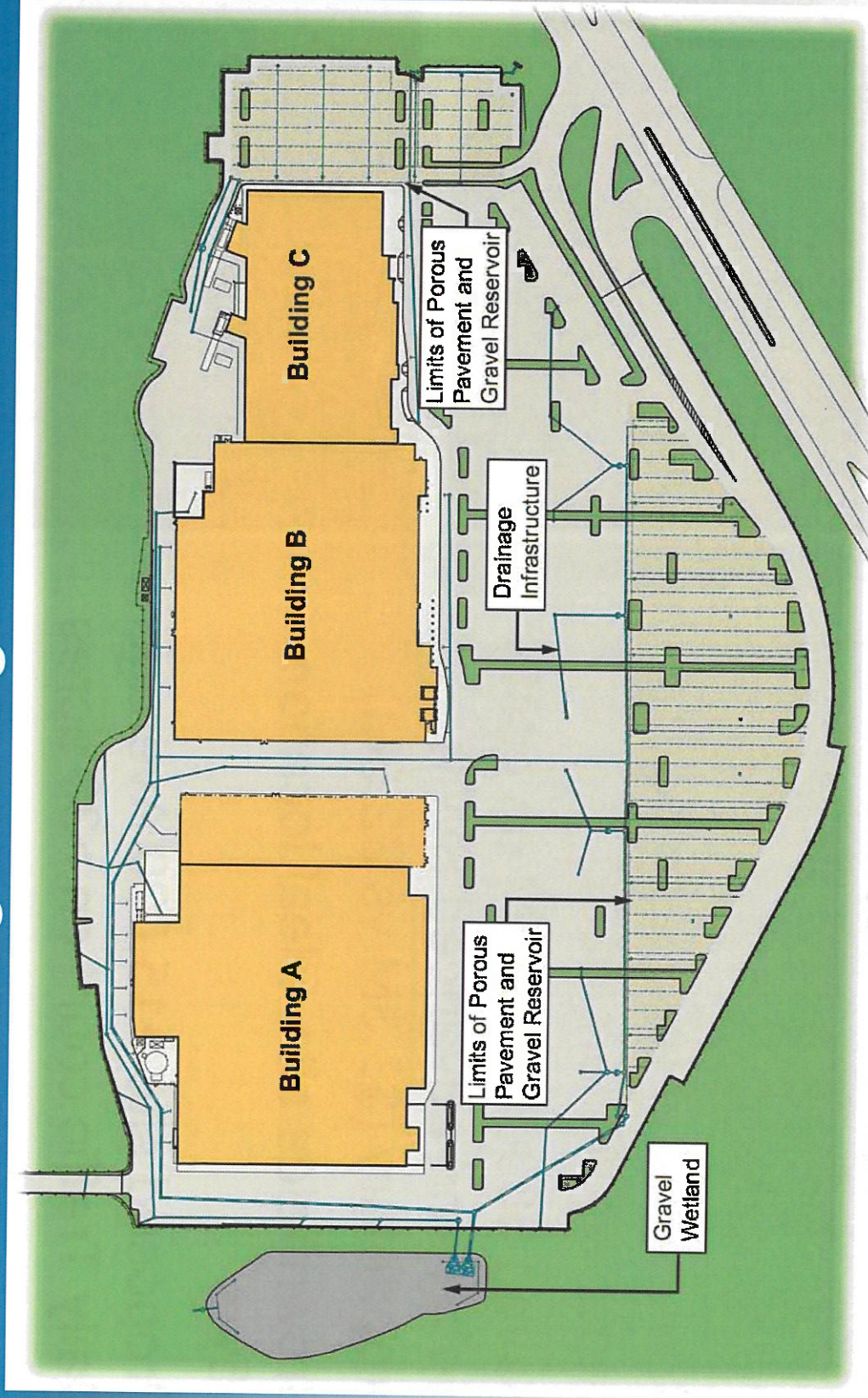


Greenland Meadows Commercial

- “Gold-Star” Commercial Development
- Cost of doing business near Impaired Waters/303D
- Saved \$800k in SWM on costly piping and advanced SWM proprietary (\$3.3M vs \$2.5M)
- Brownfields site, ideal location, 15yrs
- Proposed site >15,000 Average Daily Traffic count on >30 acres

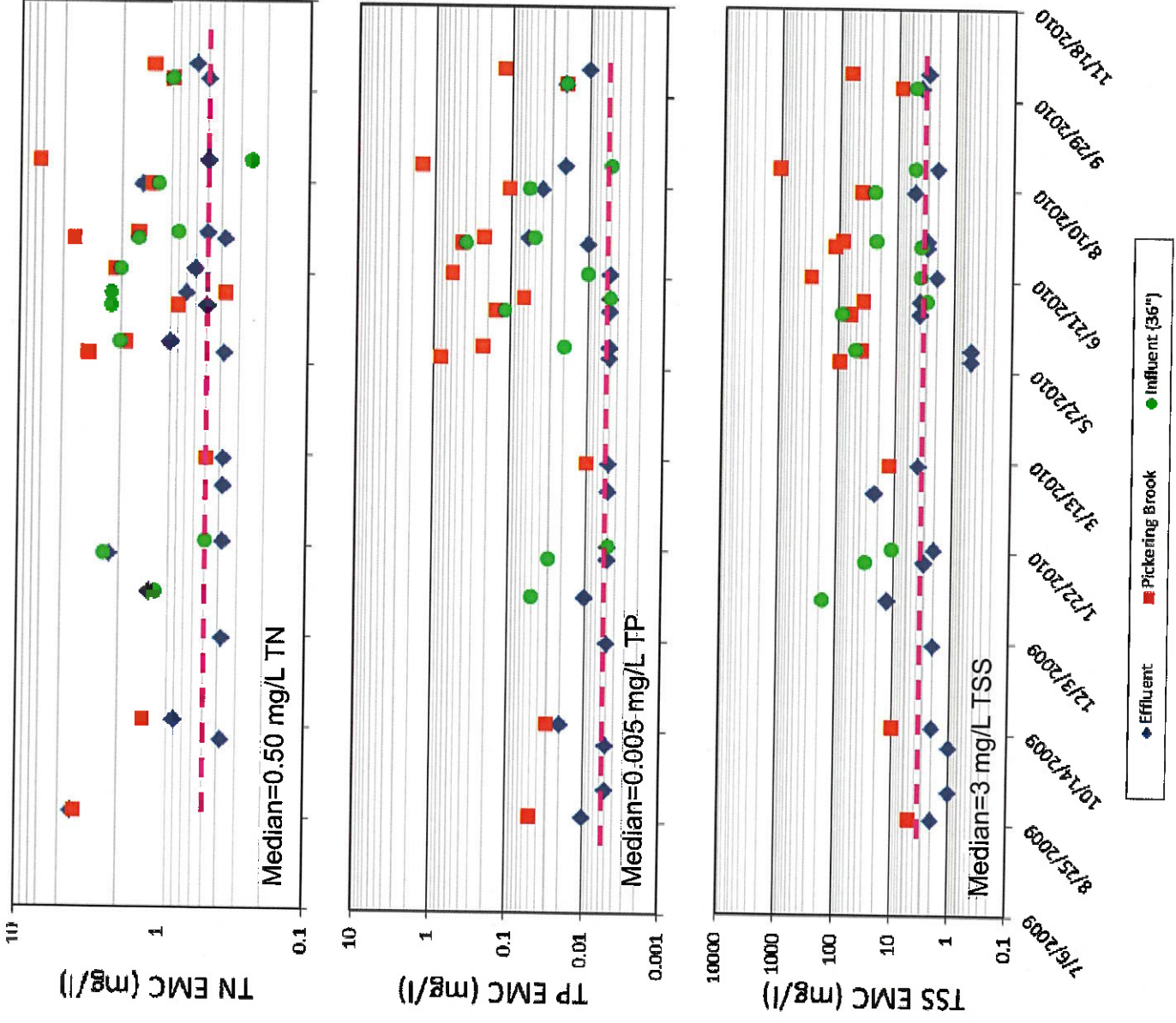
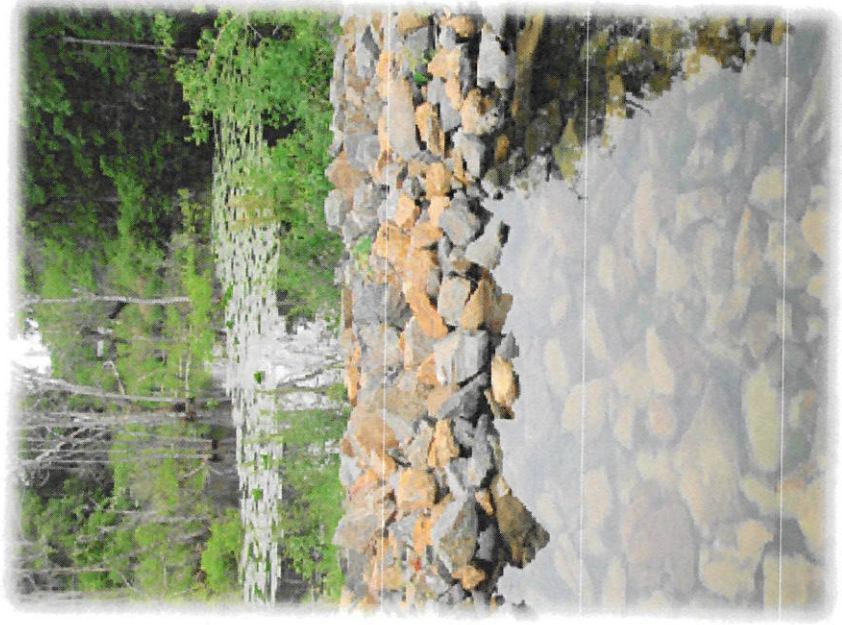


Site Design using LID and MTD



28 ac site, initially >95% impervious, now <10%EIC, with all drainage through filtration, expected to have minimal WQ impact except thermal and chloride





Nutrient cycling

Phosphorous is typically in 3 forms:

- **Soluble Reactive Phosphorous.** SRP usually consists largely of the inorganic orthophosphate (PO_4) form of phosphorous. Measurements of orthophosphate are commonly used to quantify SP.
- **Soluble Unreactive or Soluble Organic Phosphorous.** SUP are organic forms of phosphorous and chains of inorganic phosphorous molecules termed polyphosphates.
- **Particulate Phosphorous.** PP contains all material, inorganic and organic, particulate and colloidal, that is captured on a 0.45-micron membrane filter.

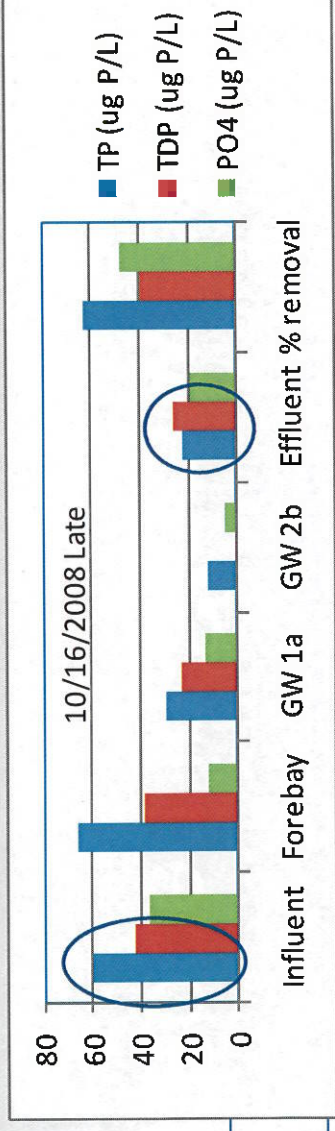
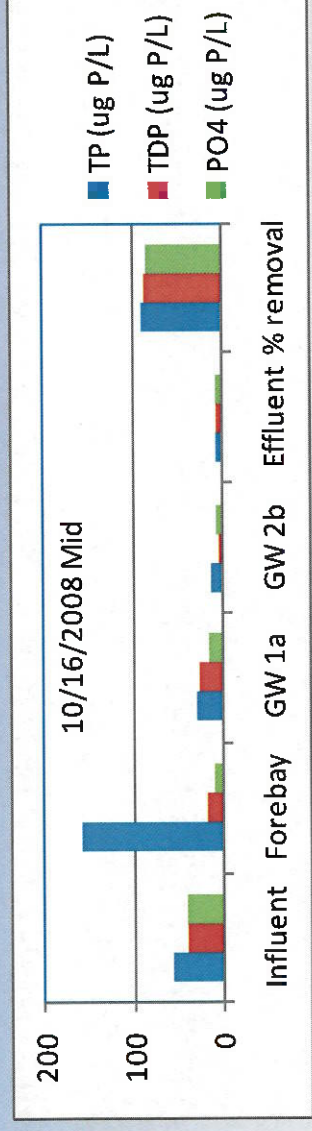
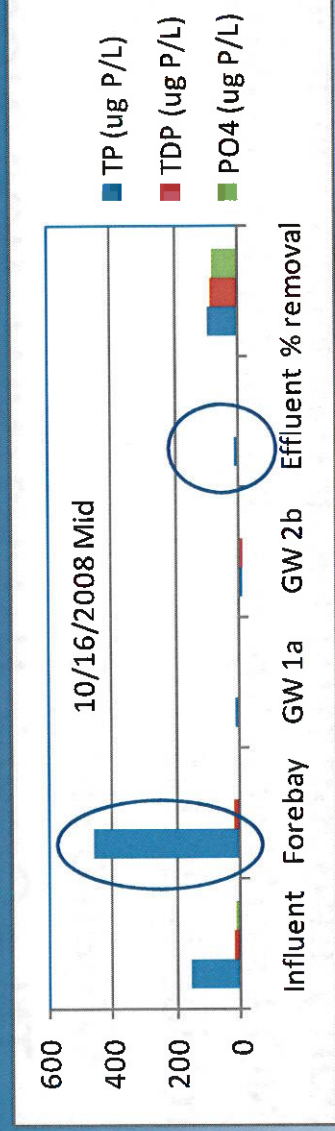
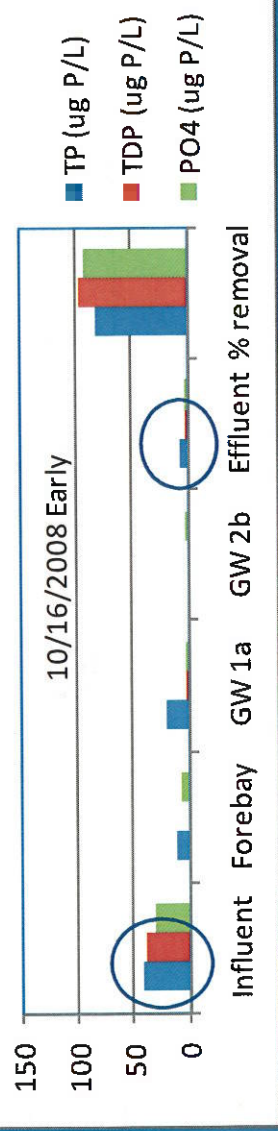
SRP +SUP= soluble phosphorous (SP)

SP+PP=total phosphorous (TP)

$\text{PO}_4 + \text{SUP} + \text{PP} = \text{TP}$

PHOSPHOROUS

Concentration ug/L



Nitrogen in Stormwater Water

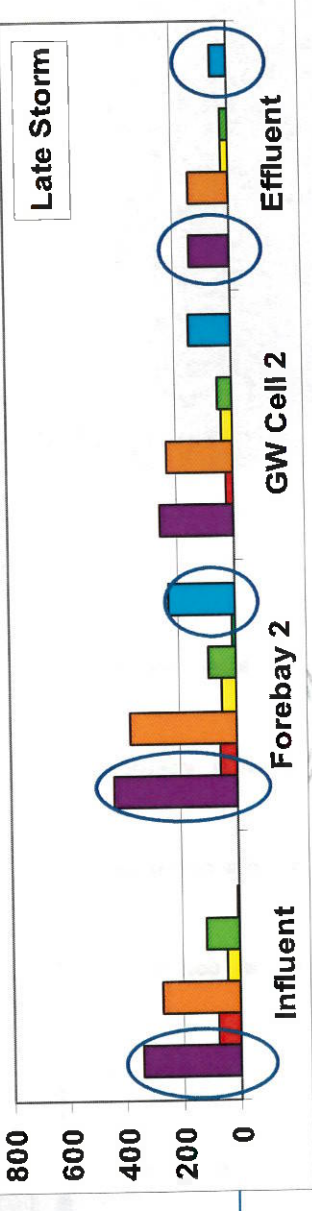
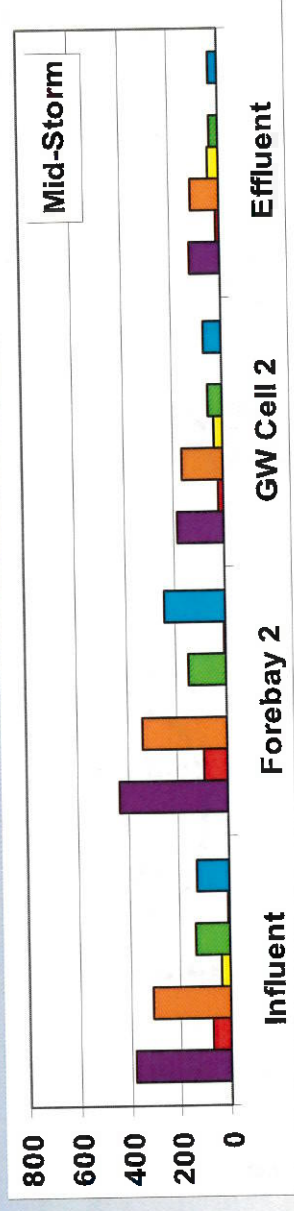
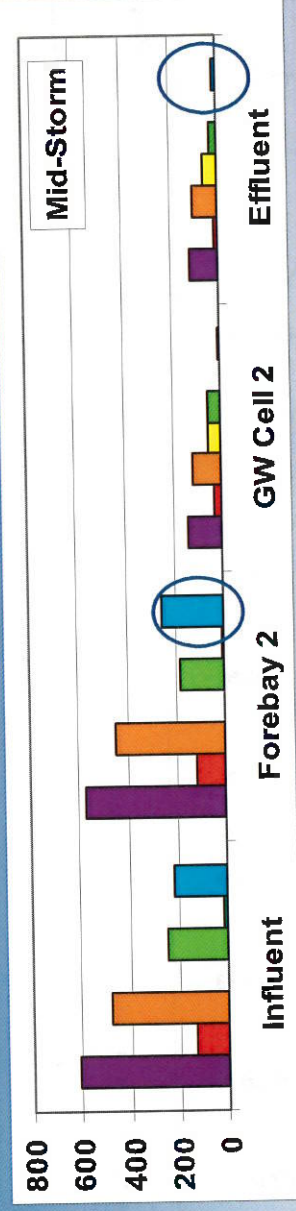
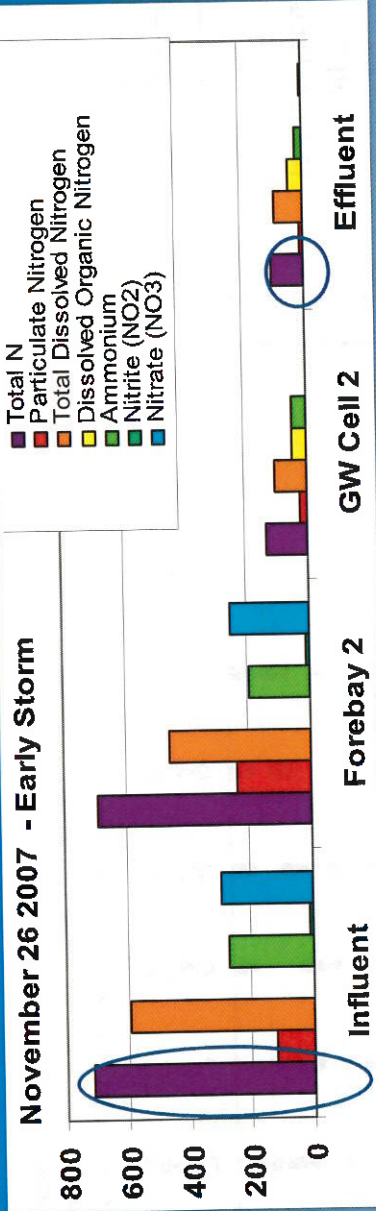
- Systems must be vegetated, sedimentation plays a minor role
- Biologically-mediated conversion processes, whether aerobic or anaerobic. Microbial decomposition of organic matter produces reduced NH_3 which is treated commonly through biological oxidation (nitrified) to NO_2/NO_3 and then treated by biological reduction anaerobically to N_2

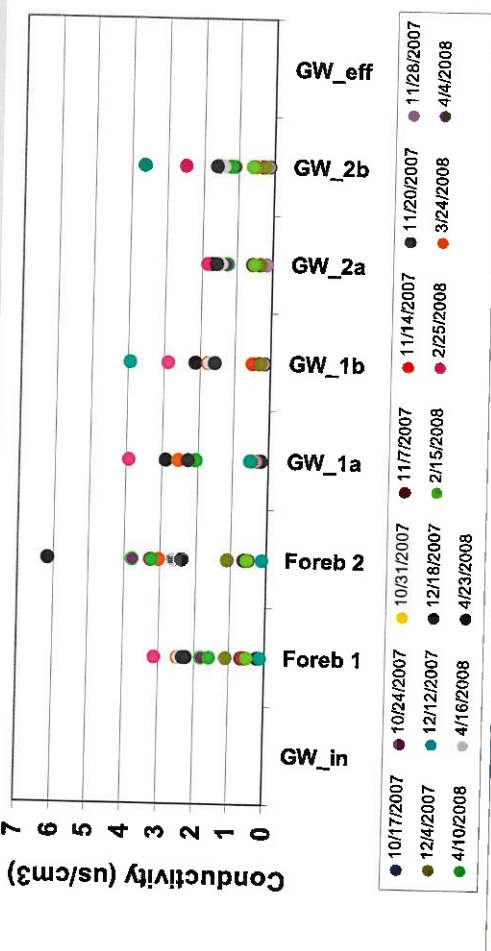
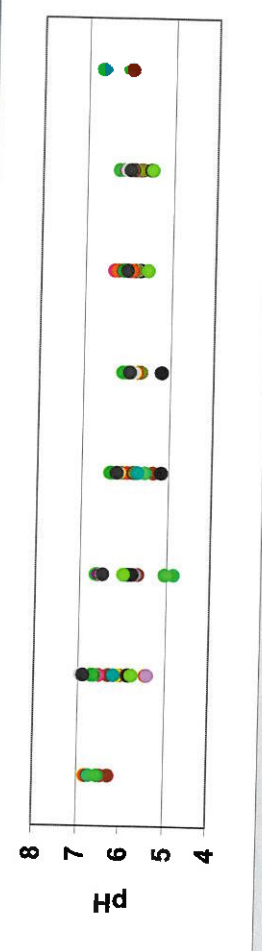
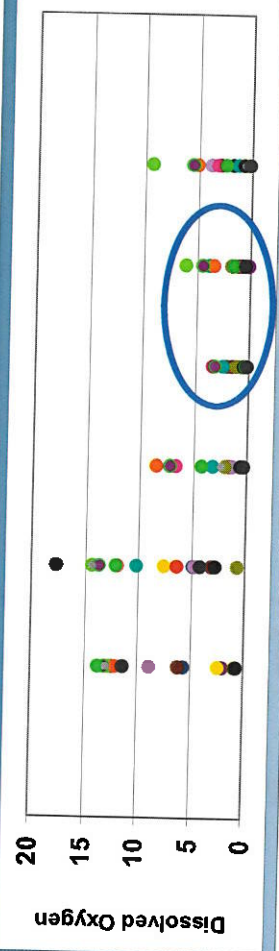
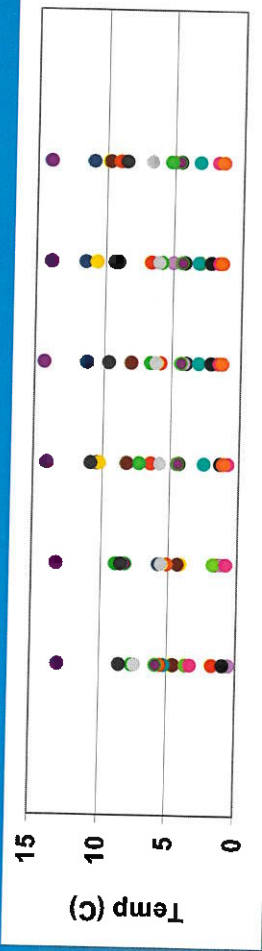
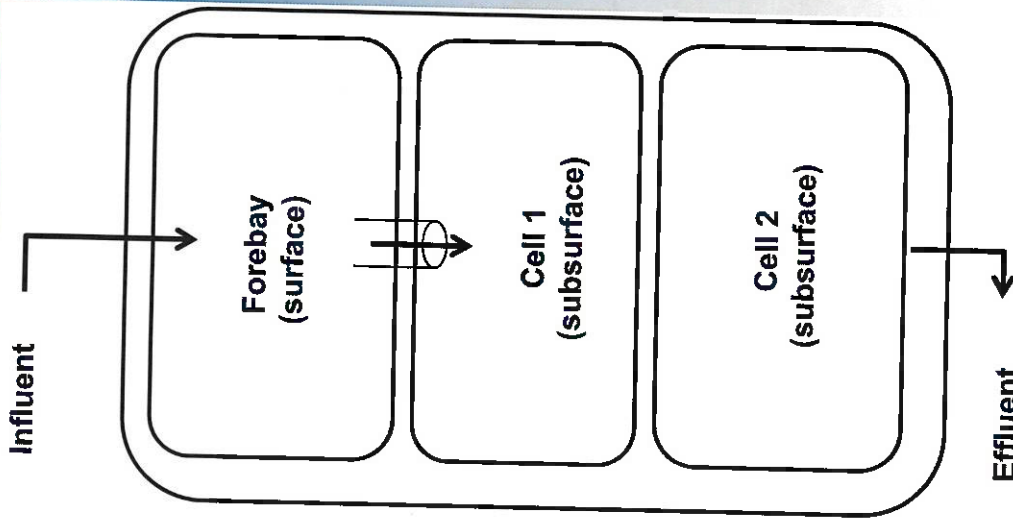
Organic N= TKN

TN = Organic N+ NH_3 + NH_4 + NO_2 + NO_3

NITROGEN

Concentration ug/L

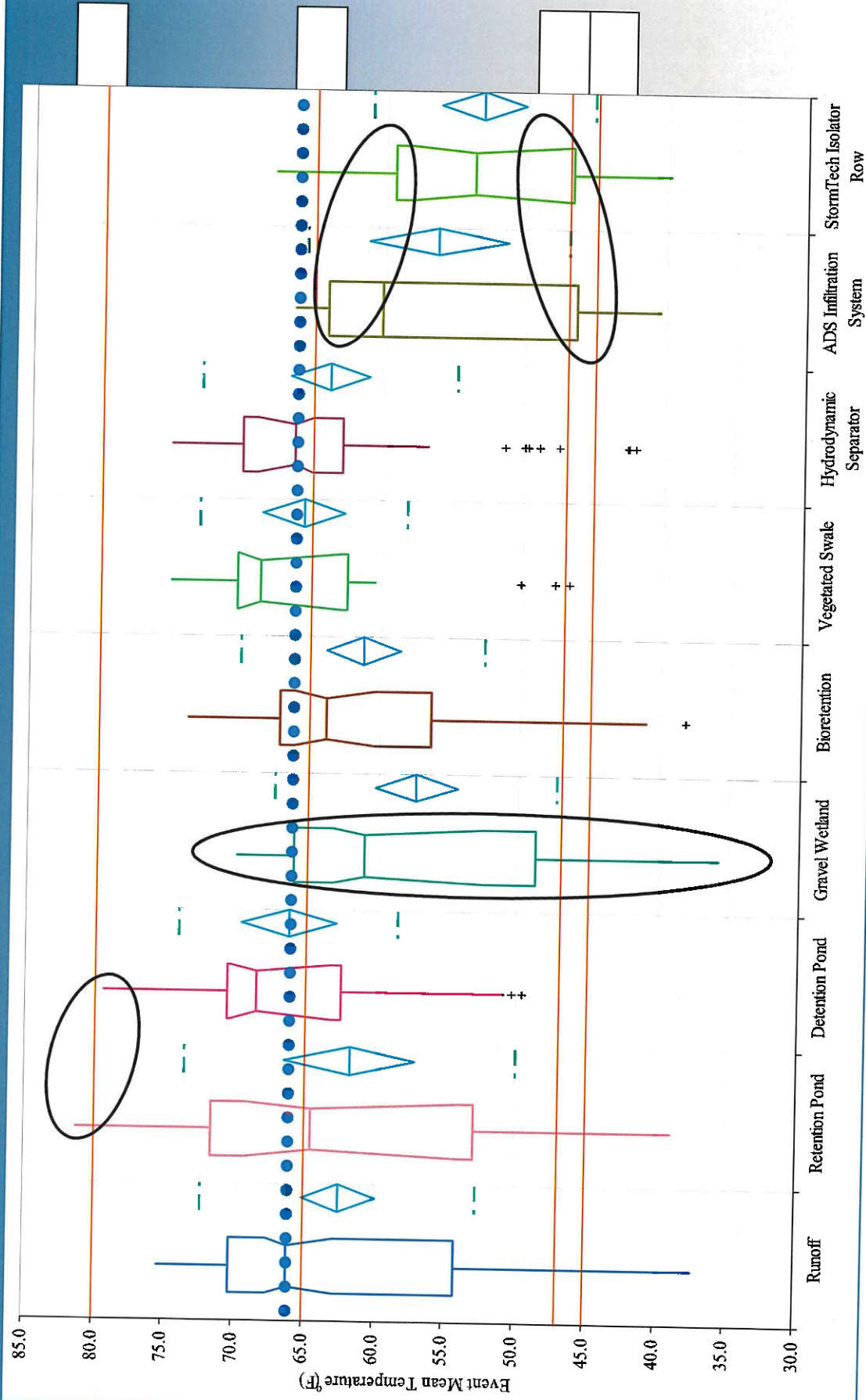




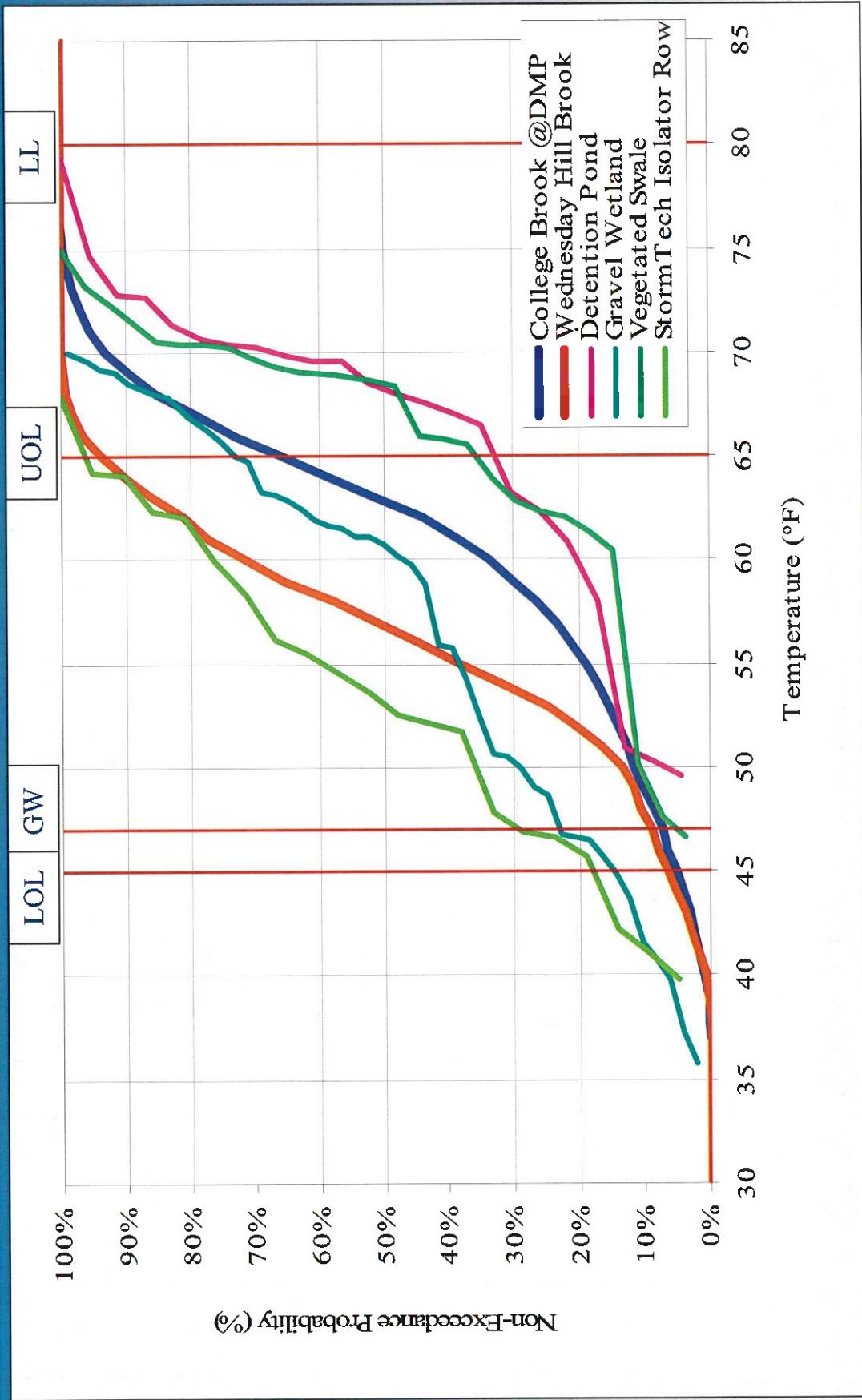
- 10/17/2007
- 10/24/2007
- 12/4/2007
- 4/10/2008
- 10/31/2007
- 12/12/2007
- 4/16/2008
- 11/7/2007
- 11/14/2007
- 11/20/2007
- 11/28/2007
- 2/15/2008
- 2/25/2008
- 3/24/2008
- 4/4/2008
- 4/23/2008

Thermal Performance

Summer Quartile Assessment



Summer Natural Streams



Results

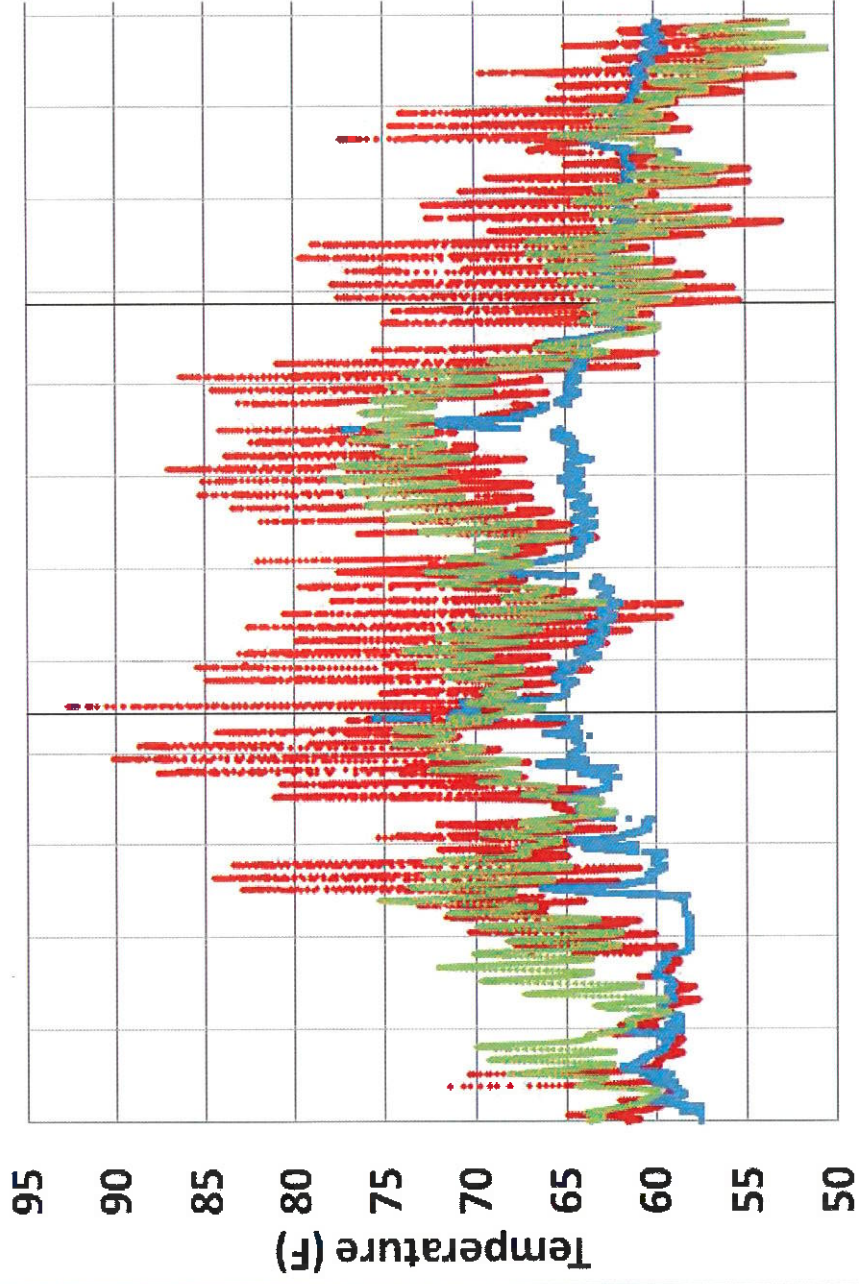
Annual Assessments		Runoff	Retention Pond	Detention Pond	Gravel Wetland	Bioretention	Vegetated Swale	HDS	ADS	STIR
EMT (°F)	Median	52.4	48.1	52.8	47.3	51.8	57.3	56.6	49.2	47.6
	Mean	53.5	50.9	52.3	48.7	51.9	54.8	54.1	51.5	49.0
	Standard Deviation	12.7	14.6	15.1	12.0	13.1	12.6	13.6	9.7	9.2
	Maximum	75.4	81.3	79.4	70.0	73.7	75.0	75.0	66.4	67.8
% Non-Exceedance UOL (65°F)		72.5%	79.0%	71.5%	87.0%	78.0%	72.5%	65.0%	95.0%	98.5%

Summer Assessments		Runoff	Retention Pond	Detention Pond	Gravel Wetland	Bioretention	Vegetated Swale	HDS	ADS	STIR
EMT (°F)	Median	66.2	64.6	68.6	60.9	63.9	68.6	66.3	60.3	53.7
	Mean	62.5	61.8	66.3	57.3	61.2	65.6	63.8	56.3	53.2
	Standard Deviation	9.8	11.8	7.8	10.1	8.7	7.3	9.1	9.3	7.9
Mean July Temperatures (°F)		67.1	77.9	72.2	66.0	67.7	70.3	69.0	63.4	58.5
% Non-Exceedance UOL (65°F)		42.0%	56.0%	37.0%	73.0%	58.5%	35.0%	34.0%	91.0%	96.0%

Time Series Characteristics

Subsurface Gravel Wetland (blue) Retention Pond (red)

Caldwell Brook (green)



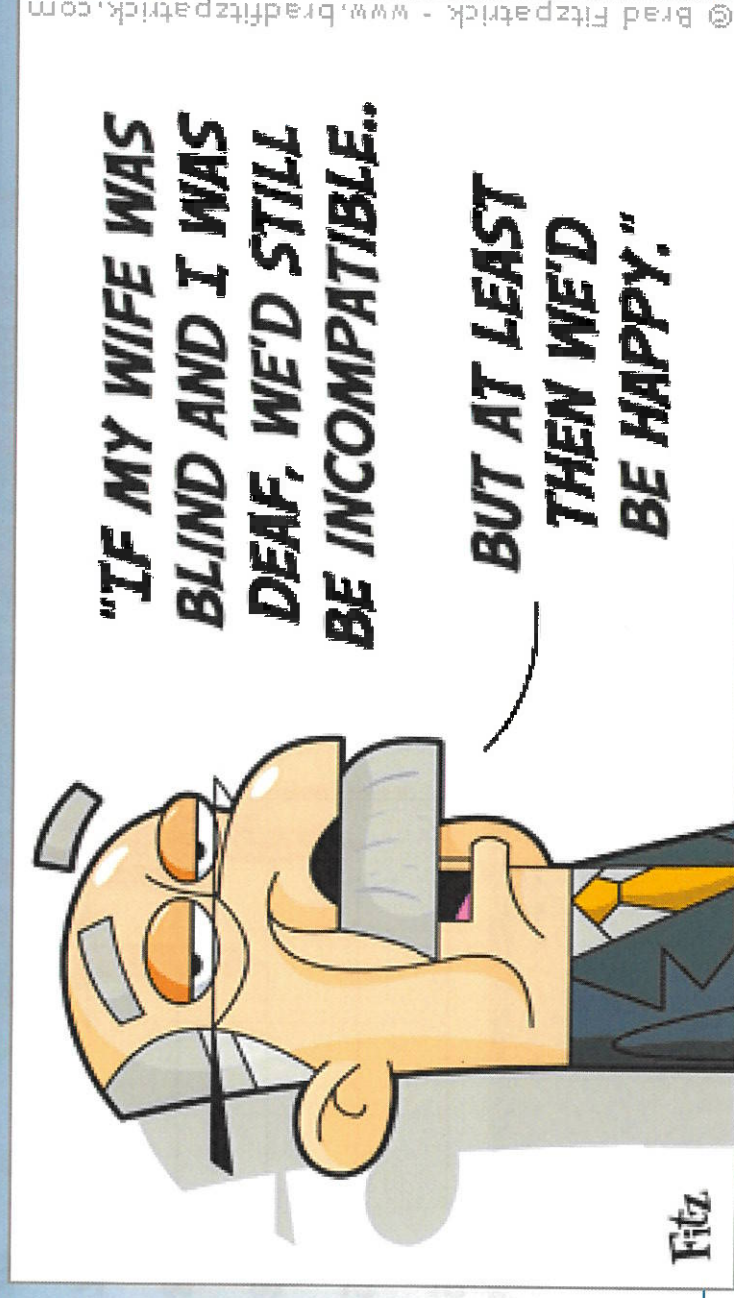
1-Jul-09

1-Aug-09

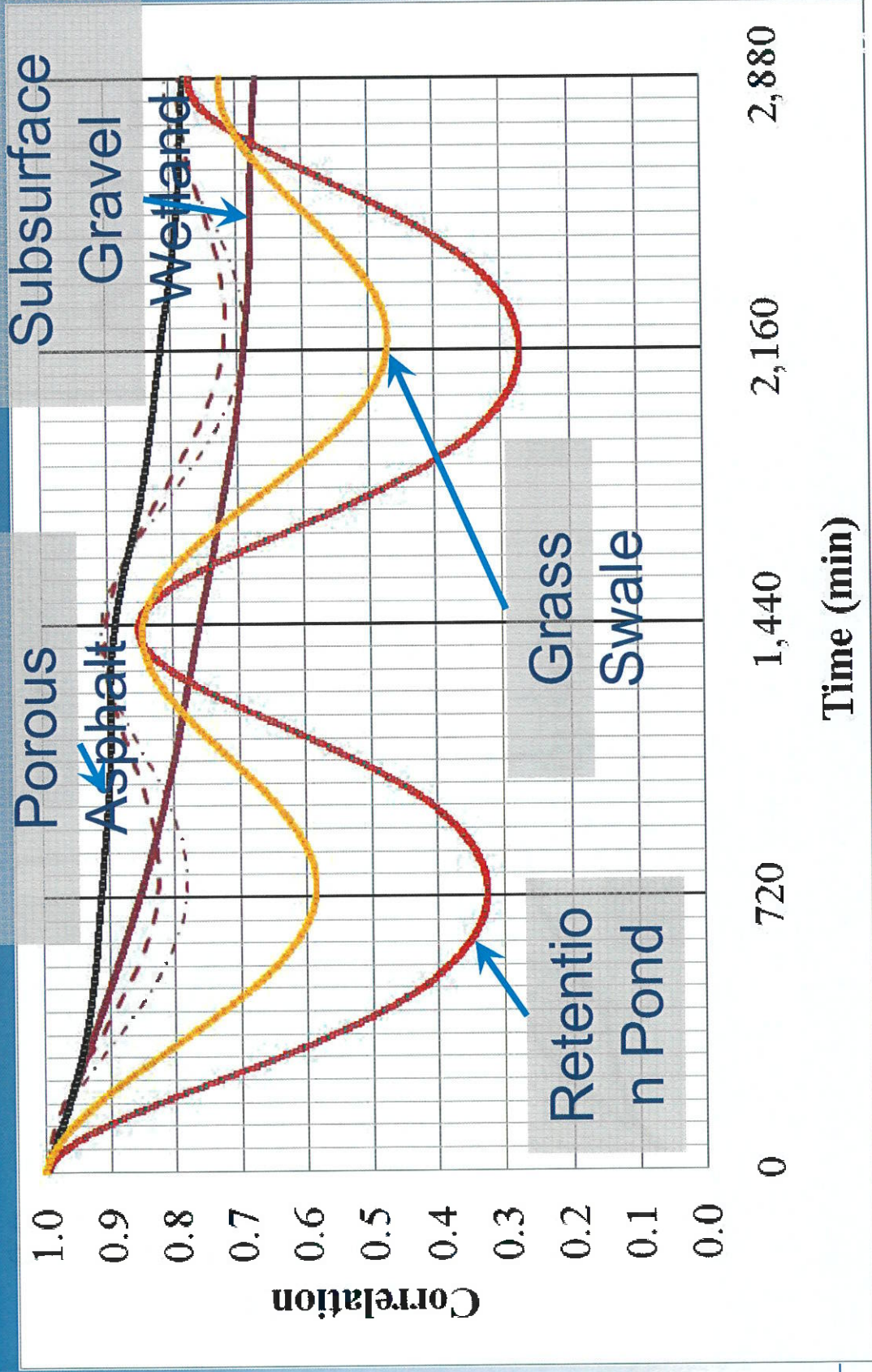
1-Sep-09

Date

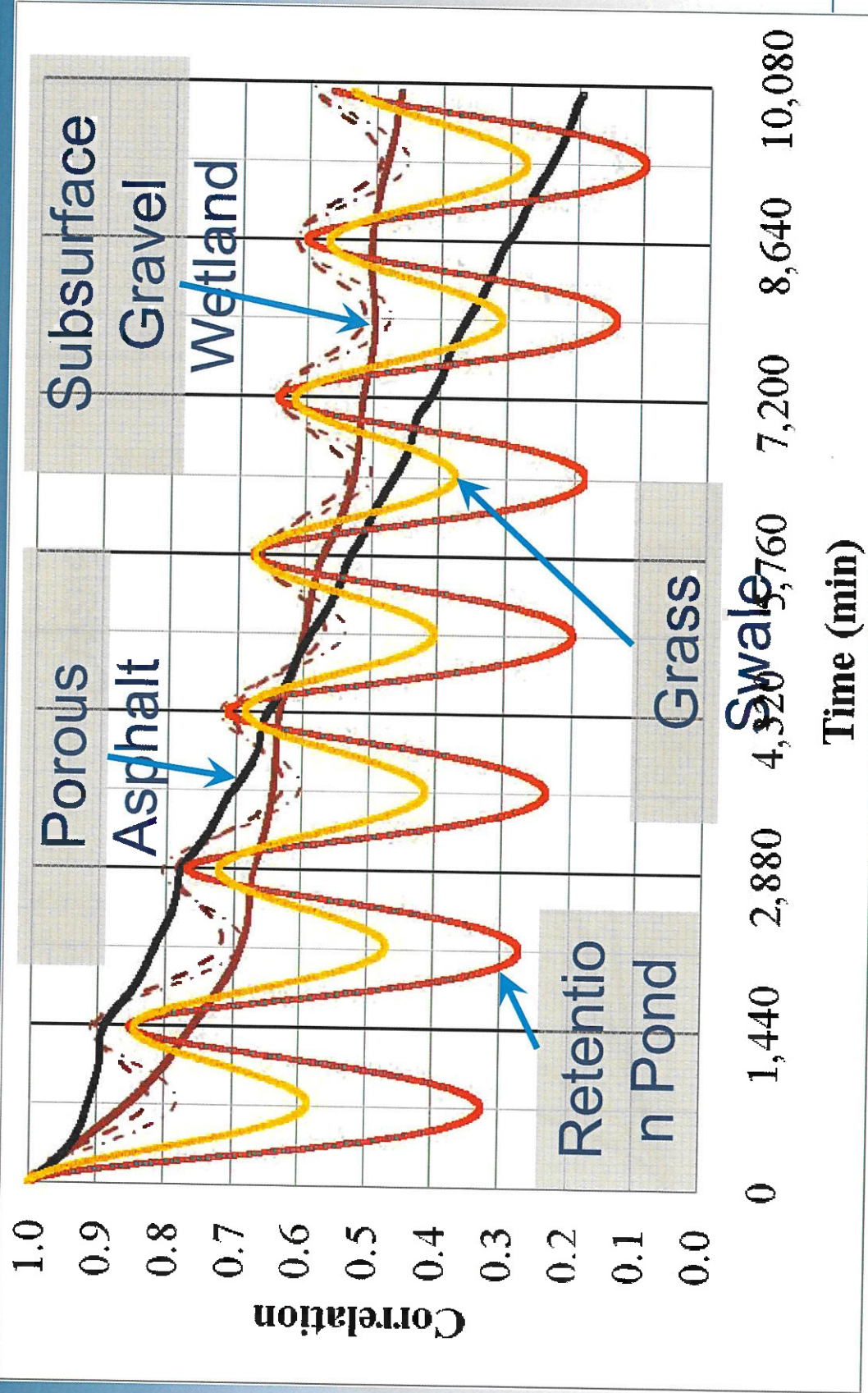
So When Stormwater Flows Into These Systems.....Is it Memory Compatible?



2009 Summer Temperatures – 2 days



2009 Summer Temperatures – 7 days



System Design and Sizing

RHODE ISLAND STORMWATER DESIGN AND INSTALLATION STANDARDS MANUAL
DECEMBER 2010



State of Rhode Island
 Department of Environmental Management
 100 Water Street
 Providence, RI 02903

CRMC
 Coastal Resources Management Council



The Vermont Stormwater Management Handbook
 Technical Support Document
 Public Review Draft




November 31, 2009

Prepared by:
 Vermont Agency of Natural Resources
 100 North Main Street
 Montpelier, Vermont 05602

Provided by:
 The Stormwater Center of Vermont
 100 North Main Street
 Montpelier, Vermont 05602

Urban Substituted Restoration Manual Series

1 An Integrated Framework to Restore Small Urban Watersheds
 Version 2.0




February 2003

CENTER FOR WATERSHED PROTECTION
 Manual 1

SC STORMWATER CENTER

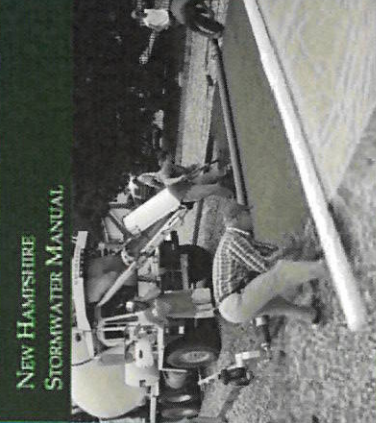
UMHSC
 Subsurface Gravel Welland
 Design Specifications




June 2009

Prepared by:
 Stormwater Center of Vermont
 100 North Main Street
 Montpelier, Vermont 05602


NEW HAMPSHIRE STORMWATER MANUAL



VOLUME 2
 Post-Construction Best Management Practices
 SELECTION & DESIGN
 DECEMBER 2008



New Jersey
Stormwater
 Best Management Practices Manual




The New Jersey Department of Environmental Protection
 Division of Environmental Management

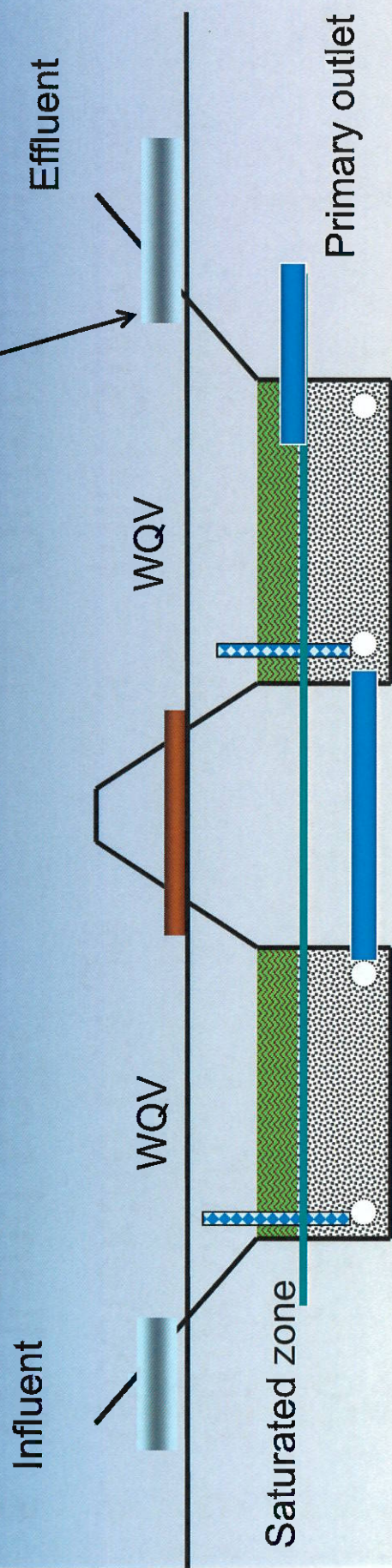
Design Criteria

- Water Quality Volume (WQv)
- Channel Protection Volume (Q2)
- Extreme Storm Volume (Q10)

WQV

- WQV is a static sizing criteria meaning it is the calculated volume resulting from the WQ storm depth (1 inch in 24 hrs) across the drainage area (1 acre parking lot = 3,300 cf)
- In this case the system needs to provide storage and treatment for the WQV as if it were delivered instantaneously.

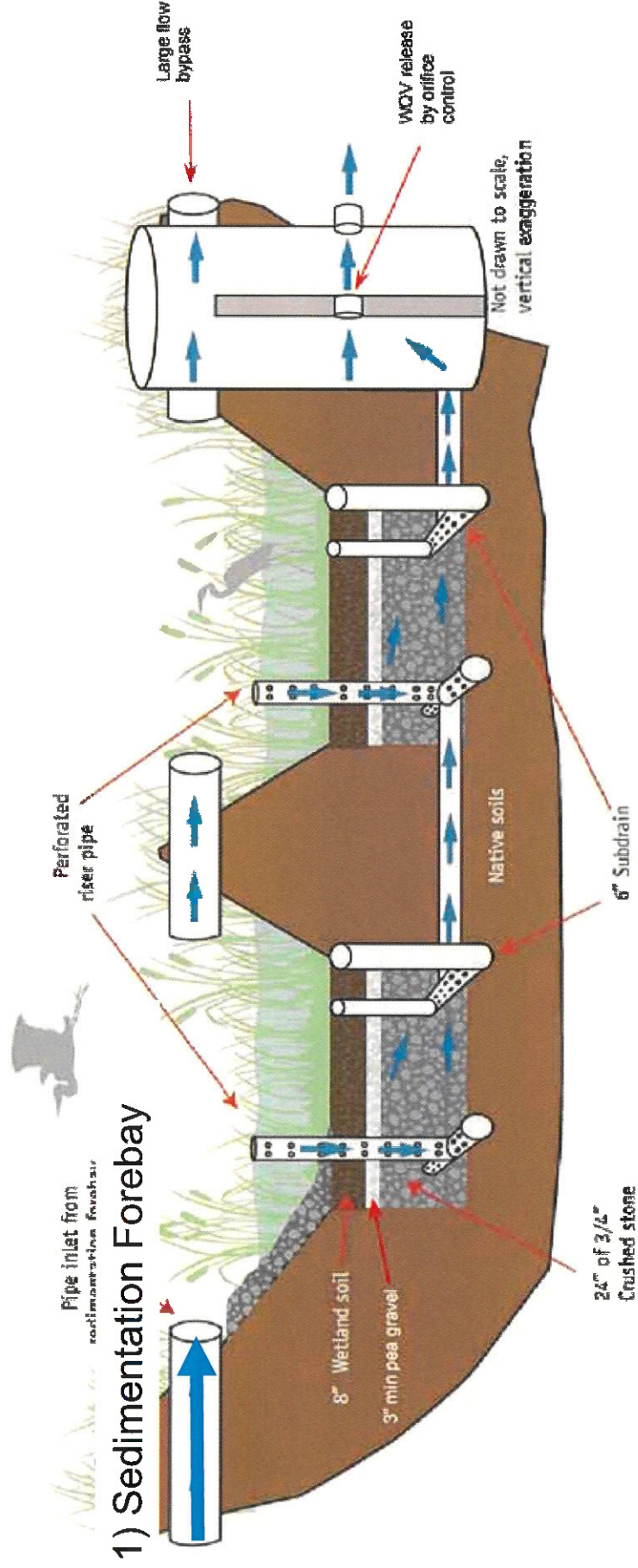
Generic Cross-Section



Critical Design Elements

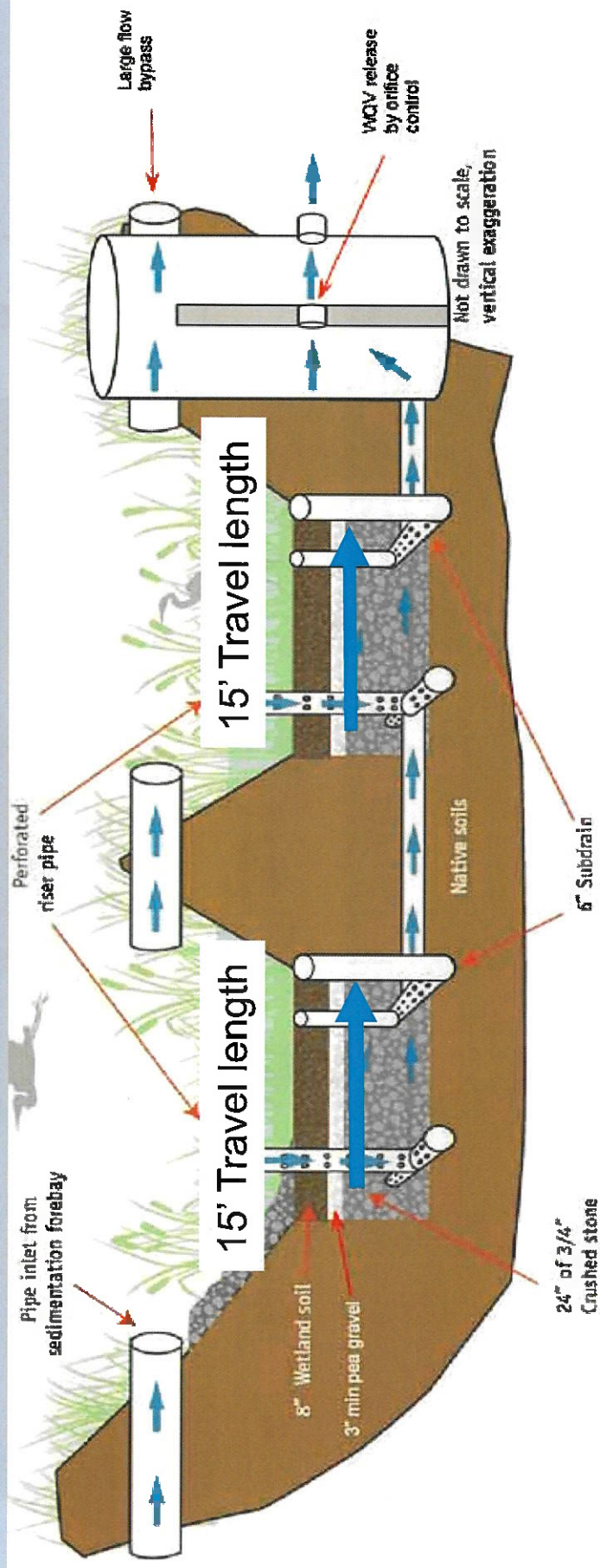
1. Pretreatment
2. Two Treatment Cells.
3. Flow path
4. Geotextile usage
5. Wetland soils
6. Subgrade soils
7. Liners
8. Materials
9. Inlet Structures
10. Outlet Structure

Subsurface Gravel Wetland

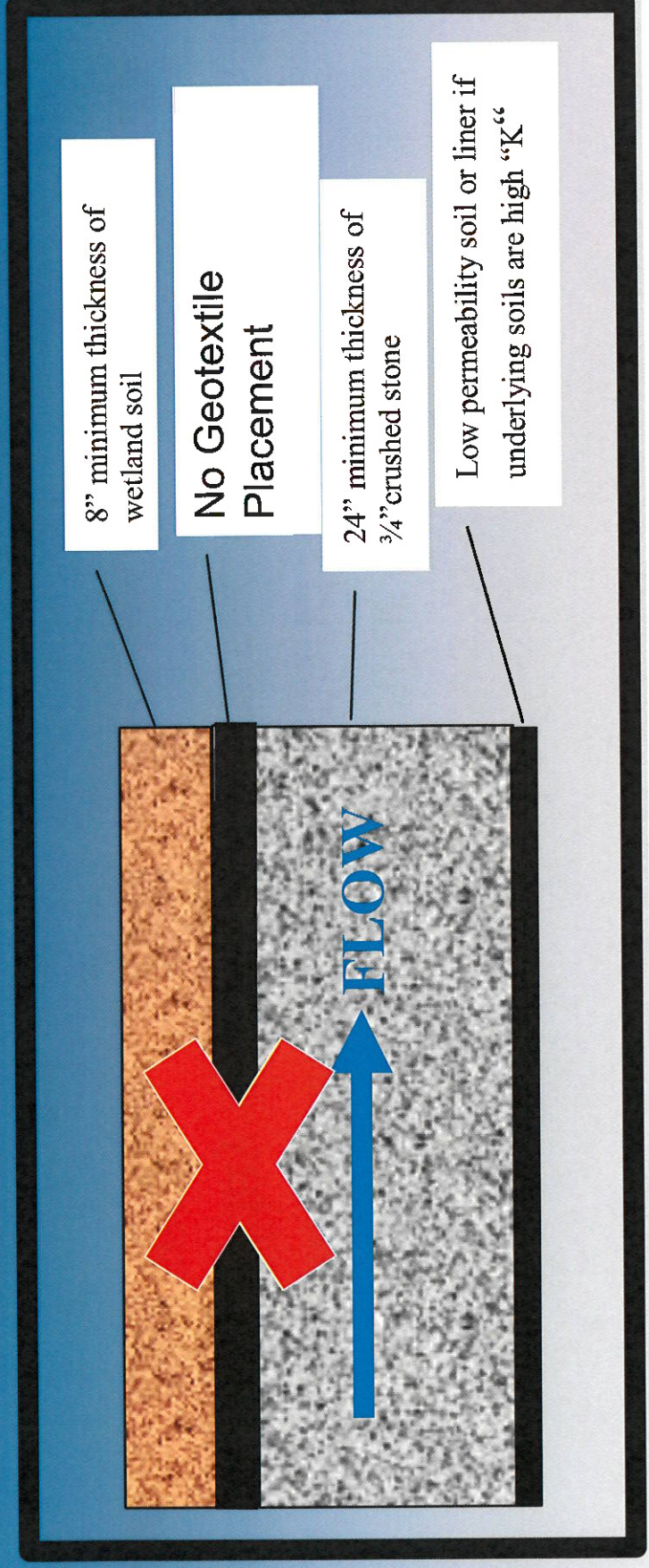


Flow Path

- Minimum flow path length through the gravel should be 15 ft per cell, 30 ft total
- Flow path is horizontal and distinct from most biofiltration



Geotextiles



- No Geotextile between soil and crushed stone, in replace use intermediate setting bed
- Do not use geotextiles between the horizontal layers of this system as they will clog due to fines and may restrict root growth.

Wetland Soil

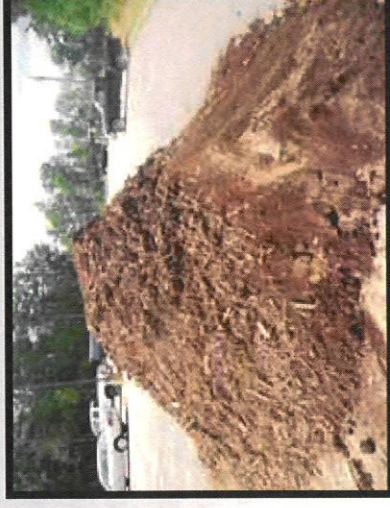
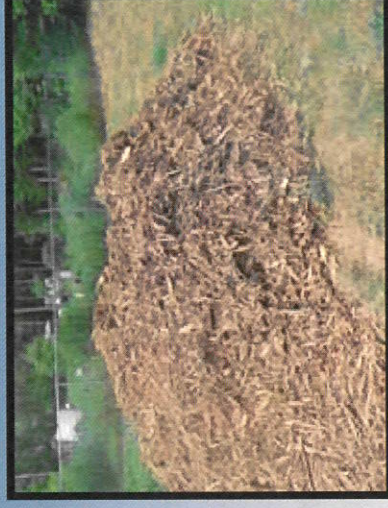
- 8 in. (20 cm) minimum thickness of a wetland soil as the top layer.
- This layer is leveled (constructed with a surface slope of zero).
- The surface infiltration rates of the gravel wetland soil should be similar to a low hydraulic conductivity wetland soil (0.1-0.01 ft/day = 3.5×10^{-5} cm/sec to 3.5×10^{-6} cm/sec)).

Wetland Soil

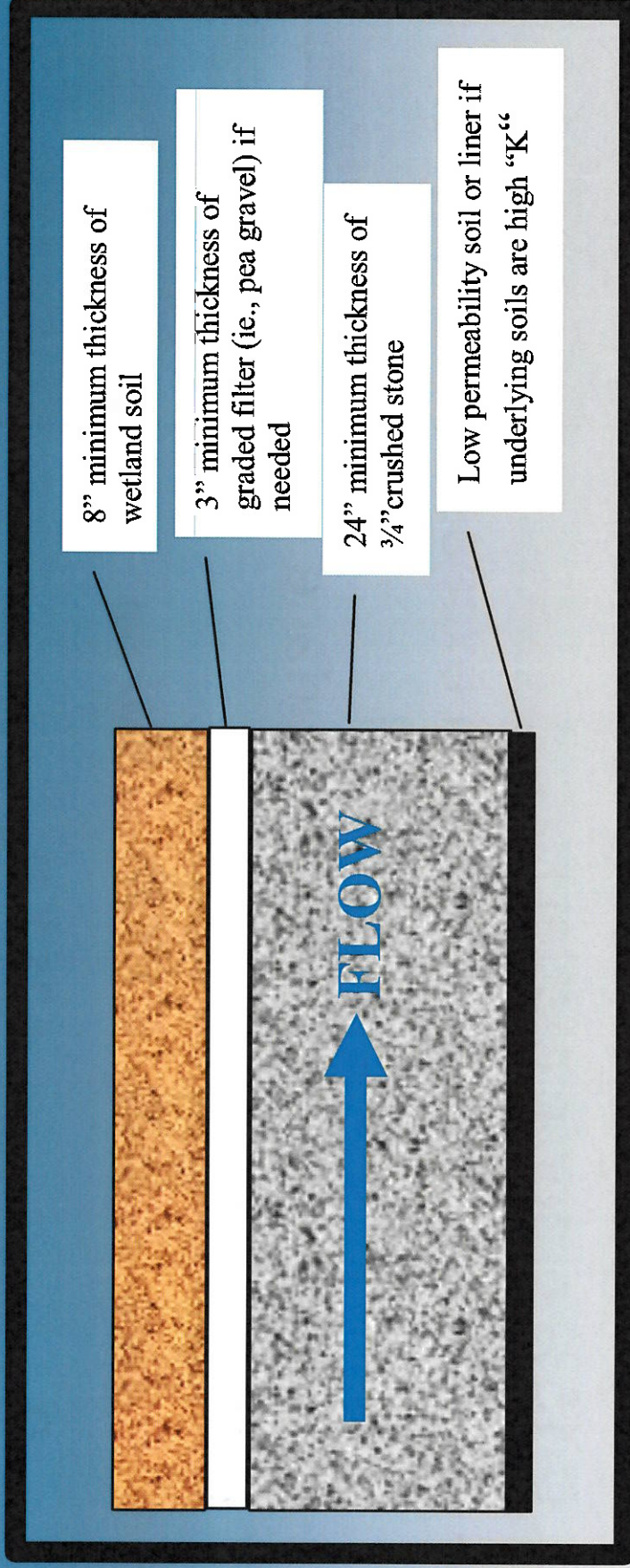
- This soil can be manufactured using existing topsoil, and compost, or sand, and some fine soils to blend to a high % organic matter content soil (>15% organic matter).
- Avoid using clay contents in excess of 15% because of potential migration of fines into subsurface gravel layer.

$$D_{15, \text{ COARSE SUBLAYER}} \leq 5 X D_{85, \text{ SETTING BED}}$$

$$D_{50, \text{ COARSE SUBLAYER}} \leq 25 X D_{50, \text{ SETTING BED}}$$

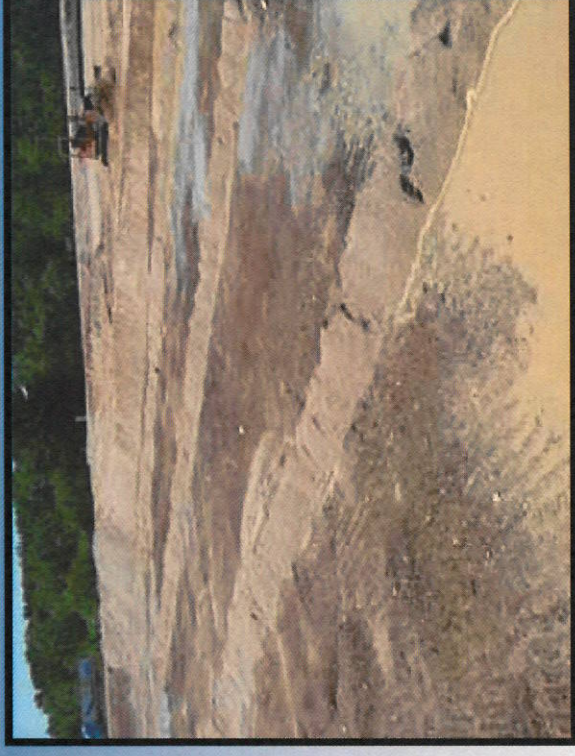


Subgrade Soils



Subgrade Soils

- Underlying soils should have low permeability to maintain driving head and risk of groundwater contamination
- Hydraulic conductivity \leq 0.03 ft/day
- If low permeability soils are present, use a compacted soil or HDPE liner.



Liners

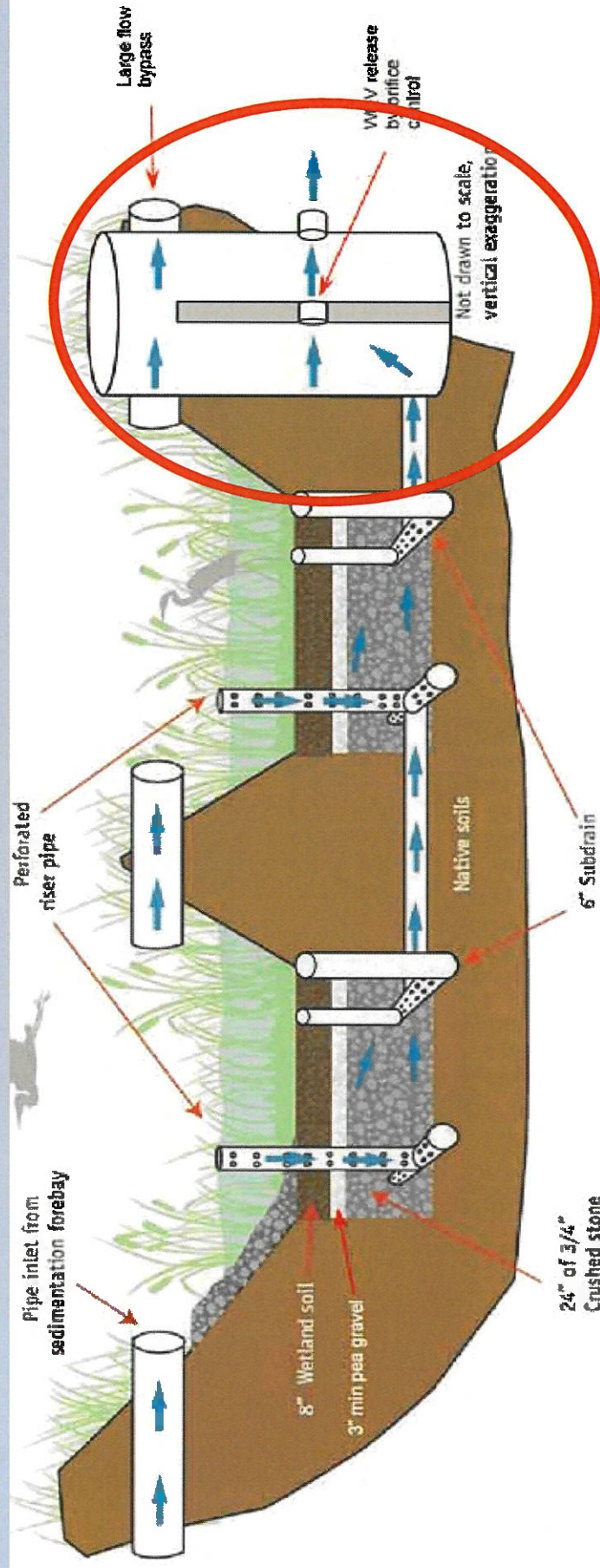
- Federal guidelines regulate groundwater protection standards.
- Liners can be used for sites where the infiltration is a concern (eg. high water table, bedrock karst sites and hot spots where hazardous materials may be handled).
- The use of Liners will preserve water quality through detention and filtration and will limit any infiltration.
- Liners can be made from HSG 'D' soils, HDPE, or clay

Reservoir Course

- 3 in. (8 cm) minimum thickness of an intermediate setting bed layer of a graded aggregate filter overtop the reservoir course
- Prevent the wetland soil from moving down into the gravel sub-layer through soil piping
- Material compatibility between layers needs to be evaluated.
- Reservoir course is constructed of ~0.75" angular stone (similar to ASTM#57)

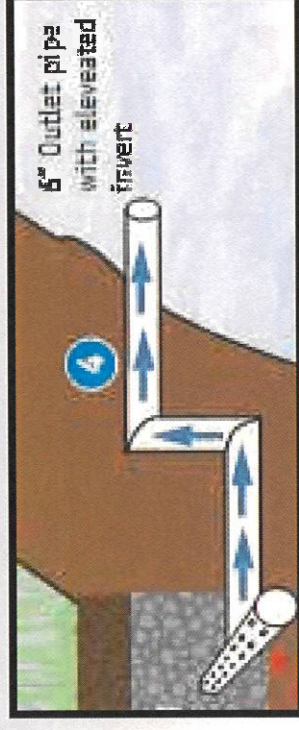
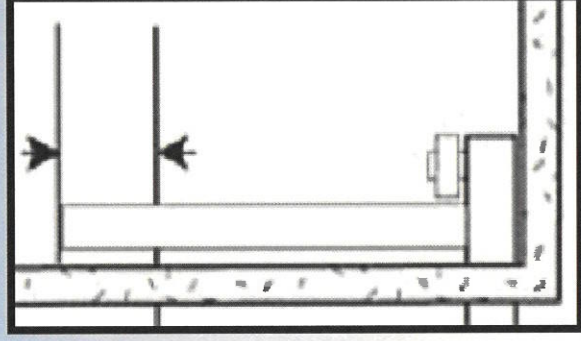
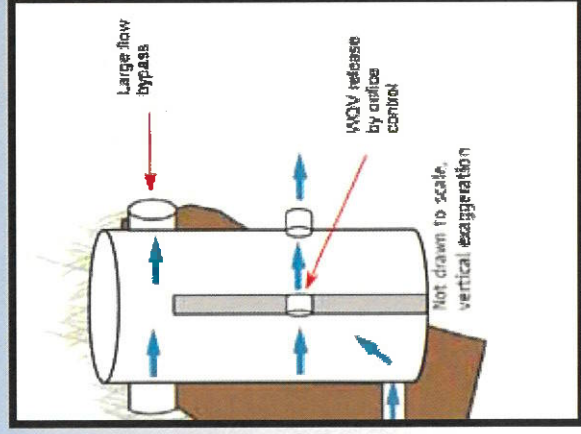
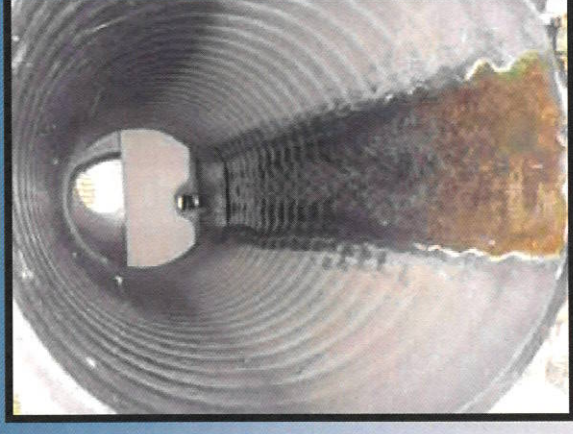
Outlet Structure

- Many options
- All will have WQV release and highflow bypass
- May include drainplug for maintenance



Outlet Structure

- Outlet Structure Options vary
 - Precast structure with weir wall
 - T-fitting with valve
 - Upturned elbow



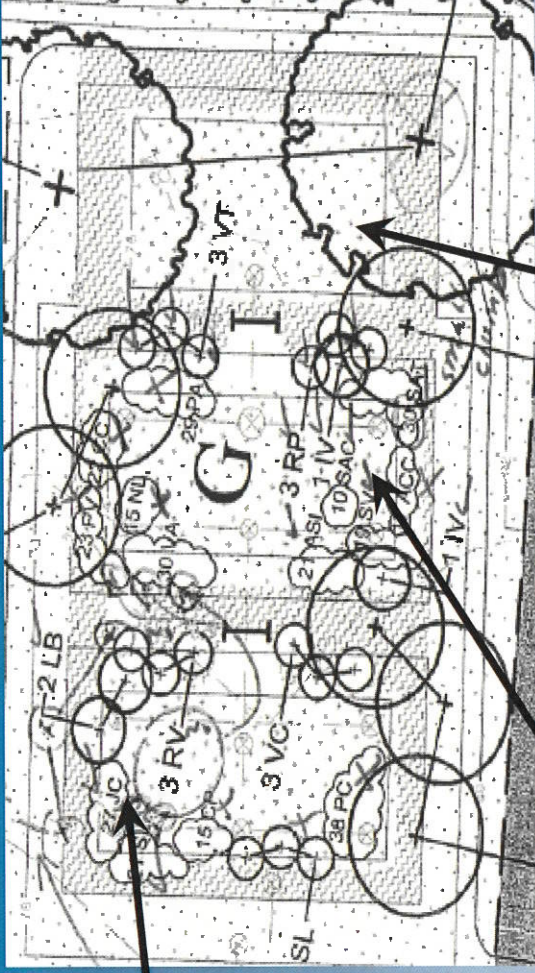
Wetland Vegetation

- Used New England Wetmix (wetland seed mix) from New England Wetland Plants Application Rate: 1 LB/2500 SQ. FT. (18 LBS/ACRE as a wet meadow seeding)
- <http://www.newp.com>
- Price: \$125.00/LB**
- Gravel wetland – mixed wetland grasses, reeds, herbaceous plants and shrubs growing vigorously. 100% cover, except for open water in forebay. Very few upland plants. Healthy, diverse wetland system.

Gravel Wetland



Sagittaria, Cattail,
Juncus, grasses, areas
with standing water



Bullrush
(scirpus),
aster, grasses,
no standing
water



Rush (juncus), cattail, grasses,
open water

UNH SC – General Wetland Condition

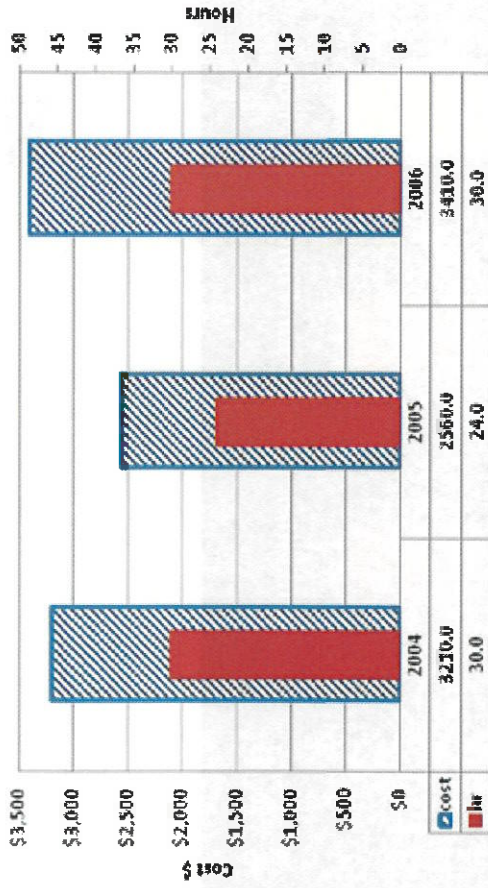
- 53% of the planted species are still present (in areas that have not been re-constructed).
- Trees and shrubs had a high survival.
- Emergent obligate wetland species (e.g water lily, pickerelweed) survival was very low.
- All areas with standing water populated by Typha (cattail).
- No Phragmites, some Purple Loosestrife removed.
- Predominantly emergent marsh/wet meadow species.
- Some vertebrate wildlife species present; frogs and heron.

Inspection and Maintenance

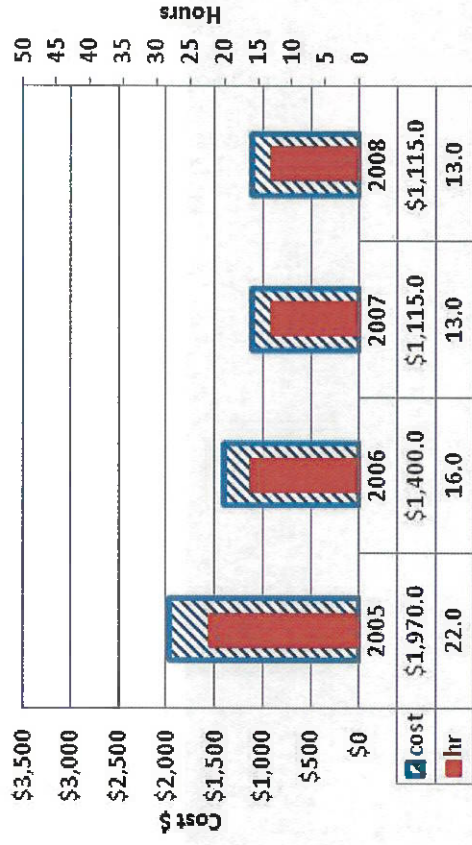


<p>REACTIVE</p> <p>Episodic maintenance Cheap in short term Expensive in long term Most property damage</p>	<p>PERIODIC</p> <p>Can be expensive and wasteful Need statistics Simple administration</p>
<p>PREDICTIVE</p> <p>Scientific basis Cost-effective Not applicable everywhere Administration more difficult</p>	<p>PROACTIVE</p> <p>Can be cost-effective Expensive if overused Can have institutional implications</p>

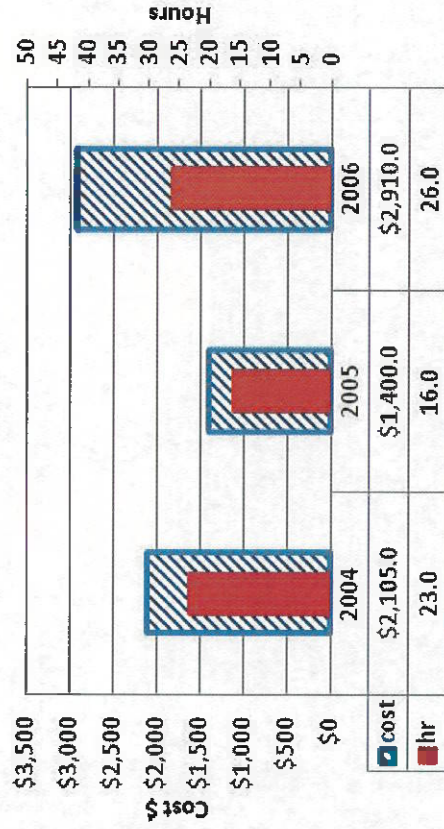
Retention Pond



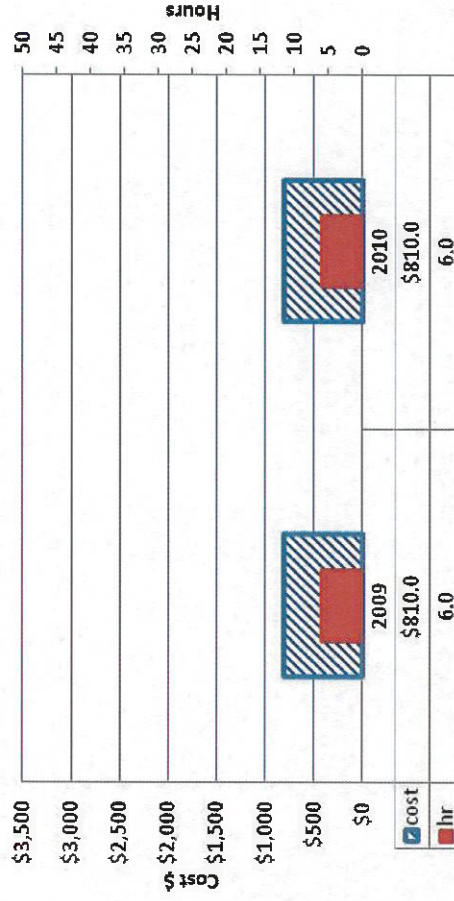
Bioretention



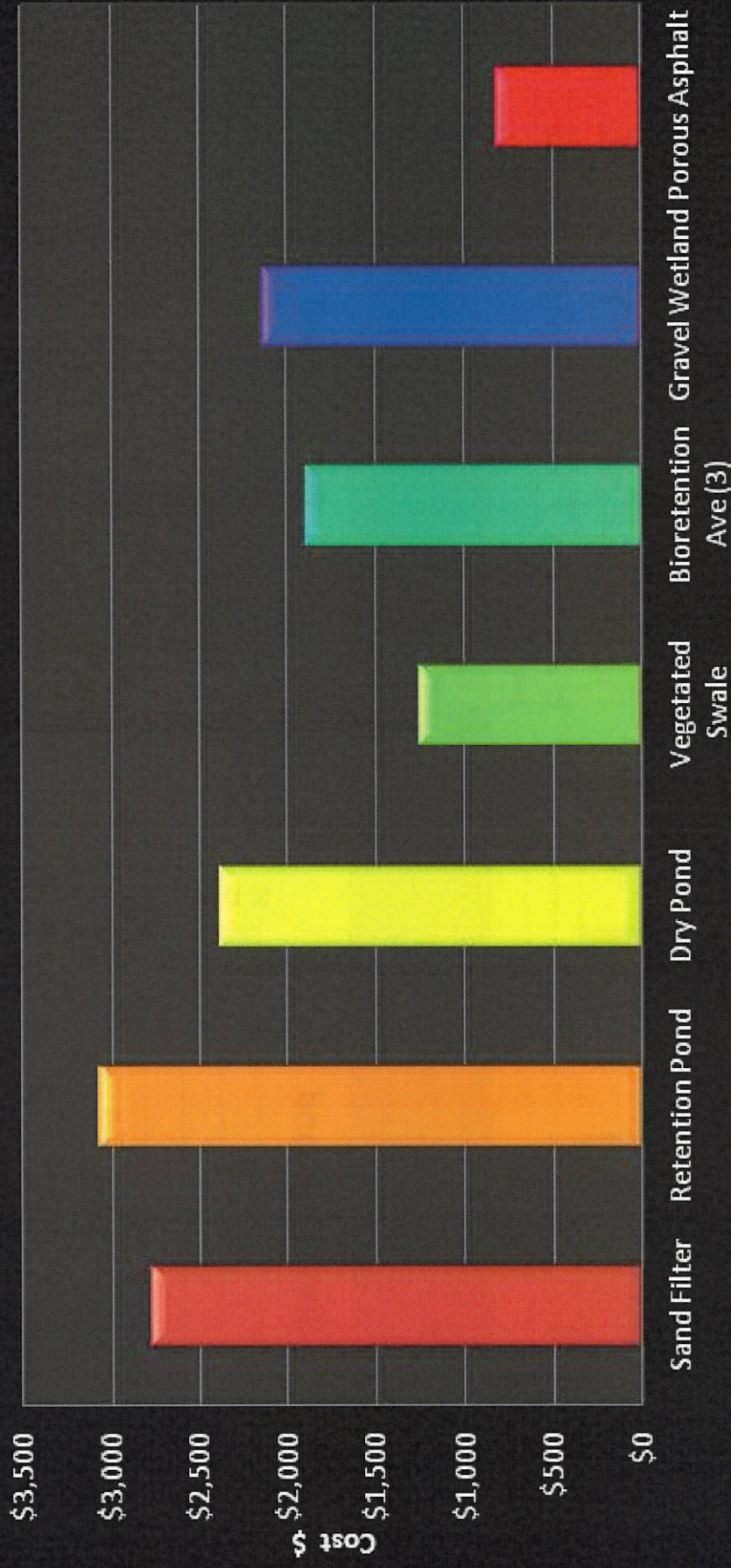
Gravel Wetland



Porous Asphalt



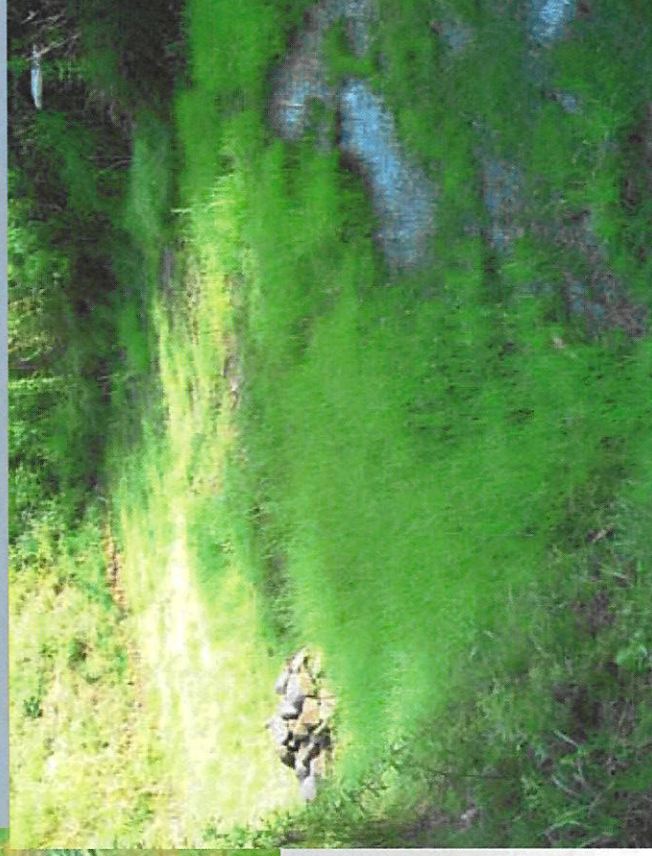
Yearly BMP Maintenance (per acre treated)



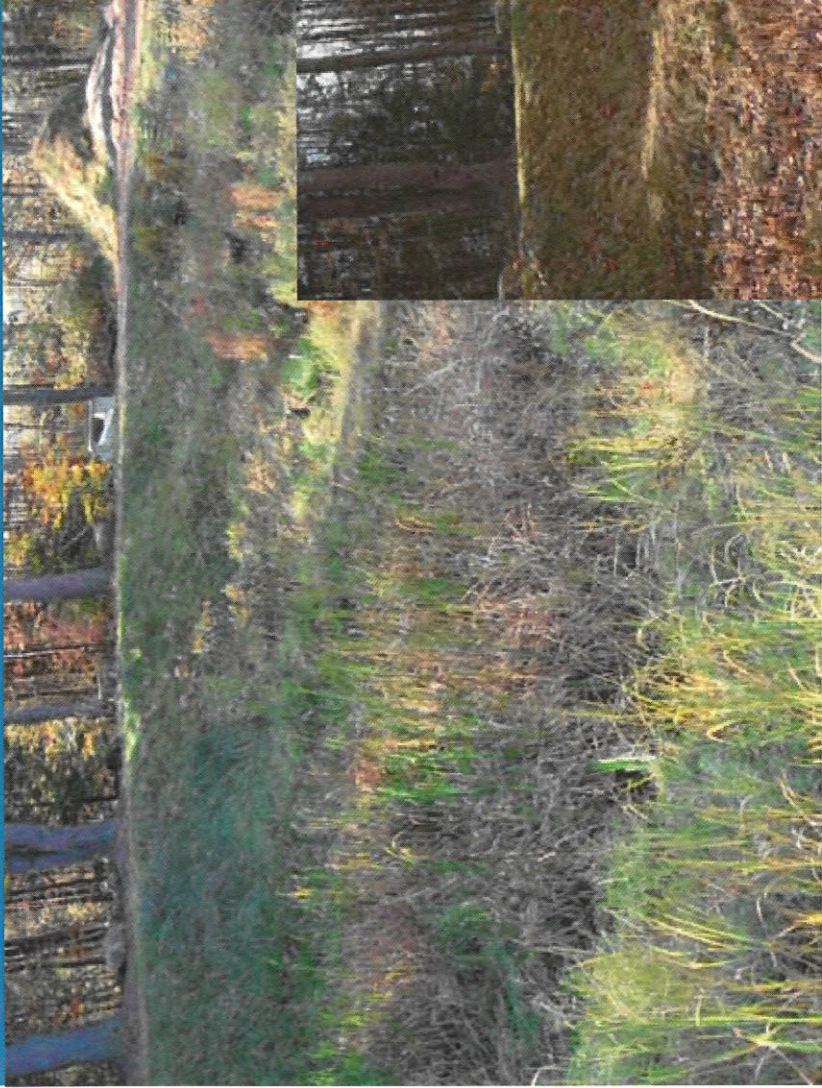
BMP Maintenance/acre/yr by Category



4 - yr Forebay Maintenance - June 2008



Current 3-yr Maintenance Plan



Maintenance

- The forebay to the gravel wetland, and probably all stormwater systems may become a source of contamination as the system ages—maintenance is essential
- Improved forebay designs would include a deeper pool of water in excess of a meter, or a deep sump catch basin or proprietary treatment device for removal of solids.

Maintenance

- Sediments and plant debris stored in the forebay may be re-suspended and released in subsequent storms. Routine maintenance is an important component in maintaining performance—2-3 year interval.

Materials and Installation Cost

Technology	Cost: \$/Acre IC
Vegetated Swale	\$ 11,200.00
Retention Pond	\$ 13,700.00
Gravel Wetland	\$ 22,300.00
Bioretention	15,000 - 25,000
HDPE Chamber	\$ 34,000.00

Greenland Case Study

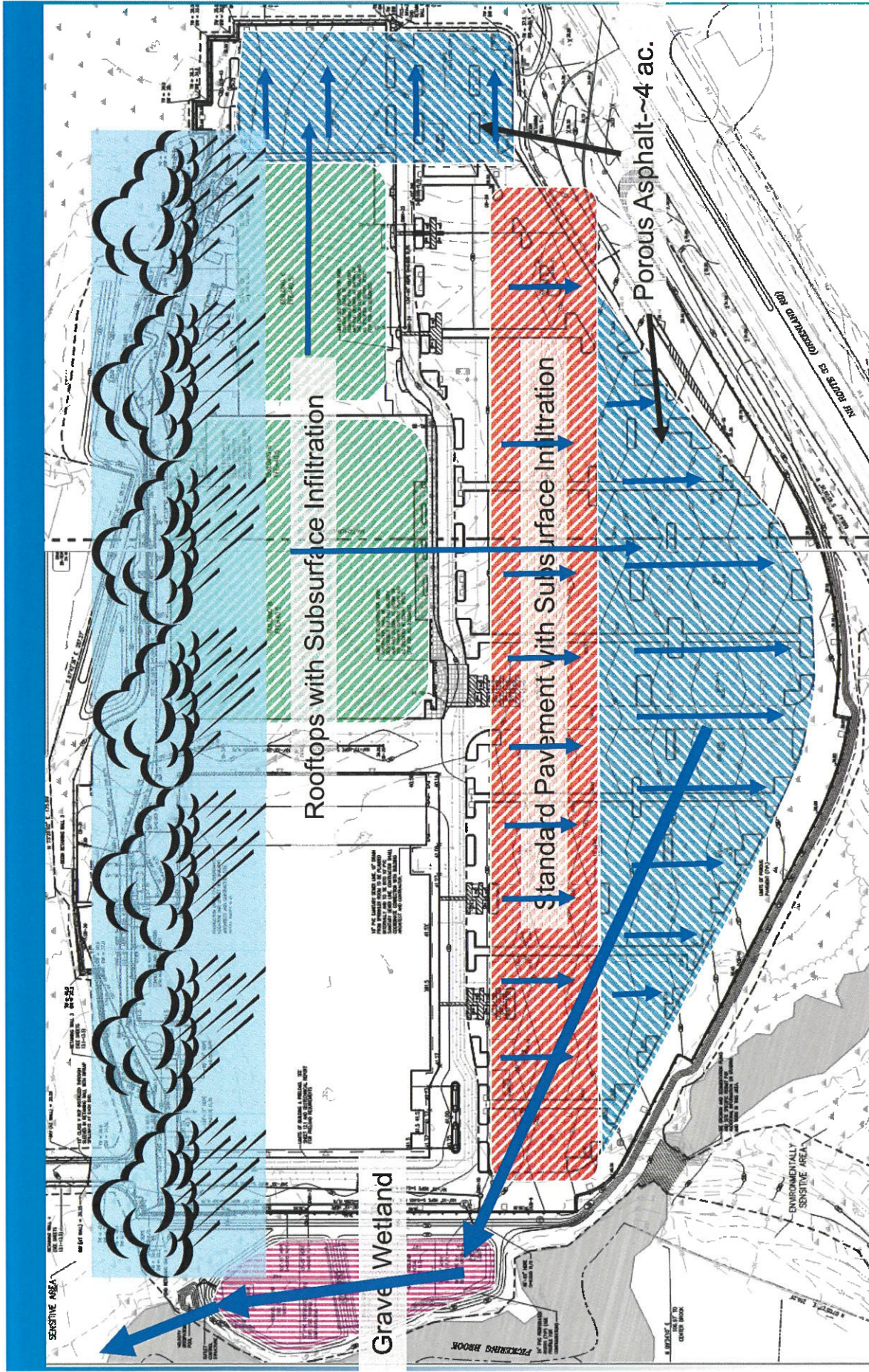
CASE STUDY: Greenland Meadows

**Packard Development, Conservation Law Foundation,
UNHSC (2005- Present)**

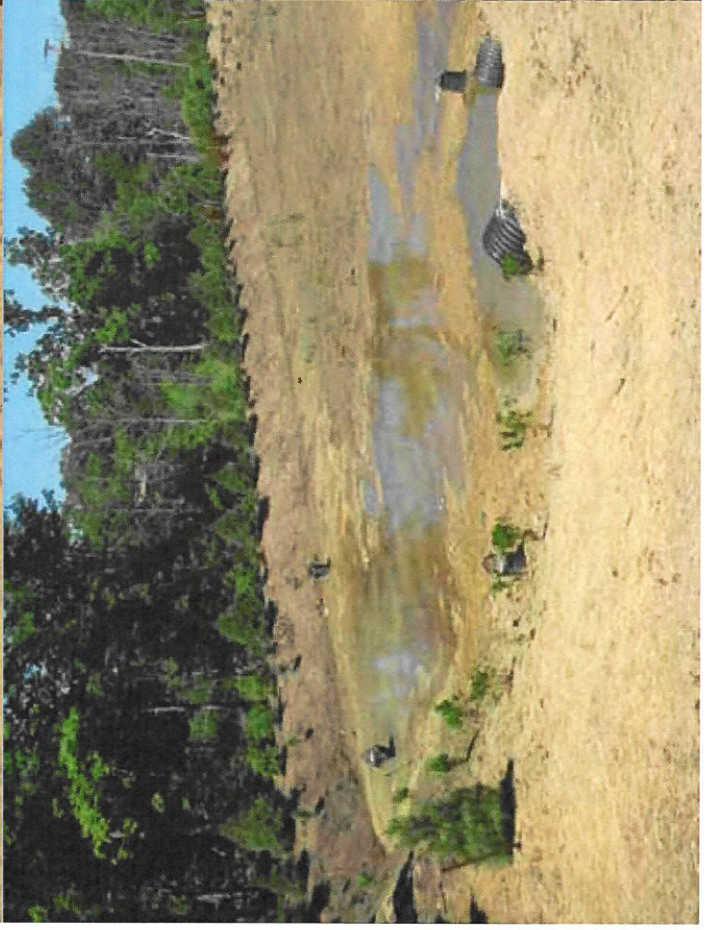
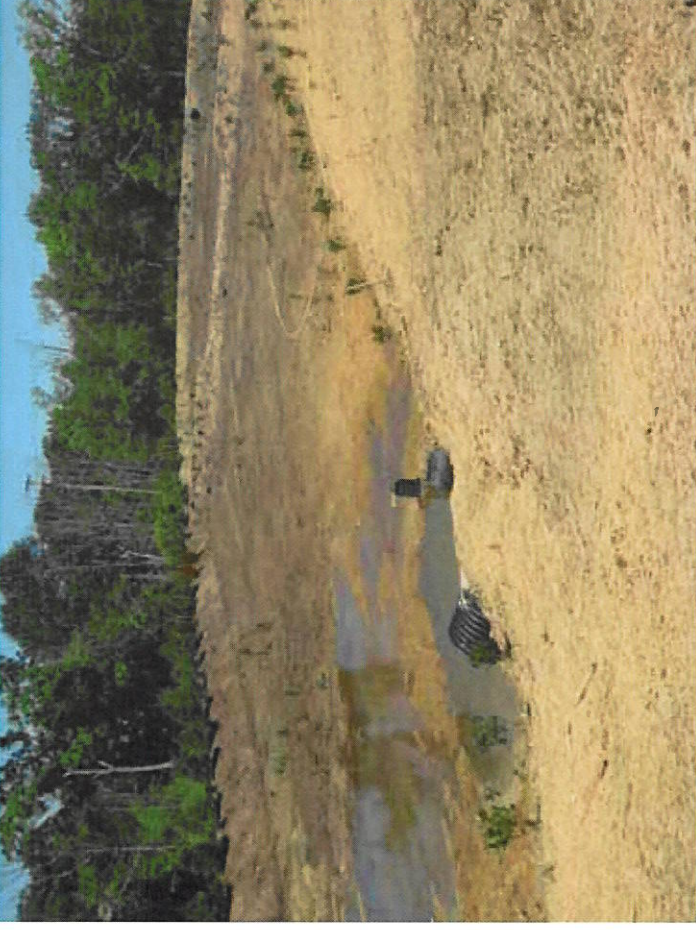
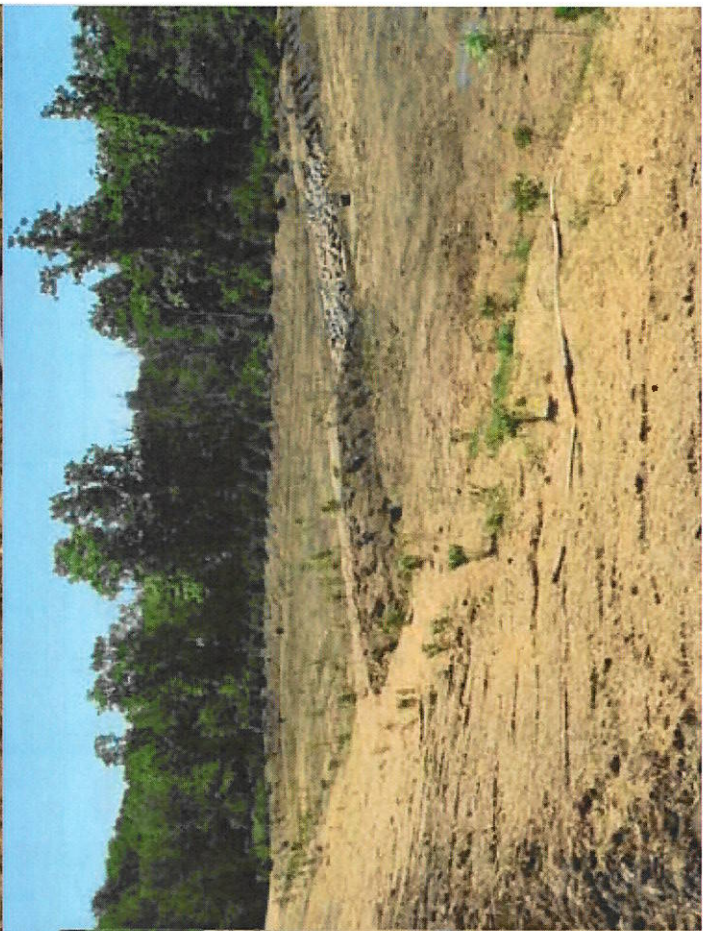
- Protection of impaired waters—Pickering Brook
- >15,000 Average Daily Traffic count

Involves the use:

- daily street vacuuming
- a porous asphalt parking lot
- subsurface infiltration of rooftop runoff
- a gravel wetland
- Combined as a treatment train



Entire site is treated by filtration, either porous pavement, subsurface infiltration, or gravel wetland, or combination of methods



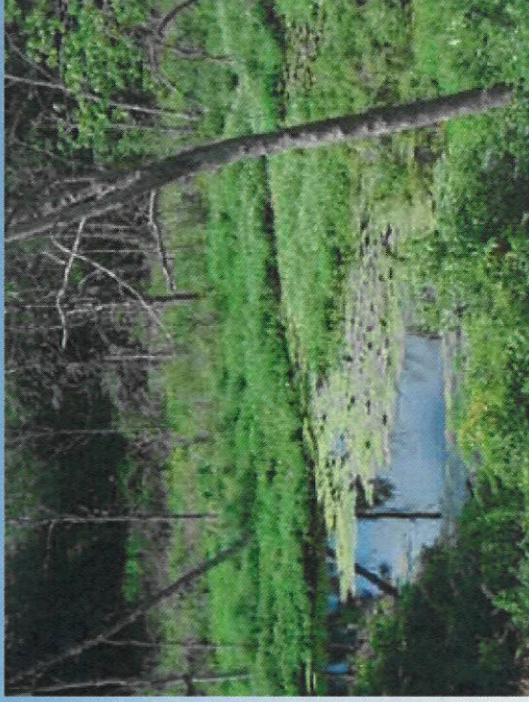
3 mos later



3 years later

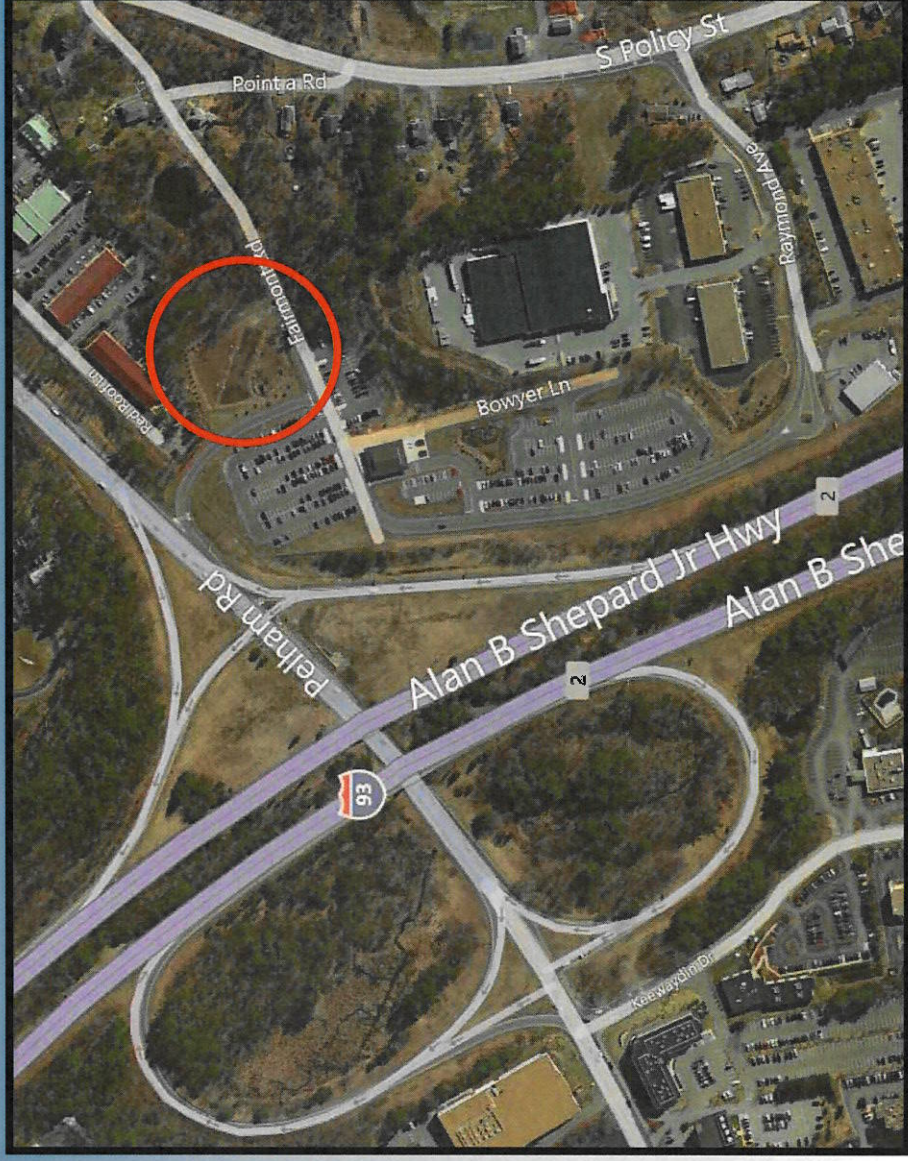


Discharge to Impaired Water

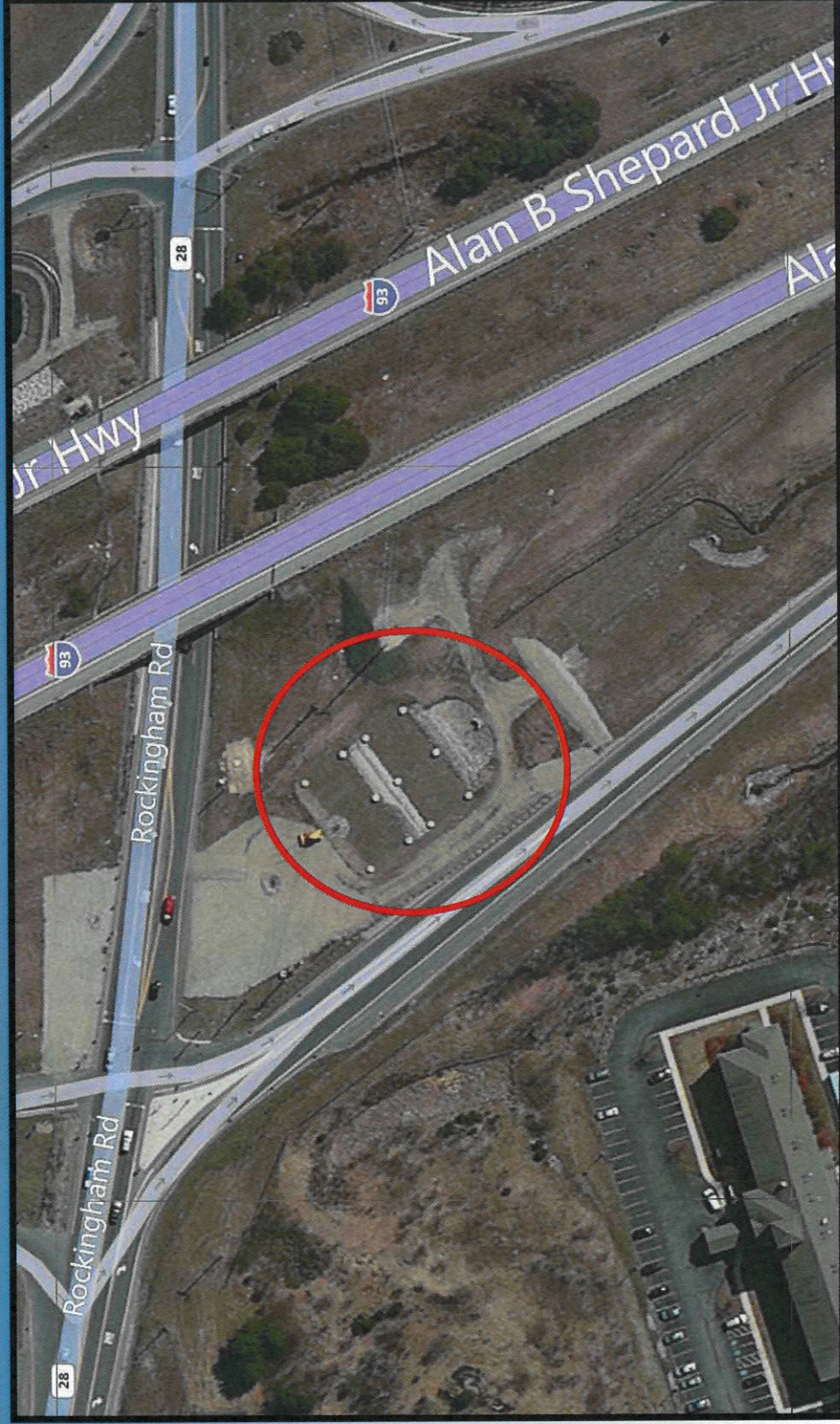


TMDL Impaired Watershed

- NHDOT Exit 2
Park and Ride
- GW use for
401 WQ
Certification
- Used widely
by NHDOT on
I-93 and Rt 16
Expansion

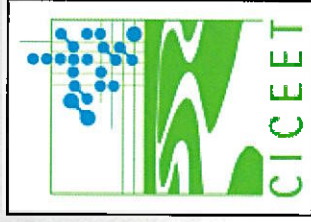


NHDOT Install Exit 5



Funding

Funding is provided by the Cooperative Institute for Coastal and Estuarine Environmental Technology (CICEET) whose mission is to support the scientific development of innovative technologies for understanding and reversing the impacts of coastal and estuarine contamination and degradation.



Sayers, Margery

From: Brenda Schweiger <bkschweiger7@msn.com>
Sent: Wednesday, January 23, 2019 11:57 AM
To: CouncilMail
Subject: 17 Homes Lawyers Hill Overlook
Attachments: IMG_2409.JPG; ATT00001.txt; IMG_2410.JPG; ATT00002.txt; IMG_2411.JPG; ATT00003.txt; IMG_2412.JPG; ATT00004.txt

[Note: This email originated from outside of the organization. Please only click on links or attachments if you know the sender.]

Hello- I live in The Gables at Lawyers Hill and wanted to send you some photos of the issues we already face in our community do to rain water.

Our storm ponds have been over flowing.

The rain runoff on our roads is really bad and when we have cold weather these steams on our roads, freeze up and are very dangerous.

At the bottom of Lawyers Hill, the road is always closed during rain storms due to rising water.

The community that Don Reuter wants to develop will surely add to the issues in our communities. Taking out trees and building 17 homes on 8 acres is not a smart idea.

There are active Springs all around this area of the proposed new builds and also on our property at The Gables at Lawyers Hill.

We are hoping that CB3 2019 passes and possibly helps prevent this new community build of 17 homes.

Sincerely,
Brenda Schweiger









Sayers, Margery

From: Michael Kreft <mikekreft92@hotmail.com>
Sent: Monday, February 4, 2019 3:23 PM
To: CouncilMail
Subject: Support for CB3-2019

[Note: This email originated from outside of the organization. Please only click on links or attachments if you know the sender.]

Howard County Council Members,

I'm writing to support CB3-2019, which will provide an additional level of control over site planning and design in Howard County's two historic districts, Lawyers Hill and Ellicott City Main Street. The protection of our historic districts is important to me, and requiring site plans to meet established guidelines for new development should be respected.

I've been a home owner in Howard County for over 25 years. I feel CB3-2019 will further protect our historic districts from unchecked development. The unique character of the Lawyers Hill and Ellicott City Main Street are worth protecting. I frequently travel through both areas, and would hate to see them permanently altered by development not in keeping with the historic charm of these two districts.

Michael Kreft
Ellicott City, District 1

Sayers, Margery

From: Cathy Hudson <cmhudson@comcast.net>
Sent: Monday, February 4, 2019 2:40 PM
To: CouncilMail
Subject: CB 3

[Note: This email originated from outside of the organization. Please only click on links or attachments if you know the sender.]

Dear Council Chair Rigby and Members of the Council,

Re CB-3

I have never written on the morning of a vote, but there is so much misinformation floating around that I feel compelled to write a follow up.

1. Statement by Mr Reuwer to his business acquaintances, in a sample letter that he asks them to send to you, "Council Bill 3 would authorize the Commission to defeat the subdivision entirely."

- This bill doesn't give the Commission that total power over a subdivision by any stretch of the imagination -but it might save a few majestic trees or help to preserve a scenic road.

2. The ethics complaint on Mr Roth. This is a purely diversionary tactic. The historic guidelines mandate that there be a citizen representative from each historic district. Mr Roth is the Lawyers Hill representative. If he has prior knowledge of the property it is because he lives in the district and we all have prior knowledge of each others' properties-and going back generations. If he is forced to recuse himself then our district will have no representative on a case that will be setting precedent in our historic district. He is doing exactly what he is supposed to be doing-representing our district. Furthermore, he purchased a property that had an easement on it that extinguished his development rights. If it still had development rights, then I would say that he might stand to gain from what happens and should consider recusal. However, this development won't affect his property value as it currently stands.

3. "Regardless of intention, its effect on the processing of the Lawyer's Hill subdivision would be nothing short of blatant corruption." (from Mr. Reuwers's letter to his business acquaintances)

I see CB-3 as beginning to swing the pendulum back to the center away from just this kind of intense developer pressure. The developer says that CB3 would be blatant corruption. What do you call the fact that the leadership of DPZ allowed the scheduling of the hearing for advisory comments before the HPC despite the fact that the applicant didn't submit to the HPC all the documents that were called for in the HPC's rules of procedure. (I might add that DPZ had the needed documents-they just didn't let the HPC see them). However citizens were forced to wait 4 hours before they were sent home because the case would not be gotten to. This Thursday will be the 3rd evening citizens will need to attend an HPC meeting just because the applicant wasn't made to produce all the necessary documents before the first hearing was scheduled.

4. There has been nothing but support from the current property owners in the historic districts for this bill. The only opposition has been from the owner of this one property.

5. I have had discussions over the past year with the Director of DPZ and his assistant on how the historic districts could be better protected and have gotten nowhere. From their responses at your worksession you could also see that it isn't even a gleam in their workplan. The historic districts need help if we are to have them in the future.

6. "Rich, white" people who live in this neighborhood. (from Mr Rutter's testimony) Those days are long gone. Lawyers Hill is one of the best mixed use neighborhoods around and has some of the more affordable homes. No property that has turned over in the past few years has come close in cost to the cost of the new proposed homes-and the new development won't even be providing affordable housing on site. We welcome quirkiness in this neighborhood and we are better for it. The local Elkridge Assembly Rooms that is in the center of our historic district was built to rebuild community after the civil war and we take that mission of welcoming diversity into our midst very seriously today.

7. Please don't table the bill. Give both the developer and the neighborhood certainty with what the next steps should be; limbo isn't fair to anyone. Besides, tabling it gives the developer the win. His threats and diversionary tactics would only get rewarded.

8. Bottom line-a vote yes might save a few more trees and shrubs and might minimize the extent of grading. Vote no (or table the bill) and 3/4ths of the property gets clear cut and the hills graded-and both historic districts are no further protected then they were yesterday.

Thank you if you read this far. And I know we all want what is best for Howard Co.

Cathy Hudson
443.474.4002

HOWARD COUNTY COUNCIL
RECEIVED

2019 FEB -4 AM 10:30
AMBR MS TW

Cindi k. Ryland
President
Retropolitan Ltd
8197 Main Street
Ellicott City, MD 21043

January 30, 2019

The Honorable Christiana Rigby, Chair
Howard County Council
3430 Courthouse Drive
Ellicott City, MD 21043

RE: Council Bill 3-2019

Dear Chairperson Rigby:

I, the undersigned business leader and professional of Howard County, respectfully request that the County Council table Council Bill 3-2019 pending the conclusion of an ongoing ethics investigation regarding Historic Preservation Commission ("HPC" or "Commission") Board Member Drew Roth. While this legislation may have been filed with good intentions, information made available subsequent to its introduction has raised significant questions about the propriety of giving the Commission more power over the approval of development projects.

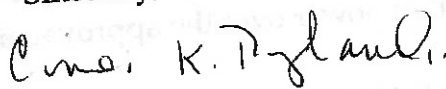
On December 6, 2018, HPC-18-63 regarding a 17-home subdivision to be located at 5819 Lawyers Hill Road was presented to the Commission. At that time, the Petitioner notified the Board that Board Member Drew Roth owned property adjoining the proposed subdivision and asked that he recuse himself. Mr. Roth refused and the Office of Law declined to intervene. Over the course of the hearing, Mr. Roth expressed clear opposition to the subdivision and sought modifications outside of the scope of the HPC. Notably, in the absence of Council Bill 3, the HPC is limited to advisory comments to be considered by the Planning Board in any approval or denial of the subdivision. Council Bill 3 would authorize the Commission to defeat the subdivision entirely.

Under Maryland law, an adjoining or abutting property owner is "presumptively aggrieved" by the development of a neighboring parcel. Such property owners have equal standing before administrative bodies as the petitioner. Undoubtedly, if the situation were reversed and Mr. Roth were the petitioner as opposed to a presumptive protestant, this Council would be reticent to give him more authority over the approval of projects on his land. The analysis is no different here.

I am sympathetic to the pressures put on the Council to support legislation that impedes residential growth. Existing constituencies routinely oppose any and all measures that will add new homes and, presumptively, lower property values. Nevertheless, the exclusionary policies that were adopted last year and the popular will that directs it has set Howard County on a dangerous path. Council Bill 3 represents a bridge too far. Regardless of intention, its effect on the processing of the Lawyer's Hill subdivision would be nothing short of blatant corruption.

That leads to the motivation behind this letter. I do not have an interest in this project. This is a matter of good government. This bill, and anyone who votes for it, is telling the business community that corruption is acceptable so long as it is targeted at the right party. I believe this legislation should be defeated entirely, but in the absence of that I would strongly urge the Council to table the bill pending the resolution of an ethics complaint that has been filed against Mr. Roth regarding his refusal to recuse himself from voting on this project.

Sincerely,



Cindi K. Ryland
President, Retropolitan Ltd



January 29, 2019

The Honorable Christiana Rigby, Chair
Howard County Council
3430 Courthouse Drive
Ellicott City, MD 21043

RE: Council Bill 3-2019

Dear Chairperson Rigby:

We, the undersigned business leaders and professionals of Howard County, respectfully request that the County Council table Council Bill 3-2019 pending the conclusion of an ongoing ethics investigation regarding Historic Preservation Commission ("HPC" or "Commission") Board Member Drew Roth. While this legislation may have been filed with good intentions, information made available subsequent to its introduction has raised significant questions about the propriety of giving the Commission more power over the approval of development projects.

On December 6, 2018, HPC-18-63 regarding a 17-home subdivision to be located at 5819 Lawyers Hill Road was presented to the Commission. At that time, the Petitioner notified the Board that Board Member Drew Roth owned property adjoining the proposed subdivision and asked that he recuse himself. Mr. Roth refused and the Office of Law declined to intervene. Over the course of the hearing, Mr. Roth expressed clear opposition to the subdivision and sought modifications outside of the scope of the HPC. Notably, in the absence of Council Bill 3, the HPC is limited to advisory comments to be considered by the Planning Board in any approval or denial of the subdivision. Council Bill 3 would authorize the Commission to defeat the subdivision entirely.

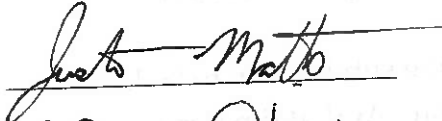
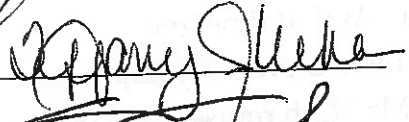
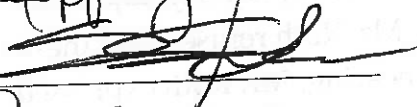
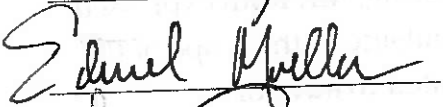
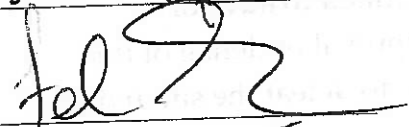
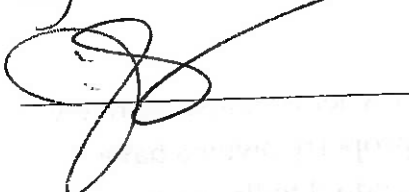
Under Maryland law, an adjoining or abutting property owner is "presumptively aggrieved" by the development of a neighboring parcel. Such property owners have equal standing before administrative bodies as the petitioner. Undoubtedly, if the

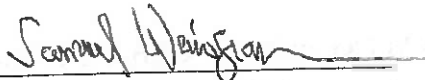
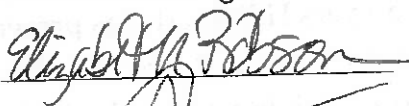
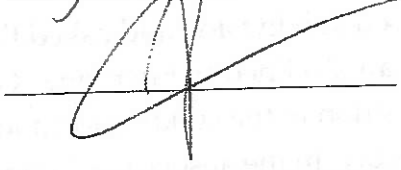


situation were reversed and Mr. Roth were the petitioner as opposed to a presumptive protestant, this Council would be reticent to give him more authority over the approval of projects on his land. The analysis is no different here.

We are sympathetic to the pressures put on the Council to support legislation that impedes residential growth. Existing constituencies routinely oppose any and all measures that will add new homes and, presumptively, lower property values. Nevertheless, the exclusionary policies that were adopted last year and the popular will that directs it has set Howard County on a dangerous path. Council Bill 3 represents a bridge too far. Regardless of intention, its effect on the processing of the Lawyer's Hill subdivision would be nothing short of blatant corruption.

That leads to the motivation behind this letter. None of the undersigned have an interest in this project. This is a matter of good government. This bill, and anyone who votes for it, is telling the business community that corruption is acceptable so long as it is targeted at the right party. We believe this legislation should be defeated entirely, but in the absence of that we would strongly urge the Council to table the bill pending the resolution of an ethics complaint that has been filed against Mr. Roth regarding his refusal to recuse himself from voting on this project.

Sincerely,

HOWARD COUNTY COUNCIL
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January 3rd 2019
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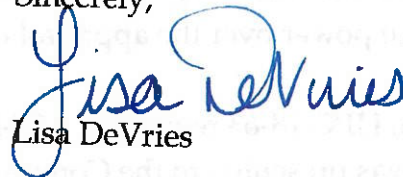
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Sincerely,

A handwritten signature in blue ink that reads "Lisa DeVries". The signature is fluid and cursive, with the first name "Lisa" being larger and more prominent than the last name "DeVries".

Lisa DeVries