Jason Sullivan

From:

Emily Sutton <emily@hawriver.org>

Sent:

Tuesday, August 01, 2017 5:18 PM

To:

Angela Birchett

Cc:

Paula Phillips; Kimberly Tyson; bgruesbeck@pittsboronc.gov; jbonitz@pittsboronc.gov; jfarrell@pittsboronc.gov; pittsborocommis2010@gmail.com; Fiocco Michael; Perry Cindy; Wilson Foley Bett; Diana Hales; James Crawford; Karen Howard; Lindsay Ray; Mike

Dasher; Walter Petty; Jason Sullivan; Janie Phelps

Subject:

Planning Meeting 8/1: Public Comments on Proposed Publix

Attachments:

Proposed Publix Planning Hearing.pdf; Pokeberry 1E Summer 2017 Report.pdf; Pokeberry 1N Summer 2017 Report.pdf; Pokeberry Site 1E-1 Upstream.jpg

Hello, Planning Staff.

I intended on presenting these comments at the meeting tonight, but something has come up and I am unable to attend.

I hope you will include the attachments in your decision making process.

I have attached my comments, two water quality reports on two sites downstream of the proposed development, and a photo of the wetlands downstream of this site.

Thank you, Emily Sutton Haw River Assembly

Emily Sutton Haw River Watch Coordinator

Haw River Assembly P.O.Box 187 Bynum NC 27228 (919) 542-5790 www.hawriver.org Proposed Rezoning of Residential Lot: Publix Planning Board Hearing: 8/1/17 Emily Sutton Haw River Assembly

Though the Environmental Impact Assessment lists no streams or wetlands in the study area, I am concerned about the environmental impacts to Pokeberry Creek. The increase of paved surfaces and disturbed soil will further exacerbate dramatic erosion and sedimentation in the tributaries and main channel of Pokeberry Creek. A steep slope occurs just south of the proposed development area. The gradual slope leading from the proposed stormwater pond leads to this steep slope. Though it is out of the study area, discharged water from this holding pond will further erode this slope and incise the creek banks of perennial tributaries and Pokeberry Creek.

The proposed BMP is certified to withstand a 100 year flood, however, these rain events are becoming more comme. We have had two of these events in the past three years. With the overflow from these BMPs into the tributaries of Pokeberry Creek will come sediment holding nutrient pollution. Pokeberry Creek has been and continues to be monitored at several sites to observe and record nutrient and sediment pollution, which has continued to worsen in the past decade.

In a 2006 report done by my predecessors at Haw River Assembly, titled *Two Threatened Streams*, turbidity was shown to be a problem Pokeberry Creek. The mean turbidity levels in both Pokeberry sites were greater than the state standard for most receiving waters (50 NTU). A monitoring site located just south of the proposed residentially zoned parcels for Publix was reported as having a "deeply incised channel preventing access to its floodplain. Also the macroinvertebrate community during the initial assessment of this site were dominated by tolerant species." The sites also received a poor score due to lack of bank stabilization. The eroding banks carry sediment, which holds high levels of nutrients, into the watershed.

Pokeberry Creek is part of the watershed of the Haw River Arm of Jordan Lake and is included in the nutrient load reduction targets under the Jordan Lake Nutrient Management Strategy and TMDL. The reductions for loading to this part of the Lake are 5% for phosphorus and 8% for nitrogen. The non-point source plan includes strategies for reducing nutrient loading to streams from agricultural lands; better management of fertilizers and biosolid applications; reducing stormwater run-off from new and redevelopment, as well as retrofitting existing development; riparian buffer protection; and improving wastewater land application and on-site wastewater systems to reduce nitrogen and phosphorus loading. All of these land use strategies apply to the Pokeberry Creek watersheds.

While the Jordan Lake Nutrient Management Strategy continues to be postponed and weakened, the conditions of Jordan Lake and the tributary watersheds continue to worsen.

Downstream of the proposed Publix site, Pokeberry Creek flows through a string of wetlands and beaver ponds that are providing amazing wildlife habitat in the midst of a developed landscape of residential neighborhoods. The wetlands are also acting as filters cleaning up much of the sediment laden stormwaters that are washing into Pokeberry from construction. Without additional protection these wetlands will start to decline, resulting in a loss of nutrient and sediment filtration to Pokeberry Creek. Currently, there are no regulations for developments

to assess or mitigate impacts downstream. The only way to avoid drastic degradations to this downstream wetland is to prevent it from happening in the first place.

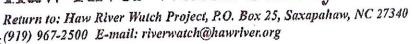
The 2003 Cape Fear Assessment Plan suggests that there is evidence that "the benthic communities in Pokeberry Creek may be declining in this rapidly developing area." The most recent report in 2014 listed the Benthos and Fish Community as meeting criteria for state standards, but our data shows gradual decline in benthic communities.

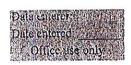
Currently, we have three monitoring sites downstream of this proposed development project. That data has shown a moderate decline in benthic communities since the 2006 publication of the *Two Threatened Streams* report. We will continue to conduct quarterly assessments of the water quality and benthic communities in Pokeberry Creek.

Due to the critical condition of Pokeberry Creek, we ask you to vote against the rezoning of these parcels for proposed development in order to avoid negative impacts on drinking water and human health, as well as pollution mitigation costs.

Thank you, Emily Sutton Haw River Assembly

Haw River Watch Survey





The purpose of this form is to aid you in gathering and recording important data about the health of your stream, to document changes in water quality. Refer to the Stream Insects and Crustaceans ID chart to identify stream macroinvertebrates.

Hom obasses in the 1	N CY C	35 49,30 /					
SECTION A. Fill in this section each time you do a sampling of your stream. (1)							
Team Name DVIAV CLASOF Site ID TOKE VIEW VYING # 01 participants.							
Stream Poke beving Clerk Location Brodger Welland of Poke Dev & bythe TORIL							
County Chr HANM Survey Leader	/ / 2 /	Phone # 919 903 8 7 7 7					
Date: 6/2:2/17 Start time_		Scribe KUS					
Air temperature 47 Flow rate: High Normal Wow Negligible 70 57							
Weather conditions (last 3 days) Cloudy vain, 0.4" Sunn Now Chrohnel							
Chemical testing: pH 616 Nitrate	Phosphate Transpa	rency (in inches):					
Macroinvertebrate Count in several places; and sample underbank, lea found: A = 1-9; B = 10-99; C = 100 or more	Search several likely habitats: look under soft mat, and woody debris. Use letter codes to reach dup the number of letters in each column	tones in riffle areas; use net to sample bottom ecord number of organisms of each type and multiply by the indicated index value.					
Pollution Sensitive	Somewhat Pollution Sensitive	Pollution Tolerant					
Stonefly	Crayfish	Aquatic Worm					
Caddisfly	Sowbug	Midge Fly Larva					
Water Penny	Scud	Blackfly Larva					
Riffle Beetle	Alderfly Larva	Leech					
Mayfly	Fishfly Larva	Pouch (and other) Snails					
Gilled Snail	Damselfly "	4					
Dobsonfly (Hellgrammite)	Watersnipe Fly Larva						
	Crane Fly						
	Beetle Larva						
	Dragonfly Clam						
The state of the s	Clain	The state of the s					
# letters times 3 ==	# letters times 2 =	# letters times 1 =					
Index Value	Index Value	Index Value					
Now add together the three Index Values from the columns for your total index value: Total Index Value =							
Compare the Total Index Value to the following ranges of numbers to determine the water quality of your stream. Good water quality is indicated by a variety of different kinds of organisms, with no one kind making up the majority of the sample. Although the A, B, and C ratings do not contribute to the water quality rating, record them to see how your macroinvertebrate populations change over time.							
Water Quality Rating							
Excellent (>22)	Good (17 - 22)	Fair (11 - 16) Poor (<11)					
1 1 - Lie shiel "hairlike" met (green ble	spots % of stream covered (10	Sugar Cites Miles					

Stream Channel Answer these Average stream width	Signs of other wildlife observed: Signs of other wildlife observed: ects of the stream don't change often. an item only if it changes. Photogra questions for a stream length of four ft. Average stream depth O	times the stream width, w ft. Is stream channe	with monitored section close to middle.
	ion (a mixof trees, shrubs, and ground	d cover), looking dowstre	eám: teet left bank;
Stream Sides Are stream banks (sides) eroding % bare soil on stream covered by plants, rocks, and log Is stream getting cut deeper? Is stream widening? Stream Shade DBest (25 - 90% shadesun-day Good (>90% shade almost to Boor (<25 shade - almost no stream shade	STEAM BEG (500 m banks (not gs)	silt (mud) sand (1/16" - 1/4" grains gravel (1/4" - 2" stones) cobble (2" - 10" stones) boulders (>10" stones) dead leaves	Stream Buffer Composition (~100%): '40 % trees % shrubs % grass % bare soil % rocks % other
Land Uses in the Watershed	to Decoud all land uses observed in the	ligh (H), Moderate (M), c	Hight (2) of the (tt) becenture to negative
OH OM OS ON Oil & g OH OM OS ON Housin OH OM OS ON Forest OH OM OS ON Loggin OH OM OS ON Urban of OH OM OS ON Sanitar OH OM OS ON Road of OH OM OS ON Mining	as drilling g developments	OH OM OS ON (describe	
Other comments on your st	tream's health and condition: O	verall wot	er level low







If there is foam, is it:	Wildlife	Odor: (check	one) Water Appearance: (you may check up to two items from the list below)
Divory brownish, less than 8"	Mussel shells seen? Tyes	9 9 444 1011011 450	S
high, w/earthy, fishy, or fresh	Fish seen? DYes No	□ musky	
cut grass smell? [Natural foam]	Signs of beaver? DYes Sto	☐ petroleum ☐ sewage	☐ milky ☐ colored sheen (oily)
D bright white, over 8" high,	Signs of other wildlife observed		☐ grey ☐ black
with perfumy or artificial "fresh" soapy scent? [Indicates	NO BEAVEY DAM	other	🗖 foamy 🔲 green (suspended algae)
pollution problem] .	DOWN STreAM	2000	O other
apontion process.			
copy to refer to. Thereafter, fill in	n an item only if it changes. Pho	tographs are very useful i	n your first survey, and be sure to keep a n recording changes to your stream.
Stream Channel Answer these	questions for a stream length of	four times the stream wid	Ith, with monitored section close to middle.
Average stream width	ft. Average stream depth	ft. Is stream ch	annel natural and meandering? QYes QNo
DOSS SHERIH HITAG ACCESS TO US IN	ood plant (is there stream deposit	01 800110 011 041110, 041	nside trees & rocks)? 🗆 Yes 🖾 No
Has stream been channelized?	Yes 2No Is there rip-rap in st	ream? Tyes Tho Do	o manmade dams block flow? 🗆 Yes 🗆 No
Stream Buffer Natural vegetate feet right bank	tion (a mix of trees, shrubs, and g	round cover), looking dov	wstream: feet left bank;
Description of stream buffer:	· '\		
Stream Sides	3 8	(bottom) (=100%):	Stream Buffer Composition (=100%):
Are stream banks (sides) eroding	g? 🗆 Yes 🗆 No	% silt (mud)	% trees
% bare soil on strea		% sand (1/16" - 1/4" gr	
covered by plants, rocks, and log	\$ \$	% gravel (1/4" - 2" stor % cobble (2" - 10" stor	
Is stream getting cut deeper?	1 8	% boulders (>10" stone	7 8 9
Is stream widening? UYes U	Vo .	% dead leaves	% other
Stream Shade	Bed sinks be	neath your feet in:	
Best (25 - 90% shadesun-day	ppled stream) Ino spots	□a few spots □many sp	pots
□Good (>90% shade almost t		AND THE PROPERTY OF THE PROPERTY CONTRACTORS OF THE PROPERTY O	Tarantee number 1
□Poor (<25 shade - almost no s			
your sampling site. Indicate whe	: Record all land uses observed a ether the following land uses have cam. If the land use is not presen	e a High (H), Moderate (N	rby (one mile upstream) and surrounding M), Slight (S) or No (N) potential to negative- it unmarked.
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	g developments	OH OM OS ON	
UH UM US UN Forest			N Livestock pasture
OH OM OS ON Loggin			N Animal operations (types) N Other possible sources of pollution
	uses (highways, parking lots, etc.) y landfill		cribe:
	g construction	,	
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OH OM OS ON Mining	(types	A TANADA A A A A A A A A A A A A A A A A A	N Garbage/litter (Type:
□H □M □S □N Croplar	ıd (types)	
What types of pipes? □runoff (any discharging pipes? □Yes (field or stormwater?)	Osewage treatment O	industrial (type of industry)
Other comments on your st	ream's health and condition	yer overy	EBM NOTED
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