From: Brandt, Kimberly G.
To: Specht, Jennifer
Subject: FW: Maintain Transparency in Sugarloaf Region Planning
Date: Tuesday, October 11, 2022 10:27:17 AM

From: Ellen Beth Gorman <info@email.actionnetwork.org>
Sent: Monday, October 10, 2022 4:12 PM
To: Planning Commission <PlanningCommission@FrederickCountyMD.gov>
Subject: Maintain Transparency in Sugarloaf Region Planning

[EXTERNAL EMAIL]

Planning Commissioner ,

I have been closely following the Sugarloaf portion of the Livable Frederick Master Plan and I was very concerned about the inexplicable removal of 500 acres from the proposed area for protection on the western side of 270.

Now that the Planning Commission has returned to the common sense boundary of 270 for this zone, it is time to move forward with transparency to put strong protections into place for the irreplaceable resources within this planning area. The mountain, surrounding farms, forests and historic sites are acutely important to the entire region.

I join many others who are also watching this planning process with interest. Though I'm encouraged by this vote at the Planning Commission, it is only the first step. We expect our leaders to enact legacy protections for future generations and not bow to short sighted development interests in what we rightly call our "Treasured Landscapes".

Ellen Beth Gorman
egorman1016@hotmail.com
7505 Democracy Blvd
Bethesda, Maryland 20817

From:	Brandt, Kimberly G.
To:	Specht, Jennifer
Subject:	FW: SugarLoaf Mt. Plan: Please send it back to the Planning Commission for suggested changes
Date:	Tuesday, October 11, 2022 10:31:00 AM

From: lesliemcmullen@aol.com <lesliemcmullen@aol.com>
Sent: Monday, October 10, 2022 6:45 PM
To: Council Members <CouncilMembers@FrederickCountyMD.gov>; Planning Commission <PlanningCommission@FrederickCountyMD.gov>; Gardner, Jan <JGardner@FrederickCountyMD.gov>
Subject: SugarLoaf Mt. Plan: Please send it back to the Planning Commission for suggested changes

[EXTERNAL EMAIL]

Dear Council Members,

I wrote earlier today to the County Council expressing my concerns with the Sugarloaf Mountain Plan, as it currently stands prior to a final vote. I am alarmed that it's guidelines trample on the property rights of land owners.

After talking further with others this afternoon about the Sugarloaf Mountain Plan, I fully agree with all of the Monocacy Citizens Group's suggested reforms sent to the Council on 9/12/22 and ask that these reforms be adopted.

I would suggest that the County Council remand the plan and send it back to the Planning Commission for further review and revisions.
In addition, it should incorporate the allowance for any suggested reforms to be voluntary in nature by those property owners impacted by the plan. Only then should the plan be resubmitted to the Council for further consideration and a vote.

Thank you so much, I do hope you take into consideration these suggestions.

Sincerely,

Leslie McMullen

-----Original Message-----
From: lesliemcmullen@aol.com
To: councilmembers@frederickcountyMD.gov <councilmembers@frederickcountyMD.gov>; planningcommission@frederickcountymd.gov <planningcommission@frederickcountymd.gov>; jgardner@frederickcountymd.gov <jgardner@frederickcountymd.gov>
Sent: Sun, Oct 9, 2022 7:34 pm
Subject: SugarLoaf Mt. Plan: Vote NO, vote against re-zoning and more gov't intrusion on property rights

Council Members.....

Based on what I have learned about the Sugarloaf Mountain Management Plan, I am concerned that the program is a clear violation of individual property rights.

While I understand the desire to prevent more rural areas from becoming overly commercialized (changed forever by unbridled growth into sprawling suburbs), the SugarLoaf Mountain Plan's effort is a

step in the wrong direction.

The Sugarloaf Mt. Plan is an example of the government imposing unnecessary re-zoning efforts that impede on property owner's use of their own land. It is ***unjust and unreasonable,*** as there are already numerous regulations in place, requiring various environmental procedures and restricting property uses.

I don't understand the justification and continued effort by Frederick County to add yet more and more onerous regulations.

Therefore, as a concerned citizen, I am ***against this SugarLoaf Mountain Plan*** re-zoning initiative.

If reforms do proceed against the wishes of many, I would strongly advise you to follow the recommendations of the Monocacy Citizens Group, along with comments made by the land owners most affected by this government.

At a minimum, participation in this re-zoning and Sugarloaf Mt. Plan should be on a **voluntary basis** by any affected landowners.

Lastly, I would think that Frederick County officials have better things to do than continually devise ways in some form or another to extend the reach of government power at the expense of individual property rights. For example, two suggestions - focusing more on fighting crime and the improving the safety of their citizens? Perhaps improving roads and mitigating traffic issues?

Thank you very much.

Leslie McMullen

From: Brandt, Kimberly G.
To: Specht, Jennifer
Subject: FW: Sugarloaf Plan
Date: Tuesday, October 11, 2022 10:33:40 AM
Attachments: Sugerloaf Plan.msg

From: frederick fisher <fwfisher@att.net>
Sent: Monday, October 10, 2022 11:17 AM
To: Council Members <CouncilMembers@FrederickCountyMD.gov>; Planning Commission <PlanningCommission@FrederickCountyMD.gov>; Gardner, Jan <JGardner@FrederickCountyMD.gov>
Subject: Sugarloaf Plan

[EXTERNAL EMAIL]

Dear Council members,

I would like thank the Council for voting on an amendment to the Sugarloaf Plan to remove the down-zoning of a large number of properties. I would further ask the Council to remand the Sugarloaf Plan back to the Planning Commission to incorporate specific language to protect property rights and to then resubmit to the Council. The Council should also remove the "Overlay" from the Sugarloaf Plan with it's unconstitutional restrictions to private land. The proposed policies and initiatives in this plan should be strictly voluntary and not regulatory regarding private land. The Sugarloaf Plan is an immoral “regulatory taking” and regulatory takings are inherently designed to shift the expense and burden of regulations to private property owners.

Remember, private property is a fundamental right that distinguishes us as a free people. The framers of both our national and state constitutions understood the importance of protecting private property rights. The Fifth Amendment of the Bill of Rights states, "No person shall be ... deprived

of life, liberty, or property, without due process of law; nor shall private property be taken for public use, without just compensation." The Sugarloaf Plan is exactly what the framers were trying to protect citizens from with the Fifth Amendment. Please make the changes listed above and honor your oath that you took to uphold the Constitution.

Respectfully Yours

Bill Fisher

From: jbitt@hughes.net
To: Council Members
Subject: Sugerloaf Plan
Date: Monday, October 10, 2022 12:40:47 PM

[EXTERNAL EMAIL]

Dear Council members,

I, as a Frederick County Maryland resident and tax payer, am opposed to the present manner of obtaining control of private lands through general acts of legislation rather than the legal manner of purchasing properties that are absolutely necessary for public needs that are presently on the books.

I do not agree with more legislation pertaining to land rights.

James Bittner
301-241-3621

September 27, 2022

Frederick County Council
Winchester Hall
12 E Church Street
Frederick, Maryland 21701

Attention: M.C. Keegan Ayer President

Dear Council Members,

Thank you for the opportunity to comment on the Sugarloaf Area Plan. I would reiterate the concerns stated in my letter to the Frederick County Planning Commission dated February 9, 2022. I would like to add some additional comments and suggestions for your consideration.

Comments on Forestry

The Stronghold property has been managed under a Forest Management Plan written by the MD DNR Forest Service since 1948. A bio-resource survey was conducted by MD DNR in 1987 that identified rare and unusual habitats on the property. A comprehensive report on threatened and endangered species was prepared by Maryland's Natural Heritage Program in 1987 and all known sites have been placed into "no management" zoning in regard to forest management. This ensures that those sensitive areas are not disturbed.

Areas to be harvested and the timing of those harvests are specified in our Forest Management Plan. All harvests are marked and managed by our consulting forester, Parkton Woodland Services. The marking is inspected by the Frederick County Forestry Board to confirm the area is marked in accordance with our Forest Management Plan.

Highlights of Stronghold's Forest and Land Stewardship

*(1940's to present day) Working with the American Chestnut Foundation, Stronghold has made efforts to restore the once dominant tree species of the

area, the American Chestnut Tree. Work is ongoing to date and chestnut seeds are still collected annually from our East Chestnut Research Field. These nuts are stored and grown out into seedlings which are shipped across the country to various locations for reclamation plantings etc.

*(1966) A large white pine planting was completed on the Cook Farm. This provided a stream side buffer area between agricultural fields and provided improved wildlife habitat.

*(1991 – 2006) Stronghold worked closely with the MD DNR Forest Service to create a 100 acre Forestry Demonstration Area displaying 5 common harvest types (clear cut, seed tree, shelter wood, single tree select, and group selection). A five acre stand of each harvest type was harvested in 5 year increments (1991,1996,2001,2006). This area was intended to provide an educational outdoor classroom for landowners, land managers, and students to learn about forestry.

*(1993) Stronghold was recognized as **Outstanding Tree Farm for Frederick County**.

*(1995 – 1999) MD DNR Forest Service conducted a paired watershed study on the Stronghold property to measure the effectiveness of Maryland's best management practices for forest harvest operations. To summarize the study findings it was stated: "There was no significant difference in total suspended solid concentrations or yields due to harvesting activities". I am providing a copy of the MD DNR report on this study dated April of 2000 for the county record.

*(2001) Stronghold enrolled approximately 15 acres into the Conservation Reserve Enhancement Program. Low lying agricultural areas along streams and drainages were planted with trees to provide riparian buffer zones.

*(2004) Hurricane Isabel destroyed nearly 800 acres of trees on the Stronghold property. MD DNR Forest Service inspected the damage and made special exceptions to our Forest Management Plan to allow for the salvage and clean up of the damages.

*(2004) Stronghold was recognized and awarded **Institutional Tree Farmer of the Year for the State of Maryland.**

*(2006) Stronghold was recognized and awarded **Frederick Soil Conservation District Cooperator of the Year.** This was in recognition of Strongholds efforts to construct grassed waterways on the agricultural fields at Cook Farm. These grassed buffer zones reduce erosion and nutrient run off.

*(2008) Stronghold spent $6,000 out of pocket to spray for gypsy moth and prevent trees from being defoliated. At that time Frederick County provided a 40% cost share. These areas were protected primarily for aesthetic value.

*(2009) Stronghold spent $5,350 to spray 222 acres for gypsy moth. The Maryland Department of Agriculture had planned to spray 350 acres of the Stronghold property but had to drop Sugarloaf Mountain from its spray program because Frederick County did not have sufficient funds for their portion of the expenses.

Most of these items are not noted in the plan document and I feel strongly that they should be because these are the facts.

Other Notes

It should be noted that Stronghold owns the entirety of the Bear Branch headwaters. Bear Branch is noted in the plan document as “the only pristine trout bearing stream in all of the Lower Monocacy Watershed”. The extraordinary water quality of Bear Branch is a direct result of Strongholds protection and management of the resources.

Our long-time consulting forester Paul Maslen of Parkton Woodland services held a Masters Degree in Forest Management from Duke University. Paul served as Baltimore City Watershed forester from 1981 to 1989 before starting Parkton Woodland Services. Paul passed away unexpectedly in 2014 and since that time his business partner Bill Bond has served as our consulting forester. Bill holds a B.S. in Forest Resource Management from The University of Montana. Bill has worked for the U.S. Forest Service, Bartlett Tree Company, and was employed by The MD DNR Forest service for over 10 years. Bill served as project forester for

both Howard and Montgomery Counties. Bill is a registered forester in both WV and MD, as well as a Certified Tree Expert in MD. These are the gentlemen, along with the MD DNR Forest Service who have managed the forests of Stronghold. I have depended upon their guidance for over 25 years personally and I trust their judgement without question.

I am strongly opposed to the overlay and its additional requirements for timber harvests. There is no justification for any additional requirements or interference on behalf of Frederick County. I ask that you please consider the information provided here when making decisions that will affect the future of Sugarloaf Mountain. I hope that this information will help to assure you that the property is well managed and in the care of extremely capable and trustworthy hands.

Sincerely,

Russell Thompson

_____

Russell Thompson
Stronghold Inc.

From:	Brandt, Kimberly G.
To:	Specht, Jennifer
Subject:	FW: Sugarloaf - Additional information re Stronghold stewardship
Date:	Tuesday, October 11, 2022 10:44:47 AM
Attachments:	MD BMP Forest Harvest Operations Apr 2000.pdf SugarLoaf Mt. Plan Vote NO vote against re-zoning and more gov"t intrusion on property rights.msg Sugarloaf Plan - Please and Thank you.msg

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From: Manalo, Noel <NManalo@mcneeslaw.com>
Sent: Saturday, October 8, 2022 5:49 PM
To: Hagen, Kai <KHagen@FrederickCountyMD.gov>; Council Members <CouncilMembers@FrederickCountyMD.gov>; Keegan-Ayer, MC <MCKeegan-Ayer@FrederickCountyMD.gov>; Blue, Michael <MBlue@FrederickCountyMD.gov>; Dacey, Phil <PDacey@FrederickCountyMD.gov>; McKay, Steve <SMcKay@FrederickCountyMD.gov>; Fitzwater, Jessica <JFitzwater@FrederickCountyMD.gov>; Donald, Jerry <JDonald@FrederickCountyMD.gov>
Cc: Cherney, Ragen <RCherney@FrederickCountyMD.gov>; Mitchell, Kathy (Legal) <KMitchell2@FrederickCountyMD.gov>; Keller, Catherine <CKeller@FrederickCountyMD.gov>; Black, Bryon <BBlack@FrederickCountyMD.gov>; Robert A. McFarland -DNR- <roberta.mcfarland@maryland.gov>
Subject: RE: Sugarloaf - Additional information re Stronghold stewardship

[EXTERNAL EMAIL]

Dear Council - attached please find a copy of the publication referenced on page 2 of Mr. Thompson's letter. Kindly include this in the case record. Regards, Noel

Noel Manalo

McNees
McNees Wallace & Nurick LLC
8490 Progress Drive, #225 | Frederick, MD 21701
Tel: 301.241.2014
Email | Website

From: Manalo, Noel
Sent: Friday, October 7, 2022 3:58 PM
To: Hagen, Kai <KHagen@FrederickCountyMD.gov>; Council Members <CouncilMembers@FrederickCountyMD.gov>; Keegan-Ayer, MC <MCKeegan-Ayer@FrederickCountyMD.gov>; Blue, Michael <MBlue@FrederickCountyMD.gov>; Dacey, Phil <PDacey@FrederickCountyMD.gov>; McKay, Steve <SMcKay@FrederickCountyMD.gov>; Fitzwater, Jessica <JFitzwater@FrederickCountyMD.gov>; Donald, Jerry <JDonald@FrederickCountyMD.gov>
Cc: Cherney, Ragen <RCherney@FrederickCountyMD.gov>; Kathy L. Mitchell Esquire

<kmitchell2@frederickcountymd.gov>; ckeller@frederickcountymd.gov; Black, Bryon <BBlack@FrederickCountyMD.gov>; Robert A. McFarland -DNR- <roberta.mcfarland@maryland.gov>
Subject: RE: Sugarloaf - Additional information re Stronghold stewardship

Honorable Council Members, for the record, attached please find a letter from Stronghold, Inc.'s Property Manager/Caretaker, Russell Thompson. Mr. Thompson has submitted comments to the record previously.

We thought you (and the Plan record) would benefit from elaboration on Stronghold's forest and land stewardship operations. While we appreciate the thinking by Council Members as to whether the proposed Overlay might still be viable if it did not rezone *some* of Stronghold's property, we hope the attached helps further elucidate why the Overlay on *any* portion of the Mountain creates questions and risk analysis considerations.

Such questions and considerations cause my client to continue to oppose the Plan/Overlay unless the Plan/Overlay excludes *all* of my client's holdings.

Thank you for your continued consideration.

Noel Manalo

McNees
McNees Wallace & Nurick LLC
8490 Progress Drive, Suite 225 | Frederick, MD 21701
Tel: 301.241.2014

Evaluating the Effectiveness of Maryland's Best Management Practices for Forest Harvest Operations

Maryland Department of Natural Resources
Forest Service
and
Chesapeake & Coastal Watershed Service

Annapolis, Maryland

April 2000

FWHS-FS-00-01

Parris N. Glendening, Governor
Kathleen Kennedy Townsend, Lt. Governor
Sarah J. Taylor-Rogers, Secretary
Stanley K. Arthur, Deputy Secretary

James Mallow, Director, Forest Service
David Burke, Director, Chesapeake and Coastal Watershed Service

Maryland Department of Natural Resources
Tawes State Office Building
580 Taylor Avenue
Annapolis, MD 21401
Phone 410-260-8531, Forest Service
Phone 410-260-8739, C&CWS
Call toll free: 1-877- 620-8DNR
TTY for the Deaf: 1-410- 974-3683
http://www.dnr.state.md.us

The Mission of the Maryland Department of Natural Resources

To inspire people to enjoy and live in harmony with their environment, and to protect what makes Maryland unique - our treasured Chesapeake Bay, our diverse landscapes, and our living and natural resources.

Cover Photo - Headwaters of Furnace Branch

Evaluating the Effectiveness of Maryland's Best Management Practices for Forest Harvest Operations

Philip D. Pannill, Regional Watershed Forester, MD DNR - Forest Service.
John L. McCoy, Program Chief, MD DNR - Chesapeake & Coastal Watershed Service.
Susan E. O'Ney, Soil Scientist, U.S.D.A. Forest Service, and formerly MD DNR - Forest Service.
Charles E. Bare, Regional Forest Hydrologist, MD DNR - Forest Service.
Niles L. Primrose, Natural Resources Biologist, MD DNR - Resource Assessment Service.
Sandra E. Bowen, Environmental Specialist, MD DNR - Chesapeake & Coastal Watershed Service.

Executive Summary

Two small forested watersheds located on Sugarloaf Mountain in Frederick County, Maryland were monitored from August 1995 until July 1999 as part of a paired watershed study to evaluate the effectiveness of Maryland's Best Management Practices (BMPs) for timber harvest operations. The study was designed to test the hypothesis that forest harvest operations have no long-term significant impacts on stream benthos, temperature, and suspended sediment if forestry BMPs are implemented. One watershed was designated as the "treatment" watershed, which was partially harvested after a one year calibration period. The second watershed was designated as a control, with no harvesting or other manmade disturbance taking place. Monitoring stations were established on the lower reaches of both watersheds, with biweekly baseflow and storm event water quality samples collected at each station and analyzed for total suspended solids. Automated recording temperature meters were installed in both watersheds. Benthic macroinvertebrate samples were taken in both watersheds each spring and fall. Photographic stations were also set up to document impacts of storm events on BMPs. Calibration period data exhibited a strong linear relationship between watersheds for both storm event suspended sediment concentrations and temperature. Following the calibration period roads, trails, landings, and stream crossings were installed or improved according to Maryland's BMPs. Timber was harvested in 1997 on seven sections of the treatment watershed, totaling 73 acres, using a variety of silvicultural prescriptions. Following harvest, disturbed areas were stabilized where required by Maryland BMPs. Monitoring of baseflow and stormflow suspended sediment samples, temperature, and benthic macroinvertebrates continued throughout the harvest and post-harvest period. Weather during the four year term of this study varied from extremely dry to extremely wet. Analysis of total suspended solids indicated no significant change between the calibration period and the treatment period. Stream temperature and benthic macroinvertebrate populations also did not indicate a significant change as a result of the harvesting. Installation costs are highly dependent upon local weather and site conditions. Logger awareness and training is critical to effective use of BMPs, since implementation and installation are ultimately under their control.

Acknowledgments

A number of groups and individuals must be thanked for their invaluable assistance with this project. First and foremost, recognition is due to **Stronghold, Inc.** for allowing us to conduct this study on their property, and for their continued support throughout. Without the support of the Board of Directors and staff of Stronghold, especially former Superintendent **Ben Smart**, this project could not have been completed. Thanks also to the many members of the Maryland DNR - Forest Service who assisted with this project, including Associate Director Steve **Koehn** and Regional Forester **Bob Webster**, who provided guidance and support; Project Manager **Mike Kay** who developed the harvesting plan and worked on many of the educational activities; Forest Rangers **Kevin Moore** and **John Leaf**, who helped with the equipment work; Forest Hydrologist **Anne Hairston-Strang**, who reviewed the draft; and **Pam Cressman** and **Barbara Rice**, who prepared it for printing. Former Forest Hydrologist **Jeff Grizzel** helped initiate the project along with **Steve Koehn** and **John McCoy**. Our thanks are also extended to many personnel of the Maryland DNR - Chesapeake and Coastal Watershed Service, including **Ken Yetman**, who provided advice and assistance with the monitoring; former Environmental Specialist **Roger Windschitl** who helped with data collection and coordination during a critical period; **Paul Sturm**, who helped with the equipment setup; and **Sharon Turner, Beth Valentine, Jack Tawil, Julie Gouker**, and **Ken Sloate**, who administered the grant at various times. The contributions of **Chesapeake Biological Laboratories** under the supervision of **Carl Zimmerman** who performed the analysis of water samples are also acknowledged. The timber sale was managed by **Paul Maslen** and **Bill Bond** of Parkton Woodland Services. Much of the road and landing construction and improvement was done by **J. Maurice Carlisle, Inc.** The timber was harvested by **Rockwell Lumber Co., Inc.** and **M & C Lumber Company, Inc.** Last, but certainly not least, we extend our appreciation to the **U.S. Environmental Protection Agency**, who provided guidance for this study.

This study was funded through a
Clean Water Act Section 319(h) Grant
from the U.S. Environmental Protection Agency

Table of Contents

APPROACH

Study Design

This project evaluated the effectiveness of Maryland's Best Management Practices for forest harvest operations through water quality monitoring on two forested watersheds. A paired watershed approach was selected as the study design. This approach requires two watersheds - control and treatment - and two periods of study - calibration and treatment (USEPA 1993). At the end of the calibration period, the data collected are used to establish a relationship between the treatment and control watersheds through regression analysis. At the end of the treatment period, a similar equation is developed, and the regression lines are then compared and tested for differences in overall significance, slope and intercept. The treatment watershed underwent a controlled level of timber harvesting with strict adherence to BMPs, while the control watershed remained unharvested. Water quality monitoring occurred on both watersheds before, during and after harvest activities. Suspended sediment concentrations and stream temperature were monitored to evaluate the effectiveness of BMPs in protecting physical water quality, and benthic macroinvertebrate communities were monitored to evaluate possible effects on living resources.

Three hypotheses were tested:

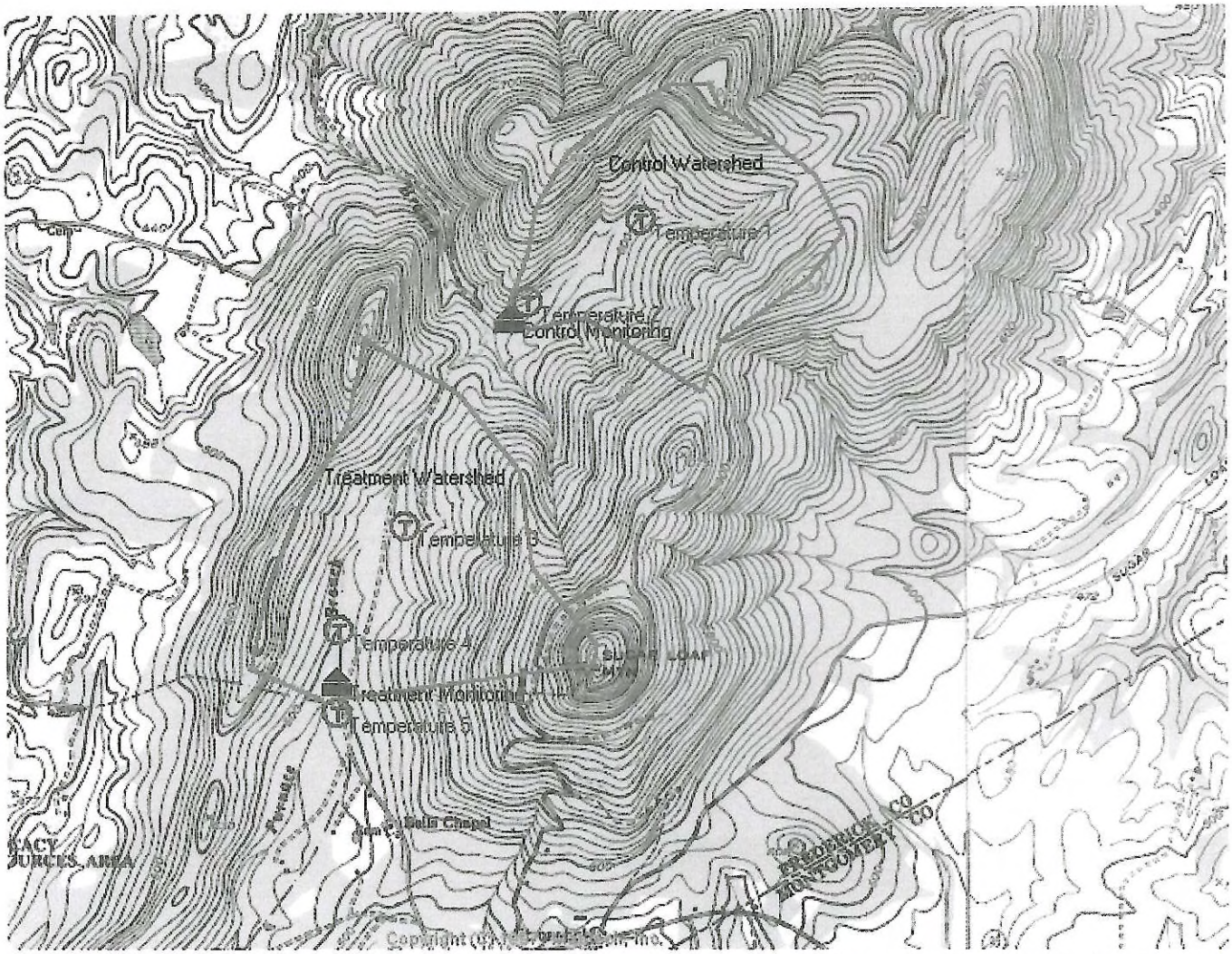
(1) There are no significant differences in stream suspended sediment concentrations/ loads before and after logging using Best Management Practices;

(2) There are no significant differences in the average daily temperature or daily minimum/maximum temperatures of the stream before and after logging using Best Management Practices;

(3) There are no significant differences in the benthic macroinvertebrate populations of the stream before and after logging using Best Management Practices.

The Study Area.

Two small watersheds located on Sugarloaf Mountain (elev. 1282 ft.) in southeast Frederick County, Maryland were selected as the study site (Map1). Although it is located within the Piedmont physiographic province, Sugarloaf Mountain is a monadnock or isolated mountain, with characteristics more closely resembling the Blue Ridge province (Catoctin & Frederick SCDs 1985). The watersheds are on the property of Stronghold, Inc., a private non-profit foundation that owns most of Sugarloaf Mountain, which is within sight of Washington D.C. on a clear day. The land was once owned by iron companies who repeatedly harvested the timber for charcoal production. It was mostly acquired in the first half of this century by Gordon Strong, who dedicated it for use as an outdoor recreation and education area open to the public. Both watersheds are 100% forested and dominated by mixed Appalachian hardwoods, primarily red, white, scarlet, black and chestnut oaks, yellow-poplar, red maple and hickory.



Map 1. Control and Treatment Watersheds, showing location of temperature recorders and sediment monitoring stations. Scale 1:36,000. Contour interval 20 feet.

The control watershed, which drains into Bear Branch, is 280 acres, oriented NE-SW, with elevations ranging from 520-1120 ft. and slopes ranging from 0-70%. Bear Branch is a second order stream (Strahler's method) which has had no major harvest activity for about 75 years. It is considered to be a general use waterway (Class I), however, this upper portion of Bear Branch has the biological characteristics of Natural Trout Waters (Class III) based on Maryland's Water Quality Standards (COMAR 10.50.01). The treatment watershed, which drains into Furnace Branch, is 330 acres, oriented N-S, with elevations ranging from 480-1282 ft. and slopes ranging from 0-70%. Furnace Branch is a second order stream (Strahler's method), and is considered to be Natural Trout Waters (Class III). Some harvesting occurred on the Furnace Branch watershed in 1991-1992, as part of an existing Forest Stewardship Plan which includes a "Forestry Demonstration Area". The soils in both watersheds are primarily of the Edgemont-DeKalb series (stony or steep, shallow soils of the mountain and elevated inter-mountain areas) and are made up of Edgemont gravelly loam, DeKalb very stony loam and Edgemont very stony loam. Nearly half of each site contains rough, stony land. The soils fall within the Capability class of IIe-10 through VIIs-2. Most of the soils are well drained to excessively drained, though poorly drained hydric soils are found near the lower reaches of both streams. The soils are all very strongly acid to extremely acid. The watersheds are similar in cover type and previous land use history.

Table 1. Soil Types in the Treatment (Furnace Branch) and Control (Bear Branch) Watershed.

SOIL NAME	symbol	% slope	class	native pH	Furnace Branch (Acres)	Bear Branch (Acres)
DeKalb VS Loam	Dbc	0-35%	VIIs-2	4-5	20	32
Edgemont-Chandler-Channery Loam	EcB2	0-20%	IIe-10	4-5	55	5
Edgemont VS Loam	EdE	20-60%	VIs-2	4-5	109	106
Rough Stony Land	Re	20-70%	VIIs-2	4-5.5	135	136
Wehadkee Silt Loam	WcA	0-3%	VIw-1	5.1-6.0	11	
Chewacla Silt Loam	CMA	0-3%	Vw-1	4.5-5.5		1

View of the summit of Sugarloaf Mountain from the clearcut harvest area.

View of the clearcut harvest area from the summit of Sugarloaf Mountain.

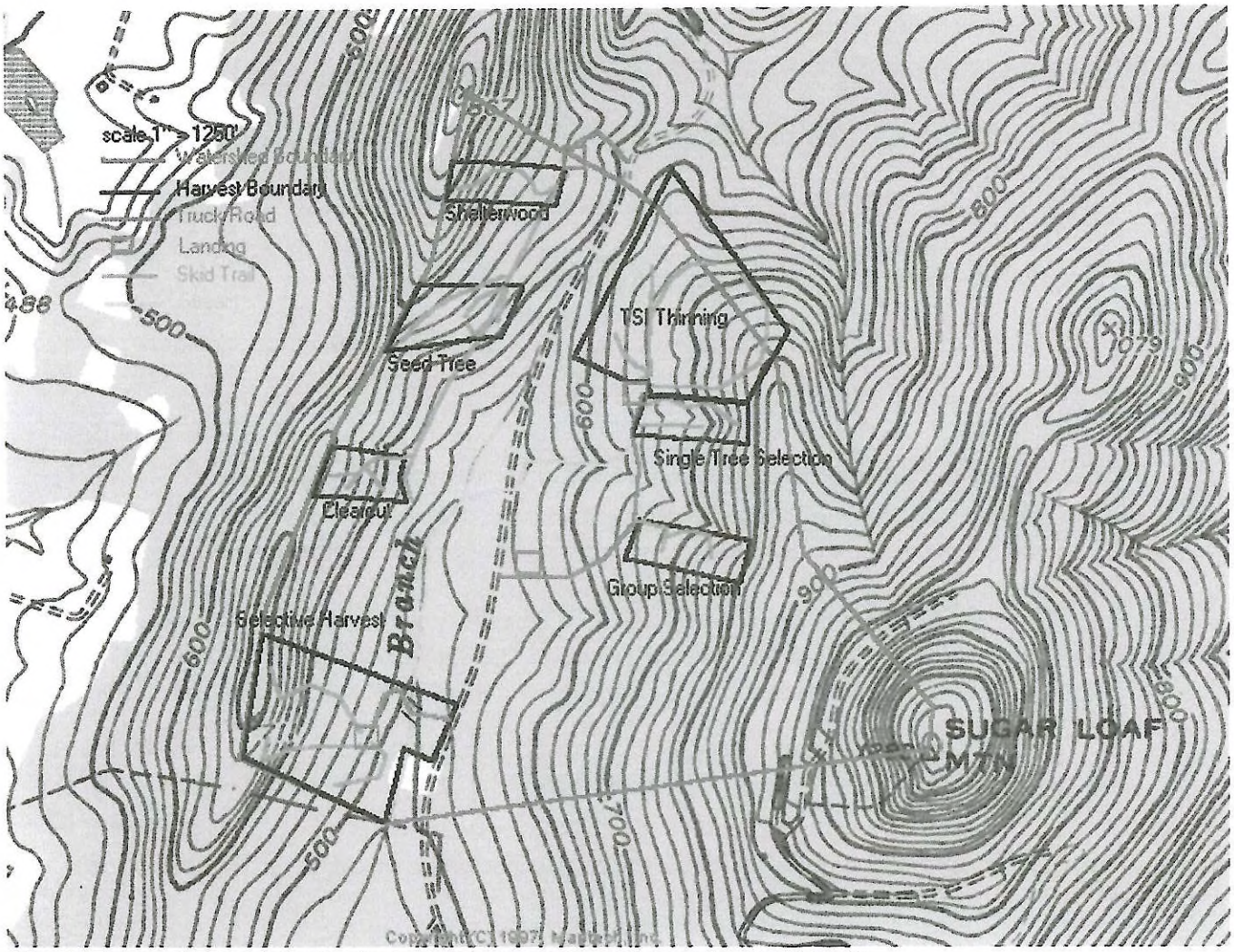
Timber Harvest

A Forest Stewardship Plan prepared in 1991 for Stronghold, Inc. by the Maryland DNR - Forest Service included recommendations for a silvicultural demonstration area that would show landowners what various types of regeneration harvests look like over a period of years. Also included in the plan were recommendations for other stands in need of commercial thinning or selective harvesting consistent with the objectives for the property. This study presented an ideal opportunity to implement the Forest Stewardship Plan and to utilize the Plan to provide the specific silvicultural prescriptions for the treatment watershed. Seven separate harvest areas were marked and measured for sale, partly by MD DNR - Forest Service personnel, and partly by a private consulting forester contracted for by Stronghold, Inc.

One 48 acre sale in the northern portion of the treatment watershed consisted of a 5 acre clearcut, an 8 acre seed tree cut, a 5 acre shelterwood cut, a 5 acre group selection cut, a 5 acre single tree selection cut, and a 20 acre timber stand improvement thinning (Map 2). Of the 20 acres of the timber stand improvement cut, approximately 5 acres were outside the boundary of the treatment watershed, but the access system (and associated potential disturbance) for the sale was almost entirely within the treatment watershed. The second sale was 25 acres of selection harvest in the southern portion of the treatment watershed, on both sides of Furnace Branch, just above the monitoring station. Each of the two sale areas was purchased and logged by a different company.

The harvesting was done by relatively small 2-3 man logging crews, using chain saws to fell the trees and rubber-tired cable skidders to drag them to the landing. The logs were then loaded with knuckle-boom loaders onto trucks, with both tractor-trailer and straight trucks being used. This is typical of the equipment used for logging in central and western Maryland. On the northern sale, some pulpwood was removed along with the sawlogs, while on the southern sale, only sawlogs were removed. An estimated total of 233,000 board feet of sawlogs and 315 cords of pulpwood were harvested on the total 73 acres harvested, with an average of 3200 board feet and 4.3 cords per acre.

Following construction and improvement of the access system according to BMPs as described below, the timber in the northern sale was harvested in January - March of 1997. At this time conditions were very wet from previous rains and freeze and thaw conditions, and stability of the truck roads was a problem in some areas. When this part of the sale was completed, required areas were stabilized in April, 1997. The southern portion was harvested September - October, 1997, under generally dry and stable conditions. Stabilization, including removal of the temporary timber bridge, followed in October, 1997.



Map 2. Treatment Watershed, showing harvest areas, roads, landings and main skid trails.
Scale 1:15,000. Contour interval 20 feet.

Newly constructed truck haul road with 2% grade.

Best Management Practices

A major objective of this project was to install a suite of Best Management Practices on harvest sites in the treatment watershed. This was in order to evaluate their overall effectiveness in preventing sediment pollution and protecting living resources, and to visually and photographically document the success or failure of individual practices. Additionally, this area was to serve as an educational tool, illustrating the proper use and installation of forestry BMPs for loggers, landowners, etc. BMP planning and layout began as soon as the harvest areas were identified, and plans continued to be revised throughout the project. Some existing roads and trails were used, though most of these were improved to meet BMPs or practical needs of the operation, i.e, width, drainage, etc. Some of these were in less than ideal locations, but relocation would have created greater disturbance and expense. BMPs were applied only where and when required by regulation. A deliberate effort was made to strictly adhere to the minimum requirements, not to do the "best possible job."

BMP installation began on September 27, 1996 with construction or improvement of major haul roads, landings, skid trail sections which required cut and fill construction, and stream crossings. This date marked the end of the calibration period of the study and the beginning of the treatment period. A wide range of BMPs were installed (see list below), including a 20 foot long portable timber bridge, a 21 inch diameter stream-crossing culvert, streamside forest buffer (streamside management zone), drainage outsloping, broad based dips, rolling dips, grade breaks and water bars, and the use of geotextile and stone for haul road stabilization (Table 1). The logging contractors also complied with the BMPs by following marked skid trails (with some unplanned changes) and performing post-harvest stabilization of roads, landings and skid trails where required. On slopes over 10% roads, main skid trails, and landings were seeded, limed, fertilized, and mulched. The stabilization was completed sale on October 31, 1997.

BEST MANAGEMENT PRACTICES USED IN STUDY

TRUCK HAUL ROADS - Three truck roads, totaling 3,630 linear feet (.68 mile).

- Slope typically less than 10%, up to maximum of 15%.
- Cut and/or fill slopes typically less than 3 ft.
- Surfacing with crushed stone at public road entrances (3), areas greater than 10% slope (4), wet areas (9), and approaches to stream crossings (2).
- Drainage using crowning and ditching, culverts, broad-based dips, rolling dips, and grade breaks.
- Post-harvest stabilization with seed and mulch where greater than 10% slope.

SKID TRAILS - Twelve major skid trails through 7 cutting blocks, with a total of 16,500 linear feet (3.1 miles).

- Slope typically less than 15%, up to 20% for short distances. One 300 ft. section 20-25% slope received special attention.
- Cut and/or fill slopes typically 3 ft. or less. One 75 ft. section, up to 5 ft. height, received special attention.
- Location made using best use of site topography.
- Drainage using out-sloping, broad-based dips, rolling dips, and grade breaks.
- Post-harvest drainage by re-grading, and waterbars at slope-based intervals.
- Post-harvest stabilization with seed and mulch where greater than 10% slope.

LANDINGS - Four landings, totaling 1.4 acres.

- Slope typically less than 10%. One landing partially at 10-12% slope received special attention.
- Located outside wetlands and streamside buffer zones, though one landing was adjacent to these.
- Located out of sight of public roads where possible.
- Cut and/or fill slopes 5 ft. or less.
- Debris from clearing (rocks, trees, stumps, brush) wind-rowed on down-slope side.
- Post-harvest drainage by re-grading.
- Post-harvest stabilization with seed and mulch of areas over 10% slope.

STREAMSIDE FOREST BUFFERS - A total of 1485 linear feet of buffer, all within one cutting block.

- Buffer width of 75 - 150 ft., varying with slope.
- Selected trees within buffer were cut, targeting retention of 60 sq. ft. of basal area.
- No truck roads or skid trails within buffer, except for access to stream crossings.
- No logging equipment within 50 ft. of stream. Any trees to be cut within 50 ft. removed by cable.
- Post-harvest stabilization of any exposed soil with seed and mulch.

WETLANDS - Three wetland areas, totaling 2.25 acres, were within harvest blocks. Several others were adjacent to cutting blocks or truck roads.

- Use of geotextile and crushed stone to stabilize truck haul road and skid trail.
- Exclusion of logging equipment from wetland areas. Trees cut were removed by cable.
- No channelization of flow into or out of wetland areas.

STREAM CROSSINGS - Two crossings were used.

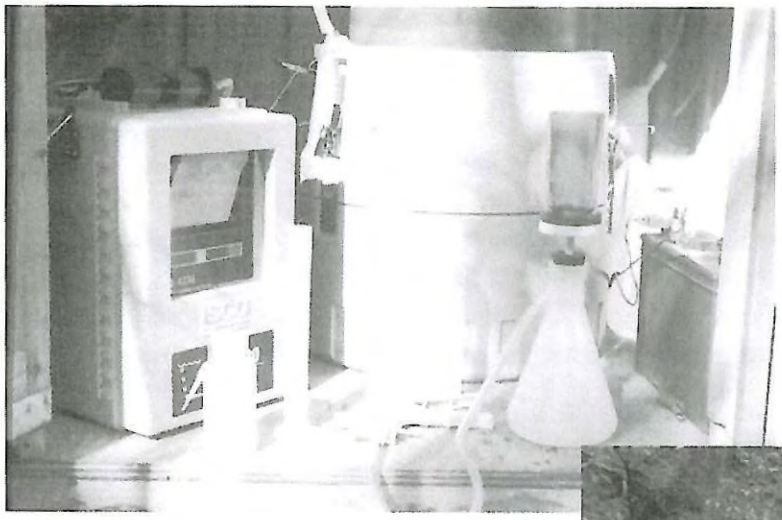
- Minimized number of crossing locations.
- Portable 20 ft. timber bridge, temporary.
- 24 inch metal pipe culvert, sized for drainage area, permanent.
- Drainage of roadbed on approach to crossing.
- Surface of approaches stabilized with geotextile and crushed stone.
- Post-harvest removal of temporary bridge and stabilization with seed and mulch.

see Appendix for the Standard Erosion and Sediment Control Plan for Forest Harvest Operations in Maryland

DATA COLLECTION AND ANALYSIS

Flow

Automated monitoring stations were installed at the lower reaches of both watersheds. Stage was measured continuously at 15 minute intervals using ISCO 4230 Bubbler Flowmeters. Stage/discharge relationships were developed using a Swoffer current velocity meter to measure discharge at a variety of stages. Stage/discharge curves were comprised of two separate equations for each site - one to predict discharge at lower stages and one to predict discharge at the higher stages. Flowmeters were downloaded monthly. Data were edited and stored in QuattroPro data sets. Data analysis was performed using PC SAS.



Monitoring station equipment

Determining stage/discharge relationships

Total Suspended Solids Concentrations

Biweekly grab samples were collected manually at the monitoring stations to establish baseflow (non-storm) water quality conditions. Storm event samples were collected by the ISCO 6700 portable samplers. The samplers were programmed to be stage activated, based on detecting a .05' rise in stream level. Twenty-four (24) samples were automatically collected at half hour intervals after the sampler was enabled. From these, at least three were selected for analysis; one from the rising limb, one at or near the peak, and one from the falling limb of the storm hydrograph. All samples were filtered in the field using GF/F Whitman 47mm diameter pre-weighed filters, and mailed to Chesapeake Biological Laboratories for analysis. Total suspended solids (TSS) were measured for each water quality sample.

Loading Estimate Methods

Annual and monthly load estimates were calculated for each station. TSS load estimates were generated using Beale's Ratio Estimator. Beale's Ratio Estimator was developed for situations with an abundance of flow information and relatively little concentration data. The Ratio Estimator assumes a positive relationship between concentration and flow, and the variance in concentration is proportional to the magnitude of flow (Preston and Summers 1992). The estimate is derived by multiplying the mean measured loads (concentration x flow) by the ratio of the average flow for the year, divided by the average flow on days when concentrations were measured (Dolan et al. 1981).

Paired Watershed Data Comparison

The TSS concentration data collected during this study were collated into pairs, one measurement from the control watershed and one measurement from the treatment watershed. For grab samples the pairs were created based on same day collection, with the time interval between the collection of the two samples being the amount of time needed to travel from one site to the other. Storm event samples were paired based on same storm, same day collection and relative position on the hydrograph. The paired TSS concentration data were then segregated into two data sets, one for the calibration period and one for the treatment period. Simple linear regressions were used to describe the relationships between the TSS concentrations leaving the treatment watershed and TSS concentrations leaving the control watershed for both the calibration and treatment periods. The regression relationships for the calibration and treatment periods were then compared using analysis of covariance as described by Grabow et al. (1998). The paired water quality and flow data were analyzed using Statistical Analysis Systems Inc. software (SAS Institute 1982).

Habitat and Benthic Macroinvertebrates

Benthic macroinvertebrate communities were sampled quantitatively with Surber samplers during the spring and fall at the single water quality monitoring site in each watershed. Samples were preserved in 70% ethanol and returned to the laboratory for sorting and identification. All samples were identified to the genus level and a suite of metrics calculated from the taxa lists. The metrics calculated were taxa richness, EPT (Ephemeroptera, Plecoptera, Trichoptera) taxa richness, percent of sample as EPT, EPT/ Chironomidae ratio, percent dominant taxa, and total rapid bioassessment (RBP) score as a percent of reference. Semi-quantitative habitat assessments were also conducted at the time of macroinvertebrate sampling. The habitat assessment used seven metrics that rated primary instream habitat, secondary bank and riparian zone habitat, and tertiary watershed characteristics. Macroinvertebrate and habitat metrics followed those described by Plafkin et al (1989) for Rapid Bioassessment Protocol III.

Various physical features of the riparian zone, banks and channel were scored. The scores were used to develop a habitat assessment index (HAI) following the Rapid Bioassessment Protocol-Habitat, as developed for Piedmont Ecoregions in Maryland (Plafkin et al. 1989). The HAI was be used with the IBI to develop a relationship between habitat and the benthic community structure in the stream. Sampling was conducted twice yearly at a minimum.

Temperature

A total of 5 temperature sensors - Ryan Tempmentors - were placed in the field. Two were located on the control watershed - one on an upper reach and one on a lower reach. Three were placed on the treatment watershed - one on an upper reach, one on a lower reach, and one at the upper edge of a proposed harvest site. Temperature was measured at 20 minute intervals throughout the growing season. Temperature sensors were downloaded monthly. Data was edited and stored in QuattroPro and analyzed using PC SAS.

Collecting benthic macroinvertebrate samples.

Documenting BMP effectiveness during storm events.

Photographic Log

The efficiency of individual BMPs was evaluated via on-site inspections during and/or immediately following storm events. Permanent photo points were established shortly after BMP installation. Using a Pentax IQ Zoom-90 Weathermatic camera, the successes or failures of individual Best Management Practices were documented by taking repeated shots from the same vantage point during the course of the study. A log book was maintained containing 35 mm slides, organized by specific BMP type (culvert, bridge, rolling dips, etc). In addition, visual observations were made during and immediately after storm events at many locations, particularly along roads, trails, and landings, and along the nearby streams. This was to identify any sources of possible sediment pollution which could reach the waterway.

RESULTS AND DISCUSSION

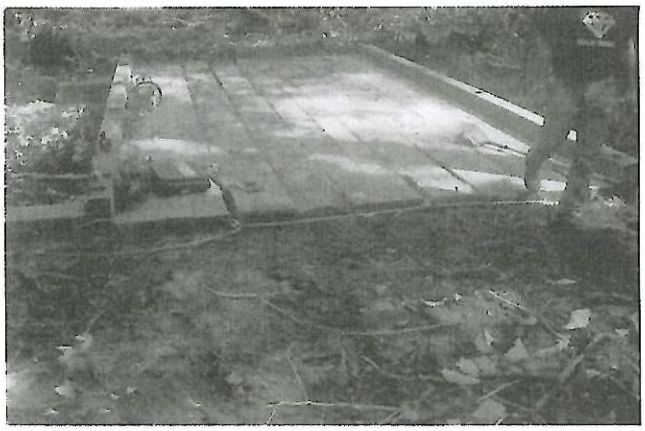
Monitoring began in the summer of 1995, with the installation of the Ryan Tempmentors in June of 1995, followed by installation of the ISCO flowmeter and sediment sampler equipment in September of 1995. The first benthic survey was performed in November of 1995. Baseline conditions were established for both watersheds. The calibration period ended on September 27, 1996 when the installation of roads and other access features began. The harvest/BMP period continued from September 27, 1996 until October 31, 1997. The logging was completed mid-October , 1997 and the treatment areas were subsequently stabilized prior to October 31, 1997. Monitoring continued until July 1999, although drought conditions and lack of flow hampered monitoring during the final year of the study.

Best Management Practices

The costs for the installation of the roads, trails, landings and stream crossings to BMP standards were greater than anticipated. This was due, in part, to extremely wet conditions during installation. Additional equipment time and materials were necessary to complete the work. During BMP installation, it also became obvious that even the most detailed pre-harvest planning may require revisions. The "Best" in Best Management Practices is a relative term. Ultimate control over BMP installation lies not with the forester or landowner, but in the hands of the equipment operator charged with the task of following prescribed guidelines.

Evaluation of some individual BMPs:

Temporary bridge. A portable timber bridge was used for the principal stream crossing on the treatment watershed. This was a 20 ft. long by 12 ft. wide bridge, made in three 4 ft. wide sections of 12 inch thick oak timber bolted with 1.25 inch steel threaded rods, based on the same pattern as crane mats. The bridge cost $1800, and was made by a Maryland company. It was supported on each end by a 6 inch by 10 inch sill timber placed on the stream bank. Total installation time, including clearing and grading, took 4 hours, but could be done in less time with experience. Removal took less than 1 hour. Except for minor disturbance when equipment forded the stream to pull the bridge across, there was no visible disturbance or sediment input during installation, use, or removal. It proved to be sufficiently strong to handle fully loaded log trucks and tandem axle dump trucks carrying 20+ tons of stone. Depending on expected usage, this could probably be made with 8 - 10 inch thick timbers to reduce weight, or preservative treated to enhance longevity. Bridges such as this are reusable, and this bridge has since been used on another timber sale with favorable comment.



Stabilization by seeding. Portions of roads, trails, and landings having a slope greater than 10% and stream crossing sites were seeded, limed, fertilized, and mulched following harvesting. The seed used was a mixture which included 35 lbs. of tall fescue ("Forager" endophyte-free pasture type tall fescue was used, not K-31), 35 lbs. of creeping red fescue, and 2 lbs. of medium red clover per acre. This is the primary seed mix recommended by Maryland BMP specifications, and was fairly easy to obtain. The mix gave good results as long as soil and moisture conditions were satisfactory. Also applied per acre, as the required minimum, was 600 lbs. of 10-10-10 fertilizer and 1½tons of lime (applied as pelletized lime to minimize dust and facilitate spreading), and about 1 ton of straw mulch. The seed, fertilizer, and most lime was spread with hand-cranked spinner type spreaders, and the mulch was spread by hand. While the seed was easy to apply, and the fertilizer fairly easy, the lime and mulch were more difficult. The large amount of lime and straw that needed to be transported to sometimes steep and remote skid trails, which had already had waterbars installed, proved to be a lot of work. The spreading of lime at the designated rate was very time consuming, and the rate seemed excessive, especially where it could not be incorporated into the soil. However, in some areas which were seeded but not limed, the establishment of planted or volunteer cover was noticeably less successful on these acidic soils. These are noteworthy considerations, since failure to properly seed and mulch required areas has been shown to be problem on some logging jobs in Maryland (Koehn and Grizzel 1995).

Streamside forest buffer. The selective harvest of the 25 acre stand along Furnace Branch near the outlet of the treatment watershed required that a streamside forest buffer be left to provide protection for the stream. Buffer width varied from 75 to 150 feet based on slope. The length of the buffered stream was 1070 feet, with a total buffer length of 1485 feet (two sides of stream, one side partially out of sale area), covering an area of 2.9 acres. The buffer boundaries were marked, and basal areas measured. The shorter, eastern bank buffer was designated to remain uncut, due to a low initial basal area averaging only 48 sq.ft./acre in trees over 6 inches d.b.h. attributed to gypsy moth (*Lymantria dispar*) mortality which occurred approximately 10 years previously. On the western bank, an area of 1.8 acres, initial basal areas averaged 84.3 sq.ft./acre, with some locations as high as 130 sq.ft./acre. In order to reduce the basal area to the minimum allowable of 60 sq.ft./acre, 36 sawtimber trees in the buffer on the western bank were marked, containing a volume of 5,516 board feet, or 3,064 bd. ft. per acre. Logging equipment was kept out of the buffer except at the stream crossing. During harvest a few of the trees marked for cutting were left uncut, either by error or choice, and several unmarked trees were knocked down by falling timber. The post-harvest basal area in the harvested western bank buffer was 62 sq.ft./acre, with the average for the total buffer on both banks being reduced from 72 sq.ft. before harvesting to 58 square feet after harvesting. On-site inspections gave no indication of overland flow through the buffer during or

after the harvest period. Stream temperatures were not significantly elevated by passage through this harvest area, and benthic macroinvertebrate populations at the lower end of this stream reach were not significantly different from pre-harvest conditions, as described below.

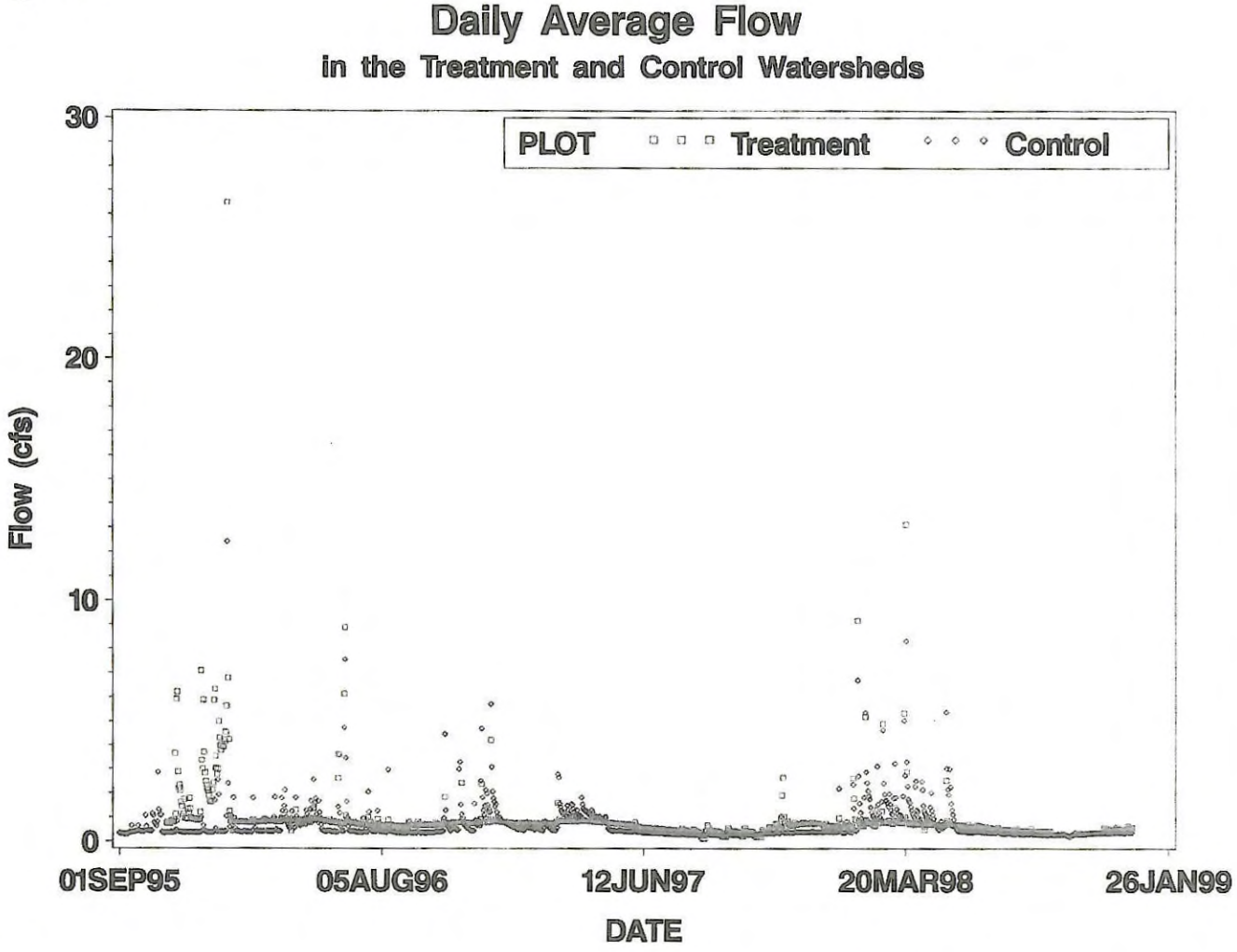
Wet area crossings. Access to the harvested areas required crossing a wetland area with a new road, and the need to stabilize some pre-existing roads and skid trails which had wet sections. The general prescription was to provide drainage outlets when possible, place geotextile (both woven and non-woven were used, moderate to heavy duty) in the roadbed, and cover with 6 or more inches of crushed stone aggregate (typically 4+ inches of 2 inch diameter stone on bottom, with 2+ inches of 3/4 inch stone on top). Installation proved to be very difficult due to the unusually wet conditions, with the alluvial silt and muck soils having the consistency and appearance of chocolate pudding. During the placement of hte stone, the wettest sections would not support construction equipment without the fabric sliding, buckling and rutting, and additional of stone and equipment time were needed. Shortly after installation, logging trucks and log skidders began using some of these areas, under continued wet conditions. Some of the moderately wet sections held up satisfactorily, but the wettest areas were completely churned up. Also, any sections used for skidding quickly lost their stone surfacing and had the geotextile torn. On the southern sale area, which was logged after the soils had dried somewhat and the roadbed had settled, the roadbed held up very well. Where this method is to be used, the construction should be done during the driest part of the year, and left to stabilize, if possible, before heavy winter/spring use. On the wettest areas, 12 or more inches of stone should be used. On this project, stone aggregate was relatively cheap and readily available due to the proximity of several quarries, but this is not always the case. Addition of a stiffener such as wire or plastic mesh placed under the geotextile may improve performance. Alternative methods such as plank or timber mats, and corduroy pole sections should be considered in the wettest areas, especially where roads are intended to be temporary. After harvesting, two of these failed wet sections were crowned and ditched on both sides, and 12 inch schedule 40 PVC pipe installed for cross drainage at frequent intervals, which seems to be working very well.

Wet area in road being stablized with geotextile and stone.

Broad-based dip being constructed on truck haul road.

Road and trail drainage. At slope-based intervals, excavated drainage structures such as dips and water bars were constructed into roads and skid trails, primarily using small bulldozers. Broad-based dips and rolling dips were used on truck roads; and waterbars were used to provide drainage for skid trails before and after use, along with out-sloping and grade breaks. At times there was some difficulty in getting the various equipment operators unfamiliar with forestry BMPs to understand and follow the standards. All these practices worked as designed, though a few needed to be repaired after disturbance from logging equipment, vehicles, horses and mountain bikes during wet weather.

Figure 1.



Flow

Daily average flow in ft^3/sec for the treatment and control watersheds are presented in Figure 1. Flows were similar in both watersheds during the control and treatment periods. There were periods in 1997 and again in 1998 where there was no flow, particularly in the treatment watershed. Base flow levels were also low in the treatment watershed during 1996. There were several large flows triggered by storm events, two in 1996 and two in 1998. It is interesting to note that the magnitude of the response in each of the watersheds was different for each storm.

Total Suspended Solids

Mean total suspended sediment concentrations measured at the outlets of the control and treatment watersheds are presented in Table 2. Concentrations range from 1.3 mg/l to 1235.7 mg/l in the control watershed and 1.4 mg/l to 1971.2 mg/l in the treatment watershed. There were significant differences in mean TSS concentrations both between watersheds and between sampling periods.

Table 2. Mean TSS concentrations in treatment and control watershed during the calibration and treatment periods.

Watershed	Calibration Period	n	Treatment Period	n
Control	140.60 mg/l	100	62.93 mg/l	114
Treatment	241.22 mg/l	100	121.77 mg/l	114

The difference in mean TSS concentrations between the watersheds is primarily a function of the county road in the treatment watershed (Map 1). The road is a moderately used gravel road with a culvert that carries the stream under the roadway during low-flow periods, but crosses over the road during high-flow periods. The road surface generates additional runoff and sediment during storm events (Reid and Dunne 1984). The extra runoff and sediment is captured in roadside ditches and carried to the stream, increasing flow and TSS concentrations in the stream. The culvert under the road constricts flow and increases the velocity of the water as it passes through the culvert. The higher velocities cause stream bank and stream bed erosion on the downstream side of the road that also adds to the TSS concentrations in the stream.

The difference in mean TSS concentrations between the periods in each watersheds is a function of the difference in flows during the calibration and treatment periods. TSS concentrations are driven by flow. The extended periods of low flow and low TSS concentrations measured during the treatment period have a dramatic impact on the average TSS concentrations for the period.

To put the sediment data in context with other watersheds, comparisons with other forested watersheds and mixed land use watersheds are presented in Table 3. Because existing data from forested watersheds in Maryland are limited, two examples from forested watersheds in the Mid-Atlantic region are also presented. The examples used from Maryland are a predominately agricultural Piedmont watershed and an urbanizing watershed at the edge of the Piedmont as it falls to the Coastal Plain. The range of TSS concentrations measured at the outlet of the treatment and control watersheds were similar to concentrations measured in both forested and agricultural watersheds.

Table 3. Total Suspended Solids Yields from the treatment, control and comparison watersheds.

Watershed	Physiographic Region	Size (acres)	% Forest	% Ag	% Other	Average Yield (lbs/ac/yr)**
Treatment	Piedmont/Blue Ridge*	330	100	0	0	161
Control	Piedmont/Blue Ridge*	280	100	0	0	84.5
Ponds Branch MD[1]	Piedmont	95	100	0	0	10
Smith Creek NC[2]	Piedmont	<6,400	74.6	22.4	3	148
Young Woman Creek PA[3]	Appalachian Plateau	25,568	95.9	4.4	0	260
Piney Creek MD[4]	Piedmont	20,032	13.6	75.3	11.1	1,216
White Marsh Run MD[5]	Piedmont	1,747	41	17	42	7,808

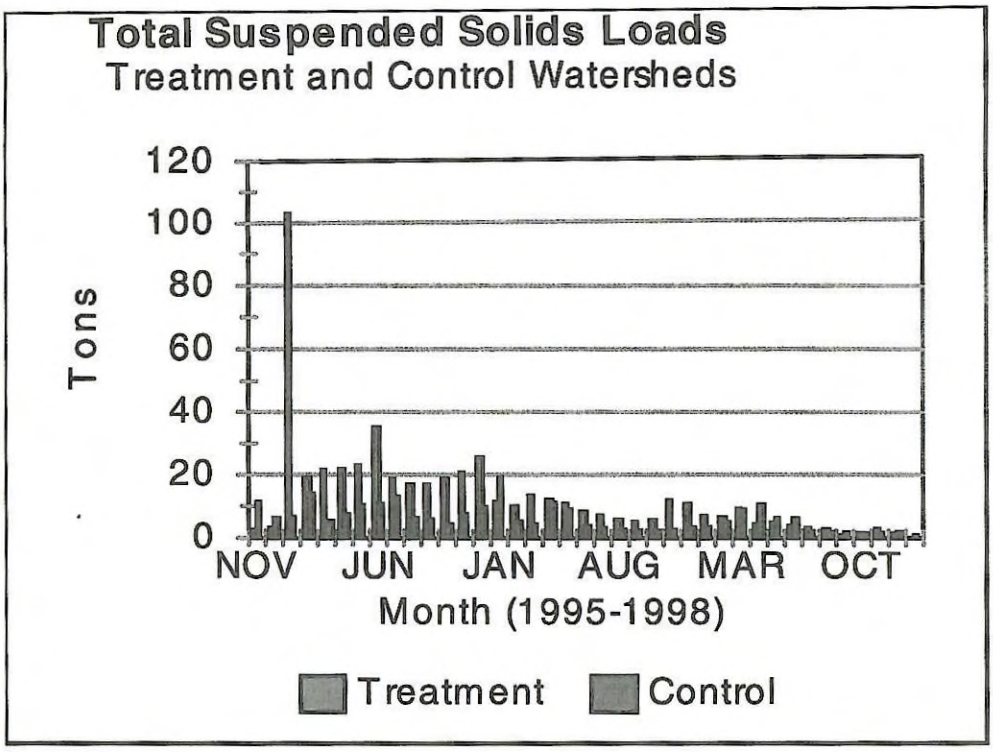
* while Sugarloaf Mt. is in the Piedmont physiographic province, it has characteristics more typical of the nearby Blue Ridge province.
** minumum of three years of data
1. Cleaves et al. 1970.
2. Lenat and Crawford 1989.
3. Langland et.al. 1995.
4. McCoy et.al. 1999.
5. MD DNR unpublished data.

Sediment Loads and Yields

Monthly TSS load estimates are presented in Figure 2. Estimates of monthly loads generated from the control watershed range from 0.99 tons in December of 1998 to 19.31 tons in December of 1996. Estimates of monthly loads generated from the treatment watershed range from 0.78 tons in September 1998 to 103.22 tons in January 1996.

Since load estimates are a function of flow and concentration, the variability in the load estimates reflects the variability in flow and concentrations. The differences in the characteristics of the control and treatment watersheds that affected the TSS concentrations and flows also affect the TSS load estimates.

Figure 2. Total Suspended Solids Loads from the treatment and control watersheds.



To account for the difference in size between the control and treatment watersheds and make comparisons with other watersheds, the load estimates for each watershed are divided by the acreage in the watershed to produce a TSS yield estimate expressed in lbs/acre (Table 3). It is interesting to note that there is variation yields from the forested watersheds. All of the yields were under 1000 lbs/acre/year. By comparison the yields from the agricultural or urbanizing watersheds are an order of magnitude or two higher than the yields from the forested watersheds. The characteristics that prevent the detachment of soil particles during rain events like vegetative cover, infiltration rates, water storage capacity and canopy interception are all much more prevalent throughout the forested watersheds (Patric 1976).

Temperature

Maximum temperatures ranged from 22.73 - 23.35 degrees (Figure 12) during the summers of 1995, 1997 and 1998 when the watersheds suffered from severe drought conditions. Both the control and treatment streams were completely dry for more than two weeks, with water remaining only in pools in 1995. Maximum stream temperatures for the summer of 1996 ranged from 15.57-17.34 degrees centigrade. This lower 1996 maximum temperature was the result of continuous water flow in the streams through the summer. During drought conditions the State maximum for Natural Trout Waters (20 degrees centigrade) was exceeded in both the control and treatment watersheds. Streams such as these are extremely sensitive to changes in stream temperature, and even small increases can adversely affect existing fish populations.

Mean summer water temperatures during the calibration and treatment periods were significantly different for both watersheds. Mean summer temperature in the control watershed was 16.63°C during the calibration period and 17.69°C during the treatment period. Mean summer temperature in the treatment watershed was 17.74°C during the calibration period and 18.54°C during the treatment period. These differences demonstrate the effect of groundwater contributions. The cooler temperatures during the calibration period are the result of higher baseflow levels in 1996.

Paired Data

Regression equations were developed to describe the relationships between TSS concentrations in the control and treatment watersheds, flows in the control and treatment watersheds, and water temperature in the control and treatment watersheds during the calibration and treatment periods (Figures 3,4 and 5). The analysis of covariance between the calibration and treatment period relationships for each of these parameters indicates that there are no significant differences between these relationships (Tables 5,6 and 7). This indicates that the timber harvest, with associated BMPs, in the treatment watershed did not cause a change in the relationship between TSS concentrations in the two watersheds, flows being discharged from the two watersheds, and water temperature in the two watersheds. Based on the study design, the results indicate that the suite of BMPs employed and the harvest methods applied did not cause a change in TSS concentrations being discharged from the treatment watershed nor a change in water temperature in the treatment watershed. Although the results indicate that there was no significant change in the relationship between flows from the treatment and control watersheds during the two periods, the data suggest that there was some change in this relationship (Figure 4). The change in the alignment of the low flow data from the calibration period to the treatment period suggests that the treatment watershed generated less run-off during smaller storm events during the treatment period. There could be several explanations for this apparent difference. Small differences in soil types between the control and treatment watersheds may have had an effect on the hydrology. The treatment period had longer dry periods than the calibration period and differences in soil water storage may have affected flow. A second explanation could be the upgrading of the roads in the treatment watershed and the installation of BMPs designed to retain sediment and water. These changes in the treatment watershed may have increased water storage in the watershed and reduced run-off. The difference may also be the result of the random spacial variability in rain fall. The watersheds are adjacent, but may have received different amounts of rainfall.

Figure 3. Paired TSS Concentrations and Regression Equations for the Calibration and Treatment Periods.

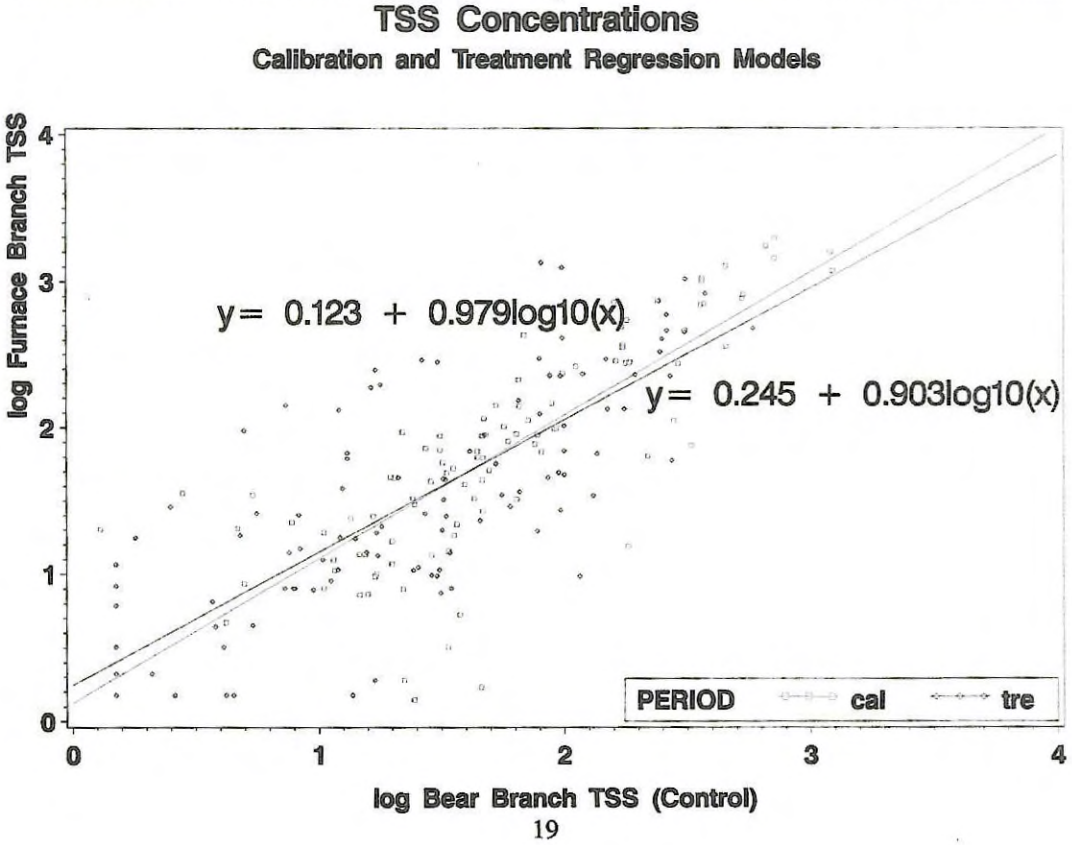


Figure 4.

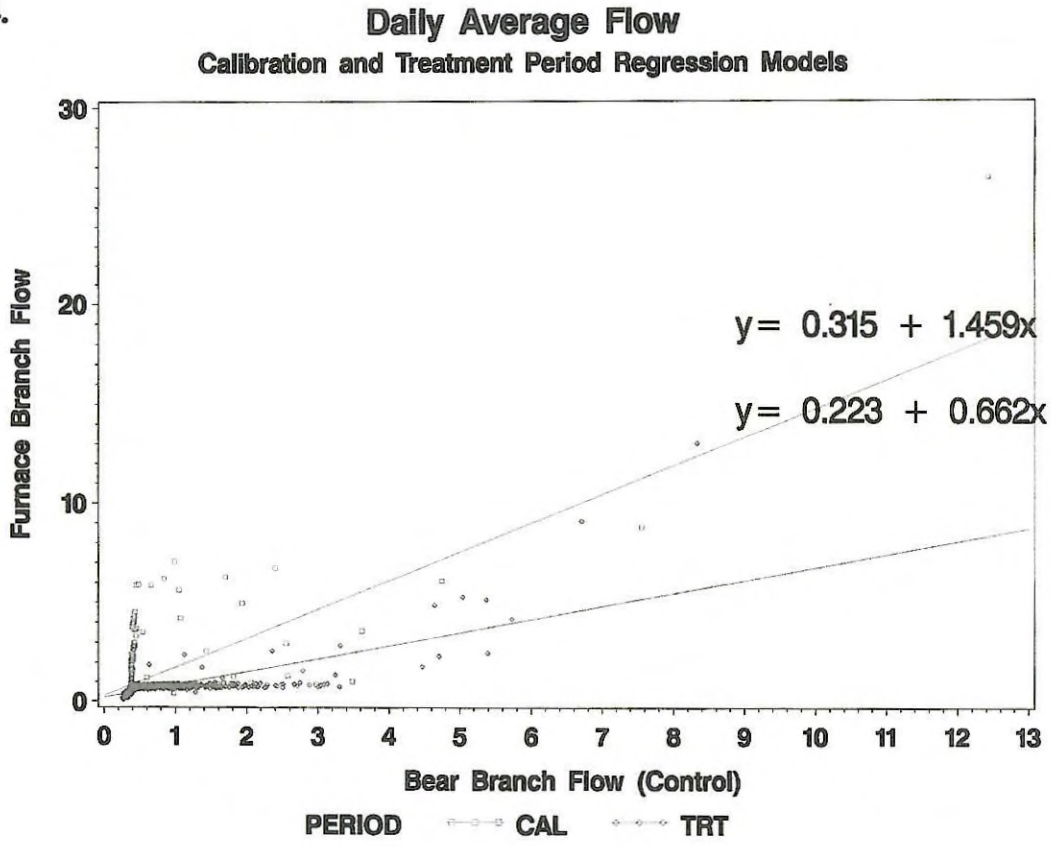


Figure 5.

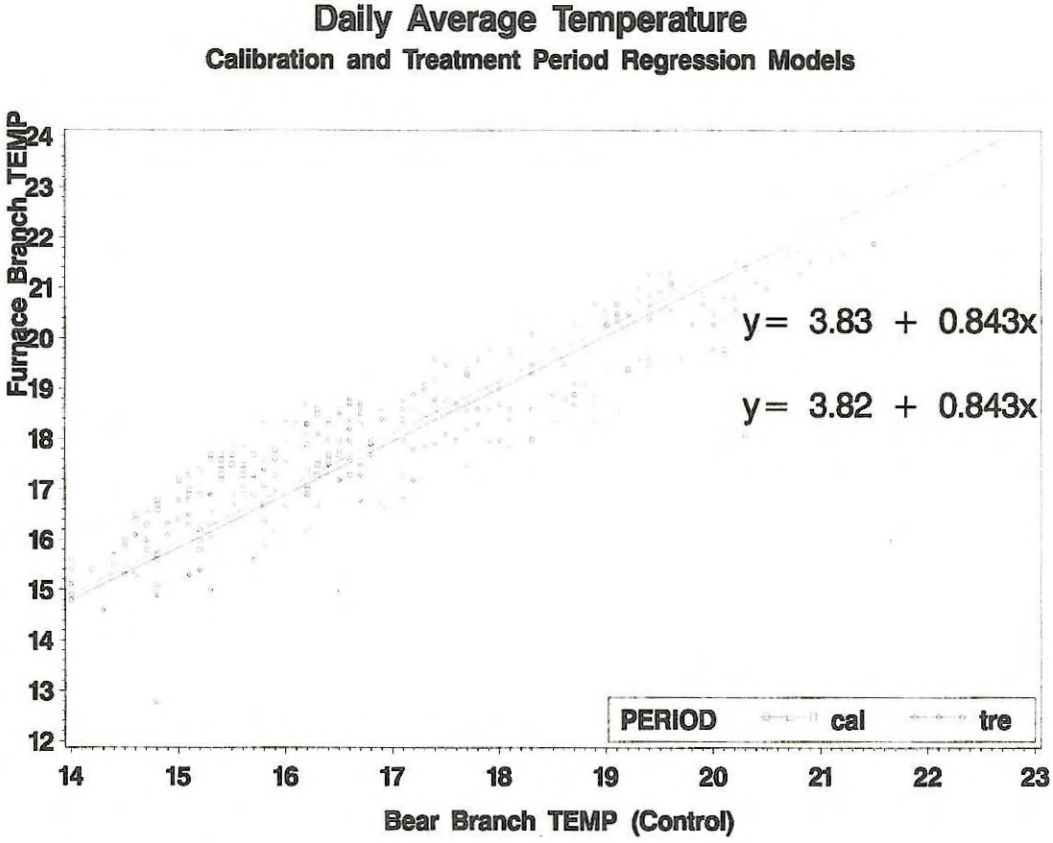


Table 4. Log 10 of TSS Concentrations in the Treatment and Control Watersheds
General Linear Models Procedure

Dependent Variable: Log 10 of TREATMENT TSS Concentrations

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	2	92.30948648	46.15474324	210.24	0.0001
Error	211	46.32241162	0.21953750		
Corrected Total	213	138.63189810			

R-Square	C.V.	Root MSE	LTREATME Mean
0.665860	28.91223	0.4685482	1.62058831

Parameter		Estimate	T for H0: Parameter=0	Pr > |T|	Std Error of Estimate
INTERCEPT		0.2080817827 B	2.72	0.0070	0.07646357
LCONTROL		0.9318494643	19.46	0.0001	0.04789193
PERIOD	cal	-.0012162547 B	-0.02	0.9857	0.06767387
	tre	0.0000000000 B	.	.	.

Table 5. Flow - Treatment and Control Watersheds
General Linear Models Procedure

Dependent Variable: DISCHG TREATMENT WATERSHED

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	3	874.97143907	291.65714636	462.60	0.0001
Error	1107	697.93831363	0.63047725		
Corrected Total	1110	1572.90975271			

R-Square	C.V.	Root MSE	DISCHGTF Mean
0.556276	90.21707	0.7940259	0.88012828

Parameter		Estimate	T for H0: Parameter=0	Pr > |T|	Std Error of Estimate
INTERCEPT		0.2226175188 B	5.70	0.0001	0.03903460
DISCHGC CONTROL		0.6617962608 B	17.73	0.0001	0.03732699
PERIOD	CAL	0.0921460942 B	1.38	0.1684	0.06685375
	TRT	0.0000000000 B	.	.	.
DISCHGC*PERIOD					
	CAL	0.7974329515 B	13.16	0.0001	0.06060307
	TRT	0.0000000000 B	.	.	.

Table 6. Daily Average Temperature in the Treatment and Control Watersheds
General Linear Models Procedure

Dependent Variable: AVETMPT Treatment Watershed

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	2	864.42171981	432.21085990	905.23	0.0001
Error	326	155.65207958	0.47746037		
Corrected Total	328	1020.07379939			

R-Square	C.V.	Root MSE	AVETMPT Mean
0.847411	3.749779	0.6909850	18.42735562

Parameter		Estimate	T for H0: Parameter=0	Pr > |T|	Std Error of Estimate
INTERCEPT		3.834030754 B	10.37	0.0001	0.36964676
AVETMPC		0.843159553	41.28	0.0001	0.02042559
PERIOD	cal	-0.014414434 B	-0.18	0.8565	0.07965628
	tre	0.000000000 B	.	.	.

Benthic Macroinvertebrates

Sampling for macroinvertebrates had been planned for August and April of each year of the study. Drought conditions during the summer and early fall of 1995 eliminated flow from the treatment watershed stream, Furnace Branch, from August through early October, and forced sampling to begin in November of 1995. Severe drought and no flow conditions also prevailed in the summer and fall of 1998 forcing the fall sampling to be postponed until early December of that year. Although flow never completely stopped in the control watersheds during these drought periods, they were at minimal levels. All other sampling was accomplished during the August/April time frame as originally planned.

Figure 6. Habitat as a % of Maximum Score

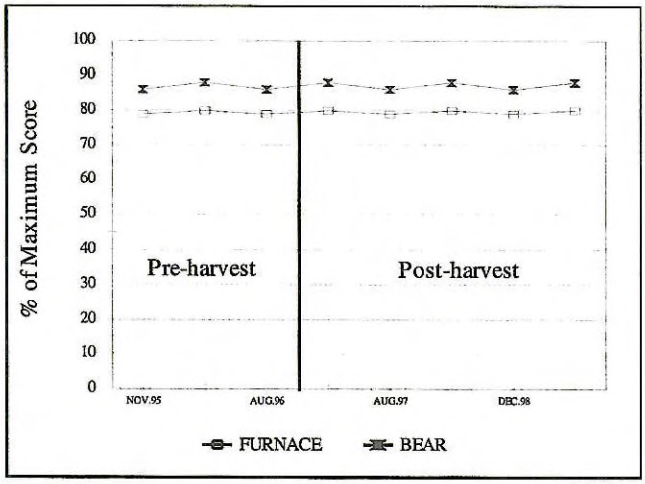
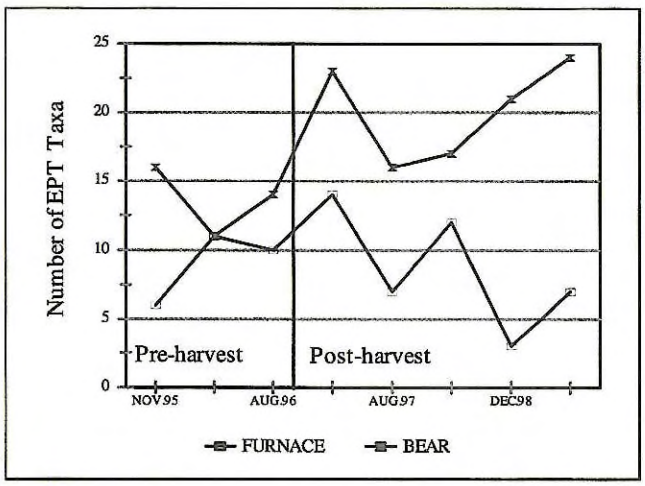


Figure 7. EPT Taxa Richness (Genus level)



The timber harvest activity had no impact on the habitat scores (Figure 6). Both streams had habitat scores above 75% of the total possible score and are considered equal to a reference or undisturbed condition. There are slight seasonal variations that reflect minimal scoring differences due to the presence or absence of leaves on the trees. The lower scores of Furnace Branch are due to a sandier substrate with higher levels of imbeddedness (primary habitat characteristics), and a higher percentage of cut banks (secondary habitat characteristic). The presence of a dirt/gravel county road through the upper portion of this watershed contributing sediment and flashy flows to the stream is considered the cause of these impairments.

The macroinvertebrate communities for Furnace and Bear Branches are consistent with those found in other similarly classed streams in the Monocacy watershed (Butler, pers. com.1999). A combined taxa list for these streams is provided in Appendix A. The suite of metrics calculated for the macroinvertebrate communities of these streams indicate no discernable impacts due to the forest harvest activity. The lower habitat quality and no flow drought conditions in Furnace Branch are considered the major factors creating the differences in macroinvertebrate community metric scores. The taxa richness metric scores are almost parallel across pre and post harvest periods except for the drought periods of 1995 and 1998 (Figure7). This pattern is repeated in the biotic index (Figure 8) and the EPT taxa richness (Figure 9). Although sampling in Furnace Branch was done a minimum of six weeks after flow returned (a standard interval for sampling after catastrophic events), the no flow conditions produced small sample sizes that tended to bias the biotic index score. In these streams, low sample sizes with lower overall taxa richness are generally dominated by the more pollution intolerant EPT (Figure 9). This EPT dominance, with their lower (better) biotic number, produces the better biotic scores. Alternatively, Bear Branch, with continuous although low flow, had a lower percentage of EPT and higher proportion of more tolerant taxa that created poorer biotic index scores (Figures 9,10 and 11).

An overall benthic Rapid Bioassessment Protocol score is produced by scoring a comparison of the individual metrics to a reference condition or a bench mark to produce a percent of reference value. The reference used in this instance was the Bear Branch sample from April of 1997. This sample had the highest metric scores of any period during the study. Figure 11 shows the results of this comparison. As with the individual metrics, there is little change in the relationship between the two macroinvertebrate communities over the course of the study.

Figure 8. Biotic Index (lower is better)

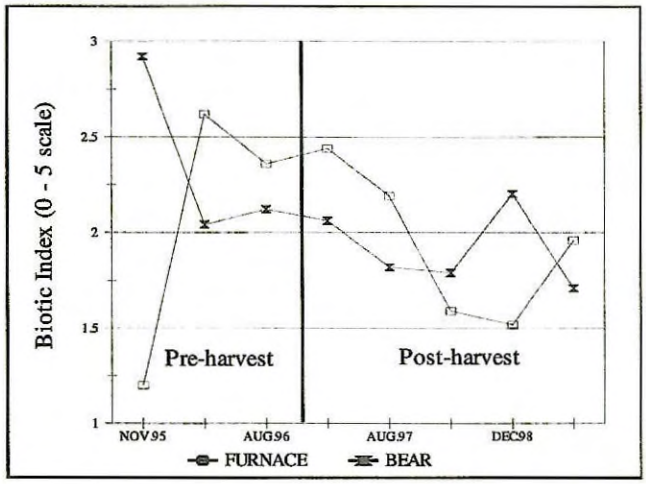
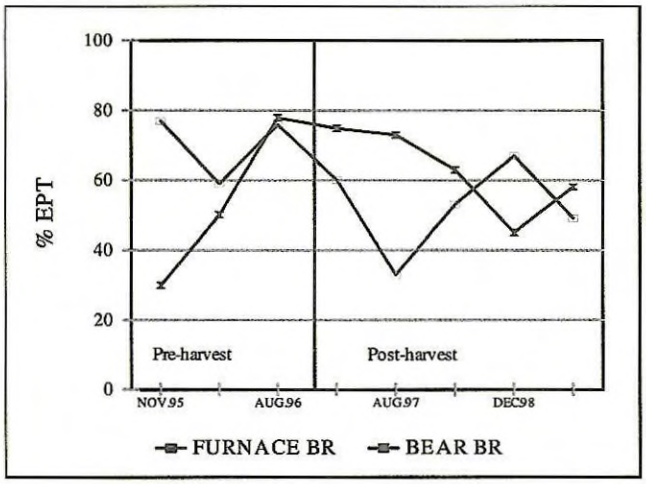


Figure 9. % of Benthic Community as EPT



The data indicate clear differences in the macroinvertebrate communities of the treatment and control watersheds. These differences are present from the beginning of the calibration period and continue basically unchanged through the end of the treatment period. Differences in watershed characteristics, i.e. the presence of the dirt/gravel road in the treatment watershed and climatic changes, are judged to be the controlling factors. The road contributes sediment and concentrated storm flows into the headwaters of the treatment watershed. The sediment loads and increased bank erosion from storm flows create a sandier substrate than found in the control stream. The sandier substrate in the treatment watershed fosters a moderately different macroinvertebrate community through microhabitat differences and being prone to de-watering during drought conditions.

The variations in the individual and overall macroinvertebrate community RBP III metrics can not be attributed to the forest harvest activity. Any impacts to the macroinvertebrate community of Furnace Branch that may have been caused by the forest harvest activity were of such minor nature that they were masked by the magnitude of natural variability resulting from ambient conditions.

Figure 10. Dominant Taxa as % of Sample Size

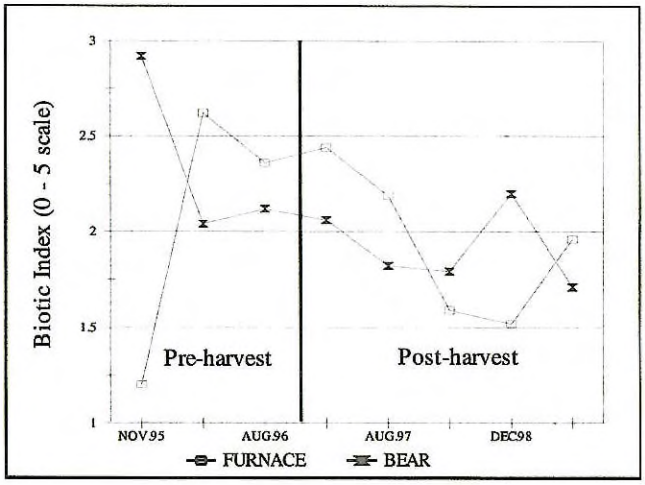
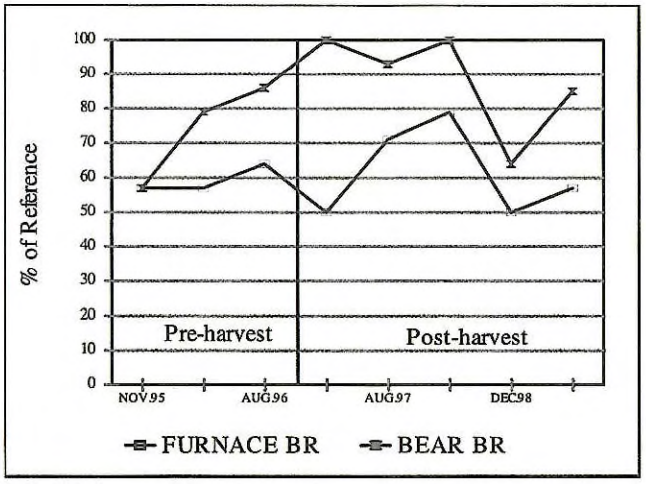


Figure 11. Benthic RBP Score as % of Reference



Photographic Log

Photographic documentation and visual observation detected several instances of BMPs for road drainage and stabilization negatively impacted by use of trucks and skidders during very wet conditions, but holding up well during moderately wet or dry conditions, and working very well for post-harvest stabilization. At no time was overland flow of storm water detected moving very far from the logging roads, landings, etc. When streams were walked during and immediately after storm events, there was no detectable overland flow of storm water from logged sites reaching streams. Photographs were able to clearly document the success of such practices as the portable bridge and post-harvest vegetative stabilization.

Stream crossing site, showing bridge being installed and used, and post-harvest stabilization, from photographic log.

Education

The educational and demonstration opportunities of this project have been well utilized. Many people have toured the project, including loggers, landowners, foresters, sediment control inspectors, municipal water supply managers, school teachers, college and high school students, local government officials, and officials from state and federal agencies such as the Environmental Protection Agency, USDA - Forest Service, USDA - Natural Resources Conservation Service and other agencies within Maryland DNR. There have also been several articles on the project in local and forestry newsletters, and formal presentations given to several professional and academic groups. Information on the project is available on our own web site at http://nfis.com/~mddnrhfo/index.com , which is also accessible through the Maryland DNR - Forest Service home page at http://www.dnr.state.md.us/forests (Programs, Chesapeake Bay & Water Quality Programs, Paired Watershed Study).

Some of the Educational Programs at the BMP Effectiveness Study Area

Date	Activity	Participants
10/7/95	Master Logger, Certification Workshop	28 loggers
9/28/96	Master Logger, Advanced BMP's Workshop	9 loggers
10/11/96	Tour for Fred. Co. Planners & Sed. Crtl. Inspectors	8 agency staff
6/30/97	Chesapeake Bay Foundation Workshop/Tour	11 teachers
7/22/97	Regional Forest Service Meeting and Tour	16 foresters
9/6/97	Erosion and Sediment Control Certification	4 loggers
10/23/97	Maryland/Delaware Society of American Foresters	29 foresters
10/30/97	Regional Forestry Board Workshop	18 members
5/16/98	Forest Landowners Field Day	30 landowners
6/2/98	Tour for New York City Watershed Group	9 agency staff
6/23/99	Workshop/Tour for SCD's & NRCS	32 agency staff

Loggers discuss BMP planning at a Master Logger Workshop.

CONCLUSIONS

The results of this study indicate that the suite of Best Management Practices implemented in this study area was effective in preventing significant impacts on stream water quality, biology, and habitat. There was no significant difference in total suspended solid concentrations or yields due to the harvesting activities. The harvesting also did not significantly impact stream habitat, benthic macroinvertebrate populations, or stream temperature. Most BMPs performed as intended and none allowed observable sediment input into waterways. Photographic evidence supports the assumption that forestry BMPs are effective if planned and installed properly. The installation and implementation of forestry Best Management Practices is subject to a wide range of variables. Installation costs are highly dependent upon local weather and site conditions. Logger awareness and training is critical to effective use of BMPs, since implementation and installation are ultimately under their control.

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APPENDIX

STANDARD EROSION AND SEDIMENT CONTROL PLAN FOR FOREST HARVEST OPERATIONS IN MARYLAND

I. General Requirements

A Sediment Control Plan is required for all harvests exceeding 5,000 square feet of disturbed area, or which cross any perennial or intermittent watercourse with a drainage area exceeding 400 acres (100 acres for trout waters).

This Standard Erosion and Sediment Control Plan may be substituted for a custom plan for forest harvest operations when all of the following conditions are met:

1. Road cuts or fills are less than 3 feet (5 feet in Western Maryland*).

2. Grades for roads are less than 15 percent.

3. Grades for skid trails are less than 15 percent (in Western Maryland*, skid trails shall not normally exceed 15 percent, but may be extended to 20 percent for distances less than 200 feet).

4. Landings are located on slopes less than 10 percent.

If the above conditions or any other criteria of this plan cannot be met, a plan modification listing controls necessary to prevent erosion and ensure site stabilization will have to be prepared by a licensed professional forester and submitted along with this plan to the local Soil Conservation District for approval.

II. Conditions

A. Unless one operator assumes full responsibility for implementing this plan, all forest harvest operators working at a site must obtain an erosion and sediment control plan. An operator is defined as any individual or company which has contracted or subcontracted a portion of the harvest operation. This also applies to those operators conducting firewood cutting or separate forest harvest operations in conjunction with or subsequent to the initial harvest. Each operator must implement and maintain the required practices.

B. The applicant shall notify the Maryland Dept. of the Environment, 1-800-922-8017 (or county inspection agency where designated) - at least 48 hours prior to commencing forest harvest operations. This inspection agency must also be notified at least 48 hours prior to the completion of work.

C. A copy of this plan and any approved plan modifications shall be available on site during harvest operations.

D. Each site will be periodically inspected by local government and/or State inspectors for compliance with this plan. State and local inspectors may require Soil Conservation District approved plan modifications to this standard plan as conditions dictate, or to prevent movement of sediment from the site.

E. Failure to properly implement or maintain the practices required by this plan, or to comply with written requirements for corrective action may result in the operation being stopped (issuance of a stop work order) until the deficiencies have been corrected. Failure to take required corrective action may also result in legal action.

F. All erosion and sediment controls must be implemented in accordance with specifications contained in the document entitled "Soil Erosion and Sediment Control Guidelines for Forest Harvest Operations in Maryland" (hereafter referred to as Guidelines for Forest Harvest Operations) available from the Maryland Department of Natural Resources - Forest service, or the Maryland Dept. of the Environment.

III. Standard Plan Requirements

A. Site Maps

Site maps or sketches shall be prepared for all harvests and submitted with the plan application to the Soil Conservation District. The map shall identify the site location and provide directions and distances from the nearest major road intersection. All access points, landings, haul roads, waterbodies, uncut buffer areas, and stream crossings must be identified on the map or sketch. A more detailed map of buffer areas is required when buffer management plans are submitted. The harvest area should also be delineated on a xerox copy of the U.S.G.S. topographic map.

B. Site Access

1. Access points to the site shall be stabilized with wood chips, corduroy logs, a stone construction entrance or other methods approved in the Guidelines for Forest Harvest Operations. Any soil or debris which is tracked onto off-site paved roads shall be removed and deposited in a controlled area by the end of each working day.

2. A grading or entrance permit may be required for a new entrance onto a county or State road. Details may be obtained from the local permitting agency.

3. Existing public road drainage shall not be blocked or damaged by access construction. Pipe culverts shall be installed to maintain existing drainage.

C. Waterway Protection

1. Uncut buffer zones shall be marked and maintained on all sides of perennial or intermittent streams, rivers, lakes, ponds, bogs or marshes. These features are identified on United States Geological Survey 7.5 Minute Series (topographic) quadrangle maps. The minimum buffer zone width shall be 50 feet. This applies to land with no slope. Where sloping land is encountered, the following table shall be adhered to:

Average Percent Slope to Watercourse	Width of Buffer (feet) on each side of Watercourse
1-10	75
11-20	100
21-30	150
31-40	200
41+	250

2. Roads, trails, and harvesting equipment shall not be allowed in any buffer area except to provide access to authorized stream crossings.

3. The restriction on harvesting within buffer zones may be waived providing that a buffer management plan is submitted to and approved by the local Soil Conservation District. The management plan shall be designed by a licensed professional forester and include harvest method, the square footage of basal area to be removed and retained, provisions for removing and restocking the cut trees, and other criteria established below and in the Guidelines for Forest Harvest Operations. All trees to be removed from the buffer shall be marked at the base of the stump (so the mark remains after harvesting) by the professional forester in advance of the harvest operation. The buffer management plan shall become a modification to this standard plan and be available on site during harvest operations.

Harvesting within buffer areas must adhere to the following criteria. Basal area may not be reduced below 60 square feet of evenly distributed trees which are 6 inches or greater in diameter, measured at breast height. Any slash which inadvertently falls into adjacent waterbodies must be pulled back to prevent waterway blockage. Roads, trails, and equipment will not be allowed within 50 feet of any waterbody except at approved stream crossings. Timber cut within this 50 foot area must be removed by cable.

D. Haul Roads and Skid Trails

1. Grading of existing roads and/or trails will be limited to that necessary to make them operable, provided that the requirements of Section D(2) are complied with.

2. Haul roads and skid trails shall be laid out along natural land contours to avoid excessive cuts, fills, and grades. No road cut or fill shall exceed 3 feet (5 feet in Western Maryland*) without prior Soil Conservation District approval of the modification.

3. Crossing of perennial or intermittent streams should be avoided. Where it becomes necessary to cross either a perennial or intermittent stream, a bridge or culvert crossing shall be temporarily installed. A Maryland Dept. of the Environment waterway construction permit shall be obtained prior to crossing streams.

4. Grades for roads and trails shall not normally exceed 15 percent. If it is not feasible to limit road grades to 15 percent, a plan modification which identifies the erosion controls necessary to prevent excessive erosion, must be approved by the Soil Conservation District prior to road construction. (In Western Maryland*, skid trails may be established on slopes up to 20 percent for distances not to exceed 200 feet, without modification).

5. No haul roads or skid trails other than those providing access to waterway crossings shall be constructed within buffer areas. Drainage from approaches to waterway crossings shall be diverted to undisturbed areas.

6. Drainage structures shall be provided at the time of construction of haul roads and skid trails according to specifications contained in the Guidelines for Forest Harvest Operations.

E. Landings

Landings shall be located on reasonable level (between 3 and 10 percent slope) well drained ground. If the harvest sites do not have any area with a slope of at least 3 percent, landings shall be located on the maximum slope of the site. Landings located on slopes exceeding 10 percent shall require prior approval of the local Soil conservation District and may need erosion and sediment controls.

F. Stabilization

1. All unstable material (exposed soil) resulting from the construction of roads, trails and landings, with slopes greater than 30 percent and all perimeter slopes which are not adjacent to a buffer shall be stabilized within 7 days of disturbance with seed and mulch.

2. Upon completion of the harvest, all roads, trails, and landings located on slopes greater than 10 percent shall be graded or back-dragged, seeded, and mulched according to specifications. The surface of roads, landings, and major skid trails less than 10 percent should be backdragged and left in a condition that permits successful natural regeneration of trees, shrubs, or other annual and perennial plants. Under certain circumstances stabilization of these roads and landings with seed and/or mulch may be required.

G. Maintenance

1. All practices installed shall be maintained at all times to function as intended.

2. Any practice that fails to function properly will be repaired or corrected immediately.

* *Western Maryland conditions apply to Garrett, Allegany, Washington, and Frederick Counties.*

From:	lesliemcmullen@aol.com
To:	Council Members; Planning Commission; Gardner, Jan
Subject:	SugarLoaf Mt. Plan: Vote NO, vote against re-zoning and more gov"t intrusion on property rights
Date:	Sunday, October 9, 2022 7:34:36 PM

[EXTERNAL EMAIL]

Council Members.....

Based on what I have learned about the Sugarloaf Mountain Management Plan, I am concerned that the program is a clear violation of individual property rights.

While I understand the desire to prevent more rural areas from becoming overly commercialized (changed forever by unbridled growth into sprawling suburbs), the SugarLoaf Mountain Plan's effort is a step in the wrong direction.

The Sugarloaf Mt. Plan is an example of the government imposing unnecessary re-zoning efforts that impede on property owner's use of their own land. It is ***unjust and unreasonable,*** as there are already numerous regulations in place, requiring various environmental procedures and restricting property uses.

I don't understand the justification and continued effort by Frederick County to add yet more and more onerous regulations.

Therefore, as a concerned citizen, I am ***against this SugarLoaf Mountain Plan*** re-zoning initiative.

If reforms do proceed against the wishes of many, I would strongly advise you to follow the recommendations of the Monocacy Citizens Group, along with comments made by the land owners most affected by this government.

At a minimum, participation in this re-zoning and Sugarloaf Mt. Plan should be on a **voluntary basis** by any affected landowners.

Lastly, I would think that Frederick County officials have better things to do than continually devise ways in some form or another to extend the reach of government power at the expense of individual property rights. For example, two suggestions - focusing more on fighting crime and the improving the safety of their citizens? Perhaps improving roads and mitigating traffic issues?

Thank you very much.

Leslie McMullen

From:	Bill Woodcock
To:	Council Members; Keegan-Ayer, MC
Subject:	Sugarloaf Plan - Please and Thank you
Date:	Sunday, October 9, 2022 8:09:39 PM

[EXTERNAL EMAIL]

Respectfully County Council,

PLEASE FO THE NEXT RIGHT THING.
Remand the Sugarloaf Plan back to the Planning Commission to get the job done right to fairly reform the plan to protect property rights - to then resubmit to the Council for review and adoption.

The plan is complicated.

It needs to be fixed HOLISTICALLY, to protect property rights as there are various problems throughout the plan. Don't rush the plan through for adoption by the County Council before the general election in November, a few short weeks away.

P.S. As you very well know this is somewhat of a template for all the future " Area Plans", the last thing Frederick County needs is unintended consequences in Land Planning.

Sincerely yours,
William Woodcockn
9236 Oak Tree Cir, Frederick, MD 21701

From: Brandt, Kimberly G.
To: Specht, Jennifer
Subject: FW: Sugarloaf Plan
Date: Tuesday, October 11, 2022 10:54:44 AM

From: Frederick Fisher <fwfisher3840@gmail.com>
Sent: Monday, October 10, 2022 8:28 PM
To: Council Members <CouncilMembers@FrederickCountyMD.gov>
Subject: Sugarloaf Plan

[EXTERNAL EMAIL]

Dear Council members,

I am asking you to reject the Sugarloaf Plan. It is detrimental to property rights and contradicts the protections of the Fifth Amendment.

Respectfully Yours,
Patricia Fisher

From:	Brandt, Kimberly G.
To:	Specht, Jennifer
Subject:	FW: Sugarloaf - Stronghold, Inc. - documentation re recognized organization (October 11 meeting)
Date:	Tuesday, October 11, 2022 12:49:09 PM
Attachments:	image002.png Sugarloaf Treasured Landscape Plan.msg

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From: Manalo, Noel <NManalo@mcneeslaw.com>
Sent: Tuesday, October 11, 2022 10:17 AM
To: Cherney, Ragen <RCherney@FrederickCountyMD.gov>; Keegan-Ayer, MC <MCKeegan-Ayer@FrederickCountyMD.gov>
Cc: Keller, Catherine <CKeller@FrederickCountyMD.gov>; Mitchell, Kathy (Legal) <KMitchell2@FrederickCountyMD.gov>; Black, Bryon <BBlack@FrederickCountyMD.gov>; Luna, Nancy <NLuna@FrederickCountyMD.gov>; Boroughs, Abigail <ABoroughs1@FrederickCountyMD.gov>
Subject: RE: Sugarloaf - Stronghold, Inc. - documentation re recognized organization (October 11 meeting)

[EXTERNAL EMAIL]

Hi, Ragen. Tonight, it will be me.

Noel Manalo

McNees
McNees Wallace & Nurick LLC
8490 Progress Drive, Suite 225 | Frederick, MD 21701
Tel: 301.241.2014

From: Cherney, Ragen <RCherney@FrederickCountyMD.gov>
Sent: Tuesday, October 11, 2022 10:06 AM
To: Manalo, Noel <NManalo@mcneeslaw.com>; Keegan-Ayer, MC <MCKeegan-Ayer@FrederickCountyMD.gov>
Cc: Keller, Catherine <CKeller@FrederickCountyMD.gov>; Mitchell, Kathy (Legal) <KMitchell2@FrederickCountyMD.gov>; Black, Bryon <BBlack@FrederickCountyMD.gov>; Cherney, Ragen <RCherney@FrederickCountyMD.gov>; Luna, Nancy <NLuna@FrederickCountyMD.gov>; Boroughs, Abigail <ABoroughs1@FrederickCountyMD.gov>
Subject: RE: Sugarloaf - Stronghold, Inc. - documentation re recognized organization (October 11 meeting)

[EXTERNAL]
Thank you Noel. Can you advise which individual will be the speaker this evening so the time keeper knows the name in advance of who will be the designated speaker for up to five (5) minutes?

Thanks.

R

Ragen Cherney
Chief of Staff/Legislative Director
Frederick County Council
Winchester Hall
12 East Church Street
Frederick, Maryland 21701
301.600.1049

From: Manalo, Noel <NManalo@mcneeslaw.com>
Sent: Tuesday, October 11, 2022 9:50 AM
To: Keegan-Ayer, MC <MCKeegan-Ayer@FrederickCountyMD.gov>
Cc: Cherney, Ragen <RCherney@FrederickCountyMD.gov>; Keller, Catherine <CKeller@FrederickCountyMD.gov>; Mitchell, Kathy (Legal) <KMitchell2@FrederickCountyMD.gov>; Black, Bryon <BBlack@FrederickCountyMD.gov>
Subject: FW: Sugarloaf - Stronghold, Inc. - documentation re recognized organization (October 11 meeting)

[EXTERNAL EMAIL]

Hon. Pres. Keegan-Ayer: With regard to the above-referenced meeting date, pursuant to County Council Rules 1-1(i); 2-5(a); 4-2(b); and 4-7(e), attached please find the required documentation for purposes of identifying the specified individuals (David Webster, Marion Webster, John Webster, Russel Thompson, Noel Manalo, and Clay Martz) as representing a "recognized organization."

Please let me know if you need additional information, and thank you for your attention to this. Regards, Noel

Noel Manalo

McNees
McNees Wallace & Nurick LLC
8490 Progress Drive, Suite 225 | Frederick, MD 21701
Tel: 301.241.2014

From: Manalo, Noel
Sent: Monday, August 22, 2022 10:38 AM

To: Keegan-Ayer, MC <MCKeegan-Ayer@FrederickCountyMD.gov>
Cc: Black, Bryon <BBlack@FrederickCountyMD.gov>; Kathy L. Mitchell - Frederick County Government (kmitchell2@frederickcountymd.gov) <kmitchell2@frederickcountymd.gov>; Cherney, Ragen <RCherney@FrederickCountyMD.gov>
Subject: FW: Sugarloaf - Stronghold, Inc. - documentation re recognized organization (Aug 23 meeting)

Hon. Pres. Keegan-Ayer: With regard to the above-referenced meeting date, pursuant to County Council Rules 1-1(i); 2-5(a); 4-2(b); and 4-7(e), attached please find the required documentation for purposes of identifying the specified individuals (David Webster, Marion Webster, John Webster, Russel Thompson, Noel Manalo, and Clay Martz) as representing a "recognized organization."

Please let me know if you need additional information, and thank you for your attention to this. Regards, Noel

Noel Manalo

McNees Wallace & Nurick LLC
5283 Corporate Drive, #104 | Frederick, MD 21703
Tel: 301.241.2014

From: Manalo, Noel
Sent: Monday, August 22, 2022 10:36 AM
To: Keegan-Ayer, MC <MCKeegan-Ayer@FrederickCountyMD.gov>
Cc: Black, Bryon <BBlack@FrederickCountyMD.gov>; Kathy L. Mitchell - Frederick County Government (kmitchell2@frederickcountymd.gov) <kmitchell2@frederickcountymd.gov>; Cherney, Ragen <RCherney@FrederickCountyMD.gov>
Subject: FW: Sugarloaf - Stronghold, Inc. - documentation re recognized organization (Aug 22 meeting)

Hon. Pres. Keegan-Ayer: With regard to the above-referenced meeting date, pursuant to County Council Rules 1-1(i); 2-5(a); 4-2(b); and 4-7(e), attached please find the required documentation for purposes of identifying the specified individuals (David Webster, Marion Webster, John Webster, Russel Thompson, Noel Manalo, and Clay Martz) as representing a "recognized organization."

Please let me know if you need additional information, and thank you for your attention to this. Regards, Noel

Noel Manalo

McNees Wallace & Nurick LLC
5283 Corporate Drive, #104 | Frederick, MD 21703

Tel: 301.241.2014

From: Manalo, Noel
Sent: Monday, August 15, 2022 11:34 AM
To: mckeegan-ayer@frederickcountymd.gov
Cc: Black, Bryon <BBlack@FrederickCountyMD.gov>; Kathy L. Mitchell Esquire <kmitchell2@frederickcountymd.gov>; rcherney@frederickcountymd.gov
Subject: FW: Sugarloaf - Stronghold, Inc. - documentation re recognized organization (Aug 15 meeting)

Hon. Pres. Keegan-Ayer: With regard to the above-referenced meeting date, pursuant to County Council Rules 1-1(i); 2-5(a); 4-2(b); and 4-7(e), attached please find the required documentation for purposes of identifying the specified individuals (David Webster, Marion Webster, John Webster, Russel Thompson, Noel Manalo, and Clay Martz) as representing a "recognized organization."

Please let me know if you need additional information, and thank you for your attention to this. Regards, Noel

Noel Manalo

McNees
McNees Wallace & Nurick LLC
5283 Corporate Drive, #104 | Frederick, MD 21703
Tel: 301.241.2014

From: Manalo, Noel
Sent: Wednesday, August 10, 2022 10:18 AM
To: 'mckeegan-ayer@frederickcountymd.gov' <mckeegan-ayer@frederickcountymd.gov>
Cc: 'Black, Bryon' <BBlack@FrederickCountyMD.gov>; Kathy L. Mitchell Esquire <kmitchell2@frederickcountymd.gov>; 'rcherney@frederickcountymd.gov' <rcherney@frederickcountymd.gov>; 'rcherney@frederickcountymd.gov' <rcherney@frederickcountymd.gov>
Subject: FW: Sugarloaf - Stronghold, Inc. - documentation re recognized organization (Aug 11 meeting)

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Tel: 301.241.2014

From: Manalo, Noel
Sent: Saturday, August 6, 2022 5:23 PM
To: mckeegan-ayer@frederickcountymd.gov
Cc: Black, Bryon <BBlack@FrederickCountyMD.gov>; rcherney@frederickcountymd.gov; Kathy L. Mitchell Esquire <kmitchell2@frederickcountymd.gov>
Subject: Sugarloaf - Stronghold, Inc. - documentation re recognized organization

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Noel Manalo

McNees Wallace & Nurick LLC
5283 Corporate Drive, #104 | Frederick, MD 21703
Tel: 301.241.2014
Email | Website

From: Fleming, Leah
To: Council Members
Subject: Sugarloaf Treasured Landscape Plan
Date: Tuesday, October 11, 2022 10:28:04 AM

[EXTERNAL EMAIL]

I'm writing to express concern for the Sugarloaf Treasured Landscape Plan. I don't live in the Sugarloaf area but recognize that the passing of this plan will set a precedent for other areas that may come under scrutiny in the future. The concept of protecting open spaces and putting them into conservation is fantastic but it needs to be applied appropriately.

My concern surrounds changing zones that already have requirements that restrict development like ag reserves and areas already zoned for agriculture. Moving all or even portions of these properties to resource conservation seems excessive. Farming and animal husbandry/activity is an integral part of what Frederick County is about. Placing further restrictions on what property owners can do to keep their existing businesses functioning at a level that allows them to continue to feed their families or even break even requires a lot more thought. A blanket zonal change is not the right way to manage this process. At a minimum, businesses need to be grandfathered through the life of that ownership.

Finally, while I absolutely do not want to see further development across the county and up the 270/15 corridor, residential owners that bought properties with the intent to develop them should be appropriately compensated as this rezoning smacks of 'eminent domain.'

Leah D. Fleming
Walkersville, Maryland
301-938-0976

From:	Brandt, Kimberly G.
To:	Specht, Jennifer
Subject:	FW: Sugarloaf - Stronghold, Inc. - documentation re recognized organization (October 11 meeting)
Date:	Tuesday, October 11, 2022 12:49:09 PM
Attachments:	image002.png Sugarloaf Treasured Landscape Plan.msg

---

From: Manalo, Noel <NManalo@mcneeslaw.com>
Sent: Tuesday, October 11, 2022 10:17 AM
To: Cherney, Ragen <RCherney@FrederickCountyMD.gov>; Keegan-Ayer, MC <MCKeegan-Ayer@FrederickCountyMD.gov>
Cc: Keller, Catherine <CKeller@FrederickCountyMD.gov>; Mitchell, Kathy (Legal) <KMitchell2@FrederickCountyMD.gov>; Black, Bryon <BBlack@FrederickCountyMD.gov>; Luna, Nancy <NLuna@FrederickCountyMD.gov>; Boroughs, Abigail <ABoroughs1@FrederickCountyMD.gov>
Subject: RE: Sugarloaf - Stronghold, Inc. - documentation re recognized organization (October 11 meeting)

[EXTERNAL EMAIL]

Hi, Ragen. Tonight, it will be me.

Noel Manalo

McNees
McNees Wallace & Nurick LLC
8490 Progress Drive, Suite 225 | Frederick, MD 21701
Tel: 301.241.2014

From: Cherney, Ragen <RCherney@FrederickCountyMD.gov>
Sent: Tuesday, October 11, 2022 10:06 AM
To: Manalo, Noel <NManalo@mcneeslaw.com>; Keegan-Ayer, MC <MCKeegan-Ayer@FrederickCountyMD.gov>
Cc: Keller, Catherine <CKeller@FrederickCountyMD.gov>; Mitchell, Kathy (Legal) <KMitchell2@FrederickCountyMD.gov>; Black, Bryon <BBlack@FrederickCountyMD.gov>; Cherney, Ragen <RCherney@FrederickCountyMD.gov>; Luna, Nancy <NLuna@FrederickCountyMD.gov>; Boroughs, Abigail <ABoroughs1@FrederickCountyMD.gov>
Subject: RE: Sugarloaf - Stronghold, Inc. - documentation re recognized organization (October 11 meeting)

[EXTERNAL]
Thank you Noel. Can you advise which individual will be the speaker this evening so the time keeper knows the name in advance of who will be the designated speaker for up to five (5) minutes?

Thanks.

R

Ragen Cherney
Chief of Staff/Legislative Director
Frederick County Council
Winchester Hall
12 East Church Street
Frederick, Maryland 21701
301.600.1049

From: Manalo, Noel <NManalo@mcneeslaw.com>
Sent: Tuesday, October 11, 2022 9:50 AM
To: Keegan-Ayer, MC <MCKeegan-Ayer@FrederickCountyMD.gov>
Cc: Cherney, Ragen <RCherney@FrederickCountyMD.gov>; Keller, Catherine <CKeller@FrederickCountyMD.gov>; Mitchell, Kathy (Legal) <KMitchell2@FrederickCountyMD.gov>; Black, Bryon <BBlack@FrederickCountyMD.gov>
Subject: FW: Sugarloaf - Stronghold, Inc. - documentation re recognized organization (October 11 meeting)

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McNees
McNees Wallace & Nurick LLC
8490 Progress Drive, Suite 225 | Frederick, MD 21701
Tel: 301.241.2014

From: Manalo, Noel
Sent: Monday, August 22, 2022 10:38 AM

To: Keegan-Ayer, MC <MCKeegan-Ayer@FrederickCountyMD.gov>
Cc: Black, Bryon <BBlack@FrederickCountyMD.gov>; Kathy L. Mitchell - Frederick County Government (kmitchell2@frederickcountymd.gov) <kmitchell2@frederickcountymd.gov>; Cherney, Ragen <RCherney@FrederickCountyMD.gov>
Subject: FW: Sugarloaf - Stronghold, Inc. - documentation re recognized organization (Aug 23 meeting)

Hon. Pres. Keegan-Ayer: With regard to the above-referenced meeting date, pursuant to County Council Rules 1-1(i); 2-5(a); 4-2(b); and 4-7(e), attached please find the required documentation for purposes of identifying the specified individuals (David Webster, Marion Webster, John Webster, Russel Thompson, Noel Manalo, and Clay Martz) as representing a "recognized organization."

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McNees Wallace & Nurick LLC
5283 Corporate Drive, #104 | Frederick, MD 21703
Tel: 301.241.2014

From: Manalo, Noel
Sent: Monday, August 22, 2022 10:36 AM
To: Keegan-Ayer, MC <MCKeegan-Ayer@FrederickCountyMD.gov>
Cc: Black, Bryon <BBlack@FrederickCountyMD.gov>; Kathy L. Mitchell - Frederick County Government (kmitchell2@frederickcountymd.gov) <kmitchell2@frederickcountymd.gov>; Cherney, Ragen <RCherney@FrederickCountyMD.gov>
Subject: FW: Sugarloaf - Stronghold, Inc. - documentation re recognized organization (Aug 22 meeting)

Hon. Pres. Keegan-Ayer: With regard to the above-referenced meeting date, pursuant to County Council Rules 1-1(i); 2-5(a); 4-2(b); and 4-7(e), attached please find the required documentation for purposes of identifying the specified individuals (David Webster, Marion Webster, John Webster, Russel Thompson, Noel Manalo, and Clay Martz) as representing a "recognized organization."

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McNees Wallace & Nurick LLC
5283 Corporate Drive, #104 | Frederick, MD 21703

Tel: 301.241.2014

From: Manalo, Noel
Sent: Monday, August 15, 2022 11:34 AM
To: mckeegan-ayer@frederickcountymd.gov
Cc: Black, Bryon <BBlack@FrederickCountyMD.gov>; Kathy L. Mitchell Esquire <kmitchell2@frederickcountymd.gov>; rcherney@frederickcountymd.gov
Subject: FW: Sugarloaf - Stronghold, Inc. - documentation re recognized organization (Aug 15 meeting)

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Tel: 301.241.2014

From: Manalo, Noel
Sent: Wednesday, August 10, 2022 10:18 AM
To: 'mckeegan-ayer@frederickcountymd.gov' <mckeegan-ayer@frederickcountymd.gov>
Cc: 'Black, Bryon' <BBlack@FrederickCountyMD.gov>; Kathy L. Mitchell Esquire <kmitchell2@frederickcountymd.gov>; 'rcherney@frederickcountymd.gov' <rcherney@frederickcountymd.gov>; 'rcherney@frederickcountymd.gov' <rcherney@frederickcountymd.gov>
Subject: FW: Sugarloaf - Stronghold, Inc. - documentation re recognized organization (Aug 11 meeting)

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STRONGHOLD, INCORPORATED

BY - LAWS

Typed September 1969
Article XII, Section 2 sets out the full text of Article Six of the last will and testament of Gordon Strong, deceased, with the following modifications: Paragraph 1, subparagraph (5) is replaced with the third paragraph from the end of Article Third of the charter. Instructions to that effect were given in the copy of the By-Laws from which this was reproduced.

STRONGHOLD, INCORPORATED

BY-LAWS

ARTICLE I

Section 1. Name: The name of this Corporation is STRONGHOLD, Incorporated.

Section 2. Location: The location of the principal office of the Corporation shall be at Stronghold, Frederick County, Maryland; of which the post office address is Dickerson, Maryland.

Section 3. Corporate Seal: The corporate seal of the Corporation shall have inscribed thereon the name of the corporation, the year of incorporation, and the words "Corporate Seal" and "Maryland."

ARTICLE II

Objects

Section 1. Not for Profit: Stronghold, Incorporated, is and shall be a corporation solely for public benefit and not for profit to the members thereof. There shall be no capital stock authorized or issued. No part of the net earnings, if any, of the Corporation, shall inure to the benefit of any private shareholder, member or individual.

Section 2. Objects: The general objects of the Corporation shall be those which are set forth in Article Third of the certificate of incorporation. In respect of any property received by the Corporation pursuant to the will and codicils of Gordon Strong, deceased, the general objects of the Corporation shall likewise be those which are set forth in Article XII of these by-laws.

Section 3: The Board of Trustees shall from time to time determine the general policies and the special undertakings of the Corporation, in pursuance of the above objects.

ARTICLE III

Fiscal Year

Section 1. Fiscal Year: The fiscal year of the Corporation shall be the calendar year from January 1st to December 31st.

ARTICLE IV

Members

Section 1. Members: The first members of the Corporation shall be the original five (5) Directors (Trustees) of the Corporation, and the number of members thereafter shall never be less than five (5). The Board of Trustees may from time to time fill any vacancy which may occur in such original membership, and may elect such additional members as in its discretion it deems advisable.

Section 2. Term of Membership: Any person elected as a member of the Corporation, for so long as he shall continue to pay the dues hereinafter specified, shall continue to be a member of the Corporation until his death, resignation or removal, provided, however, that the by-laws may be amended at any time to fix a term for membership, which shall be binding upon any person then a member.

Section 3. Dues: The dues payable by each member shall be One Dollar ($1.00) at the time of election, to cover the remainder of that calendar year; and One Dollar ($1.00) each calendar year thereafter, such dues being payable on January 2.

Section 4. Termination: The Board of Trustees, or the Executive Committee, may terminate the membership of any member at any time; and shall rebate to such member any dues paid for the calendar year in which the said membership is terminated.

ARTICLE V

Meetings of Members

Section 1. Quorum: At all meetings of members of the Corporation, a quorum for the transaction of business shall consist of a majority of the members then in good standing, or five (5) members, whichever shall be the lesser number.

Section 2. Annual Meeting: After the year 1946, the date of the annual meeting of the members of the Corporation shall be the first Saturday in May of each year, or as soon thereafter as a quorum can

be assembled. The place of the said meeting shall be the principal office of the Corporation at Stronghold, Frederick County, Maryland, unless the Board of Trustees or the Executive Committee shall have determined upon some other place for such meeting, in which event, the place of such meeting shall be notified to all members in the notice of the meeting. Notice of the time and place of such annual meeting shall be sent by the Executive Secretary or his assistant, by mail or otherwise, to each member of the Corporation, not less than ten (10) days nor more than ninety (90) days prior to the date of such meeting.

Section 3. Election of Trustees: At the annual meeting of members, the said members shall , from their own number, elect Trustees as provided for in these by-laws, to serve for such term as may be provided by Article VI of the by-laws, or until their successors shall have been elected. All vacancies in the Board of Trustees occurring between the annual meetings shall be filled by the Board of Trustees, unless there shall be a special meeting of members prior to the filling of such vacancy, in which event, such vacancy shall be filled by the members.

Section 4. Special Meetings: A special meeting of the members of the Corporation may be called at any time by the President, and shall be so called upon the written request of (a) a majority of the Trustees or (b) not less than five (5) members of the Corporation, or one-fourth (1/4) of the total persons then elected to such membership, whichever is the lesser, such written request to be addressed to the Executive Secretary. Notice of the time, place and purpose of any special meeting shall be sent to each member by the Executive Secretary, by mail or otherwise, not less than ten (10) nor more than ninety (90) days prior to the date of such meeting.

ARTICLE VI

Trustees

Section 1. Number: The number of Trustees of the Corporation shall be not less than five (5), but may be increased at any time to a number not exceeding fifteen (15) either by (a) formal resolution for such increase adopted by the members at any annual or special meeting or (b) formal resolution of the Board of Trustees adopted at any meeting thereof.

Section 2. Eligibility: Any member of the Corporation, and only such a member, shall be eligible as a Trustee.

Section 3. Election: Trustees shall be elected and vacancies filled as provided in Article V Section 4 of these by-laws. The trustees so elected shall constitute the Board of Trustees.

Section 4. Term of Office: Trustees elected at the annual meeting of the members shall serve for a term of one (1) year or until their successors shall be elected. A Trustee elected between the annual meetings of members shall serve until the next succeeding annual meeting, or until his successor shall be elected.

Section 5. Powers of Board: The control and management of the Corporation, and of its affairs, funds and property, shall be entrusted to, and vested absolutely in, the Board of Trustees, insofar as may be permitted by law. The said Board may delegate such of their powers and duties to the officers and/or to the Executive Committee, whom the said Board shall elect, as may be provided in these by-laws and insofar as may be permitted by law.

ARTICLE VII

Meetings of Board of Trustees

Section 1. Quorum: At all meetings of the Board of Trustees, a quorum for the transaction of business shall be a majority of the Trustees then acting, or five (5) Trustees, whichever shall be the lesser number.

Section 2. Annual Meeting: The annual meeting of the Board of Trustees shall be held immediately upon the conclusion of the annual meeting of the members of the Corporation. No notice of such meeting shall be required provided that a quorum of the Board of Trustees shall be in attendance at the meeting.

Section 3. Election of Officers and of Executive Committee: At the annual meeting of the Board of Trustees, the said Board shall elect officers, and members of the Executive Committee, as provided for in these by-laws, to serve until the next annual meeting of the said Board, and until their successsors have been elected. In the event of a subsequent vacancy in any such office, the said Board may fill such vacancy by election at any special meeting of the said Board.

Section 4. Special Meetings: A special meeting of the Board of Trustees may be called at any time by the President, and shall be so called upon the written request of a majority of the Trustees, addressed to the Executive Secretary. Notice of the time and place of such special meeting shall set forth the purpose of the meeting, and shall be sent by the Executive Secretary, by mail or otherwise, to each Trustee at least five (5) days prior to the date of such meeting.

Article of Stronghold and By-Laws refer to the Masculine gender. — -5- This should be Changed

ARTICLE VIII

Officers

Section 1. Officers: The Board of Trustees shall elect, from their own number, a President, a Vice President, a Treasurer and an Executive Secretary. In addition thereto, the Board of Trustees shall elect, from their own number or otherwise, such additional Vice Presidents, Assistant Treasurers and Assistant Secretaries as they may deem advisable.

Section 2. President: The President shall have the general powers and shall perform the duties usually vested in the office of president of a not-for-profit corporation. He shall preside at all meetings of the members and of the Trustees.

Section 3. Vice Presidents: In the event of the absence or disability of the President, the Vice Presidents, in order of seniority, shall have all the powers and perform all the duties of the President. The Vice Presidents shall have such other powers, and shall perform such other duties, as may be prescribed by the Board of Trustees.

Exec Secy and Treasurer May be Same person. The Exec Secy and Treasurer May be two Seperate persons

Section 4. Executive Secretary and Assistant Secretary: The Executive Secretary shall have the general powers and shall perform the duties usually vested in the office of secretary of a not-for-profit corporation. Subject to the authorization of the Board of Trustees, and insofar as may be permitted by law, the President may delegate to the Executive Secretary any one or more of the powers and duties conferred upon the President and/or Treasurer under these by-laws. The Executive Secretary shall assume the powers and perform the duties so delegated. The Assistant Secretary or Secretaries shall, in the absence of the Executive Secretary, perform such of his duties as may be delegated to him or them by the President, with the authorization of the Board of Trustees.

Section 5. Treasurer and Assistant Treasurer: The Treasurer shall have the general powers and shall perform the duties usually vested in the office of treasurer of a not-for-profit corporation. He shall have the custody of all the funds and securities of the Corporation. He shall collect all moneys due the Corporation. He shall deposit the funds of the Corporation in the name and to the credit of the Corporation in such depositaries as may be designated by the Board of Trustees. He shall invest any surplus funds of the Corporation in such manner as may be authorized by the Board of Trustees. The Treasurer shall keep account of all the receipts and disbursements of the Corporation, the disbursements being classified and totalled for each month and for the fiscal year. His records shall be open at all times to the inspection of the Trustees. He shall render a complete report for the fiscal year past, at the next annual meeting of the members and of Trustees. He shall render such intermediate reports as may be

required. In the absence of the Treasurer, the Assistant Treasurer shall perform such duties as may have been delegated to him by the President or Treasurer under authorization of the Board of Trustees.

Section 6. Compensation: It is contemplated that the Executive Secretary shall receive such compensation as the Board of Trustees or the Executive Committee may authorize, but that the remaining Trustees, officers, and members of the Executive Committee shall perform their duties without compensation. The Board of Trustees or the Executive Committee are nevertheless authorized to provide such compensation as they may deem advisable for services actually rendered by any Trustee, officer, or member of the Executive Committee, or to reimburse any thereof for expenses incurred in the business of the Corporation.

Section 7. Checks: All checks or demands for money and notes of the Corporation shall be signed by such officer or officers or such other person or persons as the Board of Trustees may from time to time designate.

Section 8. Bond: The Board of Trustees may, in its discretion, require that any officer or employee of the Corporation be bonded, the cost of such bond to be paid by the Corporation.

ARTICLE IX

Executive Committee

Section 1. Membership: The Executive Committee shall consist of the President, the Senior Vice President, the Executive Secretary, the Treasurer, and not less than one (1) nor more than three (3) additional members, to be chosen from the members of the Board of Trustees other than the officers above described. Members of the Executive Committee shall be elected by the Board of Trustees at its annual meeting.

Section 2. Meetings: The Executive Committee shall meet at such regular times as it may determine, and/or from time to time at the call of the President. At any meeting of the Executive Committee, a majority of the members shall constitute a quorum.

Section 3. Powers: The Executive Committee shall have and may exercise all the powers of the Board of Trustees during the intervals between meetings of the Board, insofar as permitted by law and as not inconsistent with these by-laws; provided that the Board of Trustees may from time to time, by resolution, limit the powers of the Executive Committee as the said Board may see fit.

ARTICLE X

Waiver of Notice

Section 1. Waiver of Notice: No notice of any meeting of members or of the Board of Trustees hereinelsewhere specified shall be required provided that the member of the Corporation or the Board of Trustees, as the case may be, shall file written waiver of such notice either before or after the meeting, or shall be actually present thereat.

Section 2. Informal Actions: Any action required or permitted to be taken at any meeting of the members of the Corporation or of the Board of Trustees may be taken without a meeting if a consent in writing, setting forth such action, is signed by all of the members entitled to vote on the subject matter thereof, or by all of the Board of Trustees, as the case may be.

ARTICLE XI

Amendments to By-laws

Section 1: Subject to all of the restrictions contained in the certificate of incorporation of the Corporation, these by-laws may be amended at any annual meeting of the members or of the Trustees, or at any special meeting of the members or of the Trustees called for that purpose, provided that notice of such proposed amendment has been furnished to each member or Trustee, as the case may be, not less than ten (10) days nor more than ninety (90) days prior to such meeting. Any amendment to the by-laws must be adopted either by vote of a majority of all members of the Corporation then in good standing, or by vote of a majority of the members of the Board of Trustees then serving as such, as the case may be, without respect to any number of vacancies in the membership or in the Board of Trustees then remaining to be filled, provided that the number of members or of the Board of Trustees shall not then be reduced below the minimum number hereinelsewhere specified by these by-laws.

ARTICLE XII

Property Received from the Estate of Gordon Strong, Deceased

Section 1: The provisions of this Article of the by-laws shall be mandatory with respect to the operation and disposition of the property received by the Corporation pursuant to the will and codicils of Gordon Strong, deceased, but shall be applicable to the operation and disposition of other property theretofore or thereafter acquired by the corporation only to the extent that the Board of Trustees deems the provisions of such Article appropriately applicable thereto.

Section 2. The following provisions of the last will and testament of the said Gordon Strong, being Article Six of his last will and testament substantially as contained therein, are hereby adopted as a by-law of the Corporation:

ARTICLE SIX

STRONGHOLD CORPORATION

OBJECTS OF CORPORATION

(Art. Six)
PARAGRAPH 1. The objects of the Stronghold Corporation in Article Five, Paragraph 6 referred to, shall be the following:

OBJECTS - GENERAL

(Art. Six)
(Paragraph 1.)
SUB-PARAGRAPH 1. In General, to develop as the Corporation may determine, and to offer to the public (subject to the restrictions permitted in Sub-paragraph 5 of this Paragraph 1 of this Article Six, and without intending to make any dedication of the property concerned to the public or for public uses), for their education and enjoyment, all appropriate forms of out-of-door beauty, in connection with the property known as Stronghold and such additions as shall be made thereto; and to promote by example, by precept and by such further encouragement as the Corporation may find practicable, the development and enjoyment of out-of-door beauty elsewhere.

POWERS OF CORPORATION

(Art. Six)
PARAGRAPH 2. The powers of said Stronghold Corporation shall comprise all general powers appropriate to the attainment of the objects set forth in Paragraph 1 last hereinabove; and the special powers in this article, and more particularly in this paragraph, provided and/or implied; insofar as such general and special powers may be consistent with the laws of the State of Maryland.

ANNUAL STATEMENT

(Art. Six)

PARAGRAPH 3. The said Stronghold Corporation shall, each January or thereabouts, render to my hereinbelow designated Endowment Trustee a reasonably itemized and comparative statement for the calendar year preceding, such statement to show the following:

Receipts by Corporation

(a) Income from the Endowment Trust Fund hereinabove.

(b) Receipt of capital and/or income from all other gifts, bequests, devises, and/or from the investment thereof.

(c) Income accruing from fees, concessions and all other operations producing revenue.

Expenditures by Corporation

(d) For the purchase of additional land.

(e) For new construction of all sorts - buildings, roads, etc.

(f) For maintenance and upkeep of the property of the Corporation.

(g) For the operation, servicing and functioning of the Corporation toward the objects thereof (other than the expenditures in Sub-paragraphs (d), (e) and (f) last hereinabove).

Results Obtained by Corporation

(h) The results of the said operation, servicing and functioning of the said Corporation, toward the objects thereof, expressed in terms of numbers of people served in each of the several forms of the said functioning of the said Corporation, and in such other terms as the said Corporation may, for its own records, express the results of its functioning.

In the above provisions it is intended to indicate such a report as any well conducted charitable corporation would naturally keep for the information, guidance and protection of its own directors, and such as will, at the same time, inform my Endowment Trustee to what extent Stronghold Corporation is actually functioning for the uses in Article Six herein set forth.

UNANIMOUS WRITTEN CONSENT OF THE BOARD OF DIRECTORS OF STRONGHOLD, INCORPORATED

January 1, 2022

THE UNDERSIGNED, being all of the members of the board of directors (the "**Board**") of Stronghold, Incorporated, a Federal not for profit corporation (the "**Corporation**"), acting by written consent without a meeting in accordance with Maryland Annotated Code, Corps. & Assns. Art., Tit. 2, hereby waive the calling and holding of a meeting, consent to, and approve the following resolutions, and direct that this Unanimous Written Consent of the Board (this "**Consent**") be filed with the minutes of the proceedings of the Corporation.

WHEREAS, the Board deems it advisable and in the best interest of the Corporation to authorize certain individuals to speak on behalf of the Corporation in any and all proceedings before Frederick County, Maryland concerning the Sugarloaf Treasured Landscape Plan.

NOW, THEREFORE, BE IT:

RESOLVED, that the Corporation authorizes the following individuals to speak on its behalf with the intention that Frederick County, Maryland recognize the same, consistent with all applicable rules and regulations, including, but not limited to the Frederick County Council Rules of Procedure and the Frederick County Planning Commission Rules of Procedure:

David Webster
Executive Secretary
Treasurer

Marion Webster
Assistant Executive
Secretary Treasurer

John Webster
President

Russel Thompson- Caretaker, Rep. Stronghold Inc.

Noel S. Manalo, Esquire- Attorney, Rep. Stronghold Inc

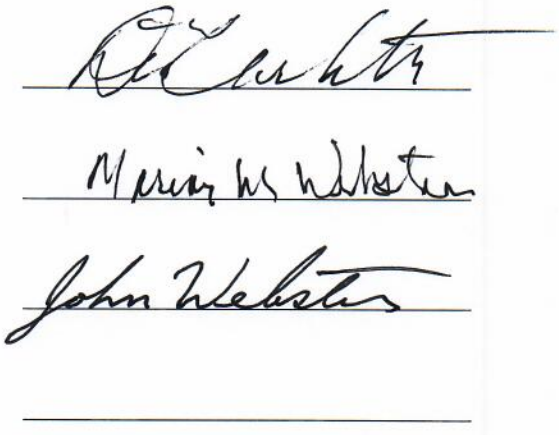
Walter "Clay" Martz, II, Esquire- Attorney, Rep. Stronghold Inc.

FURTHER RESOLVED, that this Consent may be executed in counterparts, each of which shall be deemed an original but all of which together shall constitute one and the same instrument and may be delivered by facsimile or electronic mail of a ".pdf" data file.

[Signatures on Following Page]

IN WITNESS WHEREOF, the undersigned has duly executed and adopted this Consent as of the date first written above.

BOARD OF DIRECTORS



From:	Brandt, Kimberly G.
To:	Specht, Jennifer
Subject:	FW: Testimony this evening - Sugarloaf Citizens Association
Date:	Tuesday, October 11, 2022 2:06:15 PM
Attachments:	image001.png Re SugarLoaf Mt. Plan Please send it back to the Planning Commission for suggested changes.msg Re Sugarloaf Plan.msg

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From: Cherney, Ragen <RCherney@FrederickCountyMD.gov>
Sent: Tuesday, October 11, 2022 1:46 PM
To: Steven Findlay <stevenfindlay2@gmail.com>
Cc: Luna, Nancy <NLuna@FrederickCountyMD.gov>; Tina Thieme Brown <tinaartbrown@gmail.com>; Cherney, Ragen <RCherney@FrederickCountyMD.gov>
Subject: RE: Testimony this evening - Sugarloaf Citizens Association

Thank you.

Ms. Brown will have up to five (5) minutes for public comment.

R

Ragen Cherney
Chief of Staff/Legislative Director
Frederick County Council
Winchester Hall
12 East Church Street
Frederick, Maryland 21701
301.600.1049

From: Steven Findlay <stevenfindlay2@gmail.com>
Sent: Tuesday, October 11, 2022 1:00 PM
To: Cherney, Ragen <RCherney@FrederickCountyMD.gov>
Cc: Luna, Nancy <NLuna@FrederickCountyMD.gov>; Tina Thieme Brown <tinaartbrown@gmail.com>
Subject: Re: Testimony this evening - Sugarloaf Citizens Association

[EXTERNAL EMAIL]

Ragen and Nancy — Our board had its regular monthly meeting last night. We authorized (again) Tina Brown to speak on behalf of SCA at tonight's public hearing.

Please confirm receipt of this note and/or let us know if you need anything else. Tina has testified on our behalf in the past, as you may recall. She served on the planning commission's advisory group as well.

Thanks,

Steven Findlay
President, Sugarloaf Citizens Association
Dickerson, MD

> On Sep 26, 2022, at 9:00 PM, Cherney, Ragen <RCherney@FrederickCountyMD.gov> wrote:
>
> All is good now.
>
> R
>
> Ragen Cherney
> Chief of Staff/Legislative Director
> Frederick County Council
>
> ---
>
> **From:** Steven Findlay <stevenfindlay2@gmail.com>
> **Sent:** Monday, September 26, 2022 8:55:09 PM
> **To:** Cherney, Ragen <RCherney@FrederickCountyMD.gov>
> **Cc:** Luna, Nancy <NLuna@FrederickCountyMD.gov>
> **Subject:** Re: Testimony on Sept 27 - Sugarloaf Citizen's Association
>
> **[EXTERNAL EMAIL]**
>
> Are we good then? Or do you need more? Thanks much. Steve
>
> > On Sep 26, 2022, at 2:38 PM, Cherney, Ragen <RCherney@FrederickCountyMD.gov> wrote:
> >
> > Thank you.
> >
> > **Ragen Cherney**
> > *Chief of Staff/Legislative Director*
> > Frederick County Council

Winchester Hall
12 East Church Street
Frederick, Maryland 21701
301.600.1049

<image001.png>

From: Steven Findlay <stevenfindlay2@gmail.com>
Sent: Monday, September 26, 2022 2:21 PM
To: Cherney, Ragen <RCherney@FrederickCountyMD.gov>
Cc: Luna, Nancy <NLuna@FrederickCountyMD.gov>
Subject: Re: Testimony on Sept 27 - Sugarloaf Citizen's Association

[EXTERNAL EMAIL]

The resolution is attached. Separately, I'm forwarding you the email chain. Thanks. Steve

> On Sep 26, 2022, at 12:44 PM, Steven Findlay <stevenfindlay2@gmail.com> wrote:
>
> Dear Ms Luna and Ms Cherney,
>
> I've been apprised that you need a formal resolution from our board to authorize Tina Brown to speak on behalf of Sugarloaf Citizens Association on Tuesday, Sept 27. The executive committee of the board can take this action, with a vote, under our bylaws. That committee is comprise of myself and the organization's vice president, secretary and treasurer. I'll send you the text of that resolution and the email chain documenting this authorization later today. In the meantime, please reserve a 5-min slot for us. We appreciate the work of the Council in scheduling this important public hearing. Thank you.

<PastedGraphic-1.pdf>

Steven Findlay, President
Sugarloaf Citizens Association
Dickerson, MD
301-908-8659
stevenfindlay2@gmail.com
president@sugarloafcitizens.org

From: Hagen, Kai
To: Council Members; Planning Commission; Gardner, Jan; lesliemcmullen@aol.com
Subject: Re: SugarLoaf Mt. Plan: Please send it back to the Planning Commission for suggested changes
Date: Tuesday, October 11, 2022 1:11:33 PM

Hello, Leslie.

Thank you for your emails.

If you don't mind, may I ask if you think that current zoning in Frederick County is "***unjust and unreasonable.***"

kai

From: lesliemcmullen@aol.com <lesliemcmullen@aol.com>
Sent: Monday, October 10, 2022 6:45 PM
To: Council Members <CouncilMembers@FrederickCountyMD.gov>; Planning Commission <PlanningCommission@FrederickCountyMD.gov>; Gardner, Jan <JGardner@FrederickCountyMD.gov>
Subject: SugarLoaf Mt. Plan: Please send it back to the Planning Commission for suggested changes

[EXTERNAL EMAIL]

Dear Council Members,

I wrote earlier today to the County Council expressing my concerns with the Sugarloaf Mountain Plan, as it currently stands prior to a final vote. I am alarmed that it's guidelines trample on the property rights of land owners.

After talking further with others this afternoon about the Sugarloaf Mountain Plan, I fully agree with all of the Monocacy Citizens Group's suggested reforms sent to the Council on 9/12/22 and ask that these reforms be adopted.

I would suggest that the County Council remand the plan and send it back to the Planning Commission for further review and revisions.
In addition, it should incorporate the allowance for any suggested reforms to be voluntary in nature by those property owners impacted by the plan. Only then should the plan be resubmitted to the Council for further consideration and a vote.

Thank you so much, I do hope you take into consideration these suggestions.

Sincerely,

Leslie McMullen

-----Original Message-----
From: lesliemcmullen@aol.com
To: councilmembers@frederickcountyMD.gov <councilmembers@frederickcountyMD.gov>;

planningcommission@frederickcountymd.gov <planningcommission@frederickcountymd.gov>; jgardner@frederickcountymd.gov <jgardner@frederickcountymd.gov>
Sent: Sun, Oct 9, 2022 7:34 pm
Subject: SugarLoaf Mt. Plan: Vote NO, vote against re-zoning and more gov't intrusion on property rights

Council Members.....

Based on what I have learned about the Sugarloaf Mountain Management Plan, I am concerned that the program is a clear violation of individual property rights.

While I understand the desire to prevent more rural areas from becoming overly commercialized (changed forever by unbridled growth into sprawling suburbs), the SugarLoaf Mountain Plan's effort is a step in the wrong direction.

The Sugarloaf Mt. Plan is an example of the government imposing unnecessary re-zoning efforts that impede on property owner's use of their own land. It is ***unjust and unreasonable,*** as there are already numerous regulations in place, requiring various environmental procedures and restricting property uses.

I don't understand the justification and continued effort by Frederick County to add yet more and more onerous regulations.

Therefore, as a concerned citizen, I am ***against this SugarLoaf Mountain Plan*** re-zoning initiative.

If reforms do proceed against the wishes of many, I would strongly advise you to follow the recommendations of the Monocacy Citizens Group, along with comments made by the land owners most affected by this government.

At a minimum, participation in this re-zoning and Sugarloaf Mt. Plan should be on a **voluntary basis** by any affected landowners.

Lastly, I would think that Frederick County officials have better things to do than continually devise ways in some form or another to extend the reach of government power at the expense of individual property rights. For example, two suggestions - focusing more on fighting crime and the improving the safety of their citizens? Perhaps improving roads and mitigating traffic issues?

Thank you very much.

Leslie McMullen

From: Hagen, Kai
To: Frederick Fisher; Council Members
Subject: Re: Sugarloaf Plan
Date: Tuesday, October 11, 2022 1:09:22 PM

Patricia,

Respectfully, zoning -- current zoning or new zoning changes -- is not contradictory to "the protections of the Fifth Amendment."

You may think so, but the courts (including the US Supreme Court, of course) have long determined otherwise.

If you would like to share information to the contrary, I'd be interested in seeing it.

kai

From: Frederick Fisher <fwfisher3840@gmail.com>
Sent: Monday, October 10, 2022 8:28 PM
To: Council Members <CouncilMembers@FrederickCountyMD.gov>
Subject: Sugarloaf Plan

[EXTERNAL EMAIL]

Dear Council members,

I am asking you to reject the Sugarloaf Plan. It is detrimental to property rights and contradicts the protections of the Fifth Amendment.

Respectfully Yours,
Patricia Fisher