TESTIMONY AND WRITTEN PUBLIC COMMENTS: PERMANENT REGULATIONS FOR STORMWATER CODE UPDATE COMMENTS/TESTIMONY RECEIVED JUNE 11 – JULY 9, 2015

Name	Organization	Method
Bynum, Ellen	FOSC	Testimony + 4 emails (7/9/15)
Ehlers, Carol		Letter (7/7/15) + notes
		(7/9/15)
Freethy, Diane	SCARP	Email (6/12/15)
Haase, Peter		Email (6/28/15)

From:	Ellen Bynum
To:	PDS comments
Cc:	FOSC Office
Subject:	2015 Stormwater Code Update comments
Date:	Thursday, July 09, 2015 11:58:12 AM

Dear Planning Commissioners and Planning & Legal Staff:

The following points are additions to my previous comments on the Stormwater Code Update.

The stormwater code does not contain any reference to geomorphology, geology, soils or a way to consider the context of the parcel in the area it is situated. All of these are important information to analyze the parcel and make an informed decision as to how the water from or going to the parcel (or its neighboring parcels) will affect the neighborhood (or wider area).

There is no requirement for a cumulative effects analysis for the neighborhood, which must be done if a correct decision is to be made as to what is required of parcels within the neighborhood. The Planning Commission should add a requirement in the code to require additional information be provided and/or sought to give a longer range and more complete view of the effects of stormwater on the applicant parcel and the area.

Water behaves differently in different soils types. An evaluation and consideration of soils types should be added to the code as a requirement so that decisions that cause damages, either on the parcel or in the neighborhood, or even farther away, are prevented. The Conservation District has additional information, maps and expertise as to how to evaluate this criteria.

The history of an area where the parcel is located as to flooding, erosion, bank collapse and the other geological features and geomorphological conditions should be added as a requirement for proposed developments. Placing it in the stormwater code as well as other development regulations should be done to prevent future disasters to both the parcel and the neighborhood (and area).

Please add requirements for soils analysis as well as the geomorphological and geological history of the parcel to the code.

Please add a requirement for analyzing the surrounding parcels, their histories, geology and past stormwater events before issuing permits that may cause future damage (or exacerbate past damages).

Please ask staff to consult with the Conservation District or other agencies who have and regularly use the soils, geology and geomorphology information to determine how to add this information.

The code, as written, goes a long way to fulfilling what DOE wants from the County; can we also make it comply with common sense and smart decisions about water and land use?

Omitting the characteristics and facts stated above is NOT a prudent way to manage stormwater decisions as the official making the decision does not have enough information (or some of the most critical information) as to the how the parcel and neighborhood (area) will respond to massive rain events. Thank you for your time and consideration.

Ellen Bynum

Ellen Bynum, Executive Director Friends of Skagit County 110 N. First St. #C P.O. Box 2632 (mailing) Mount Vernon, WA 98273-2632 360-419-0988 friends@fidalgo.net www.friendsofskagitcounty.org "A valley needs *FRIENDS*" 22nd Anniversary Common Goals Common Ground Common Good DONATE NOW at Network for Good \$\friends \common Goals \common Goa

From:	Ellen Bynum
To:	PDS comments
Cc:	FOSC Office
Subject:	2015 Stormwater code update - additional comments
Date:	Thursday, July 09, 2015 12:29:54 PM

Dear Planning Commissioners, planning and legal staff:

These comments are additions to my previously submitted comments.

SCC 14.32.030 (3) addresses areas outside the NPDES as to required geo-technical analysis. Please add a reference in the stormwater code update to this section and consider adding soils analysis to both the stormwater code and this section.

Under definitions it states "...effective impervious surfaces". Please add additional details to the code as to what is "effective" and how it is to be evaluated and by whom. If "effective" is included simply to say that there are better methods or materials than others, then list them or say that in the code.

Thanks very much, Ellen Bynum

Ellen Bynum, Executive Director Friends of Skagit County 110 N. First St. #C P.O. Box 2632 (mailing) Mount Vernon, WA 98273-2632 360-419-0988 friends@fidalgo.net www.friendsofskagitcounty.org "A valley needs *FRIENDS*" 22nd Anniversary Common Goals Common Ground Common Good DONATE NOW at Network for Good \$\friends \common Goals \common Goals \common Ground \common Goals \common Go

From:	Ellen Bynum
To:	PDS comments
Cc:	FOSC Office
Subject:	2015 Stormwater Code update comments 2
Date:	Thursday, July 09, 2015 2:56:41 PM

Dear Planning Commissioners, planning and legal staff,

These comments are in addition to my previous comments.

There is no reference to WAC 24.272 A - Septic Systems. The stormwater codes should related to .0200 & Table IV and .0220 & Table V. Section .0320 forbids any drainage to cross the septic field.

These may have never been referenced or may have been omitted in the update.

The Section 14.32.030 deals with illicit and allowable discharges. This section does not list roof drains and gutters discharge.

Please add references to septic systems, illicit and allowable discharges and roof and gutter discharges to the stormwater code. The coordination of these with stormwater is essential to the success of the stormwater code.

Thank you for your time and service.

Ellen Bynum

Ellen Bynum, Executive Director Friends of Skagit County 110 N. First St. #C P.O. Box 2632 (mailing) Mount Vernon, WA 98273-2632 360-419-0988 friends@fidalgo.net www.friendsofskagitcounty.org "A valley needs *FRIENDS*" 22nd Anniversary Common Goals Common Ground Common Good DONATE NOW at Network for Good Attended at Network for Good

From:	Ellen Bynum
To:	PDS comments
Cc:	FOSC Office
Subject:	2015 Stormwater Code update - additional comments 3
Date:	Thursday, July 09, 2015 3:32:20 PM

Dear Planning Commissioners, planning and legal staff:

Please add these comments to my previous comments.

There is no information regarding consideration of micro-climates in the stormwater code. Consideration of micro-climates is important in selection and choice of native or other plants for taking up water, holding soils, diverting water, etc. wherever native vegetation is required For example, Island Conservation District has some amount of experience with native plants suitable for dry climate areas on Whidbey some of which have a climate similar to Santa Fe, NM. This is especially true in shoreline areas, but can also be important on steep slopes.

Since the stormwater code applies to all development, please consider adding criteria for consideration of micro-climates and planting for restoration into the code.

No attention is paid to water quantity, as Carol Ehlers pointed out in public testimony.

Please consider amending the stormwater code to include water quantity and hydrology as a factor to be considered in stormwater permitting and planning.

Thank you!

Ellen Bynum

Ellen Bynum, Executive Director Friends of Skagit County 110 N. First St. #C P.O. Box 2632 (mailing) Mount Vernon, WA 98273-2632 360-419-0988 friends@fidalgo.net www.friendsofskagitcounty.org "A valley needs *FRIENDS*" 22nd Anniversary Common Goals Common Ground Common Good DONATE NOW at Network for Good \$\friends \common Goals \common Goals Carol Ehlers submitted the attached letter as well as three Department of Ecology publications at the public hearing on July 7, 2015. These publications can be found at and saved/printed from the following links:

"Vegetation Management: A Guide for Puget Sound Bluff Property Owners" (May 1993): <u>http://www.ecy.wa.gov/programs/sea/pubs/93-31/intro.html</u> (web version) <u>https://fortress.wa.gov/ecy/publications/documents/9331.pdf</u> (pdf version)

"Slope Stabilization and Erosion Control Using Vegetation" (May 1993): http://www.ecy.wa.gov/programs/sea/pubs/93-30/index.html (web version) https://fortress.wa.gov/ecy/publications/documents/9330.pdf (pdf version)

"Surface Water and Groundwater on Coastal Bluffs" (June 1995): <u>http://ww.ecy.wa.gov/programs/sea/pubs/95-107/intro.html</u> (web version <u>https://fortress.wa.gov/ecy/publications/SummaryPages/95107.html</u> (pdf version)

For PC Hearing 717(15	Storm water Code	
From C. d. Ehlers	• 	
Since Sc does not know this a	opy or the 3 others	that have
Jam having another copy made. Jam having another copy made. Jrequest ability to turn it in when Ms. Kendra Smith, Assistant Director done, Skagit County Planning Department C.JEL 200 West Washington St. Mount Vernon, WA 98273	٩	RECEIVED JUL 0 7 2015 SKAGIT COUNTY PDS
Re: Amendments to Drainage Ordinance, SCC 14	4.32 0CT 1 1 2002	
Dear Kendra,	Planning/Permit Ctr.	

There are legal and public relations difficulties that arise when the staff report for a hearing is made available only 24 hours before all written comments are due. Even though the text of the ordinance has, in this case, been available for some time, the staff report and assorted attached evidence flesh out the ordinance in ways that may either reassure or alarm, but less than 24 hours to respond is alarming in itself. The hearing on the drainage amendments is scheduled for Tuesday, October 15th, with written comments due on Friday. October 11. The Staff Report, dated October 9, was hand delivered in the late afternoon of October 10, or about 22 hours ago. In the Report, there seem to be assumptions about the negligible effects of logging on-site and off-site downhill that may well be debatable, but it takes time to read and analyse exactly what has been proposed.

The Written Comment period, therefore, really must be extended so there is a full week to consider the Report, or to Friday, October 18th.

Since Public Works must be involved in the approving of anything regarding surface water, it will be necessary for the Planning Commission to hear their opinion on the ordinance as well.

I have not yet found in the proposed ordinance. any relationship between the kinds of proposals to be evaluated and geologically hazardous areas. I have observed in my neighborhood that, in practice, the CAO and drainage rules seem to be uncorrelated and are risking already existing houses. This is not the first time there have been problems ignored. For proof and illustration of the things that can happen, I am turning in to the Planning Department a video that was material in the establishment of the County Drainage Utility and the South Burrows Bay Drainage Project. The video was taken in November, 1990, downhill from several land clearing projects at Seaview and The Pointe. Several minutes of the video needs to be shown the Planning Commission; the entire video must be shown those in the Planning Department responsible for correlating land-use approval, drainage, and geologic hazards.

Sincerely yours,

Cand

Carol Ehlers

C. J. Ehlers

ve 7(7/15 PC hearin

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what, then, is "ineffective"

Critical drainage area: those areas designated in SCC 14.32.110, Critical drainage areas, which have a high potential for stormwater quantity or quality problems.

Design storm event: a theoretical storm event of a given frequency interval and duration used in the analysis and design of a stormwater and drainage facility.

Developed site: the condition of the development site following completion of construction of the development including all approved phases of construction.

Diversion: the routing of stormwater to other than its natural discharge location.

Drainage feature: any natural or manmade structure, facility, conveyance, or topographic feature which has the potential to concentrate, convey, detain, retain, infiltrate, or affect the flow rate of stormwater runoff.

<u>Effective impervious surface: pursuant to the NPDES Permit, those impervious surfaces that are</u> connected via sheet flow or discrete conveyance (e.g., pipe, culvert) to a drainage system. Impervious surfaces are considered ineffective if:

(1) the runoff is dispersed through at least one hundred feet of native vegetation in accordance with BMP T5.30 – "Full Dispersion" as described in Chapter 5 of Volume V of the Stormwater Management Manual for Western Washington (SWMMWW) (2012);

(2) residential roof runoff is infiltrated in accordance with Downspout Full Infiltration Systems in BMP T5.10A in Volume III of the SWMMWW (2012); or

(3) approved continuous runoff modeling methods indicate that the entire runoff file is infiltrated.

Grubbing: the removal of vegetative matter from underground such as sod, stumps, roots, buried logs, or other debris, and shall include the incidental removal of topsoil to a depth not exceeding 12 inches.

Hard surface: an impervious surface, a permeable pavement, or a vegetated roof.

Hydrograph method: a method of estimating a hydrograph using a mathematical simulation. Commonly accepted hydrograph methods include the National Resource Conservation Service TR-55 Method and the Santa Barbara Urban Hydrograph Method.

Illicit discharge: any direct or indirect non-stormwater discharge to the stormwater system, except as expressly allowed in SCC 14.32.090.

Impervious surface: a hard surface area which either prevents or retards the entry of water into the soil mantle as under natural conditions prior to development. Impervious surface shall also include a hard surface area which causes water to run off the surface in greater quantities or at an increased rate of flow from the flow present under natural conditions prior to development. Common impervious surfaces include but are not limited to roof tops, walkways, patios, driveways, parking lots or storage areas, concrete or asphalt paving, gravel roads with compacted subgrade, packed earthen materials, and oiled, macadam or other surfaces which similarly impede the natural infiltration of stormwater. Open, uncovered retention/detention facilities shall not be considered as impervious surfaces. a non-vegetated surface area that either prevents or retards the entry of water into the soil mantle as under natural conditions prior to development. A non-vegetated surface area which causes water to run off the surface in greater quantities or at an increased rate of flow from the flow present under natural conditions prior to development. A non-vegetated surface area which causes water to run off the surface in greater quantities or at an increased rate of flow from the flow present under natural conditions prior to development. Common impervious surfaces include, but are not limited to rooftops, walkways, patios, driveways, parking lots or storage areas, concrete or asphalt paving, gravel roads,

"preßer original text - west Skagit County has a Santa Fe 2 elimate - very dry in summer. *

packen earthen materials, and oiled, macadam or other surfaces which similarly impeded the natural flow of stormwater.

Illicit discharge: any direct or indirect non-stormwater discharge to the stormwater system, except as expressly allowed in SCC 14.32.090.

Land disturbing activity: any activity that results in a change in the existing soil cover (both vegetative and non-vegetative) and/or the existing soil topography. Land disturbing activities include but are not limited to demolition, construction, paving, clearing, grading, and grubbing. any activity that results in a change in the existing soil cover (both vegetative and non-vegetative) and/or the existing soil topography. Land disturbing activities include, but are not limited to clearing, grading, filling and excavation. Compaction that is associated with stabilization of structures and road construction shall also be considered land disturbing activity. Vegetation maintenance practices, including landscape maintenance and gardening, are not considered land disturbing activity. Stormwater facility maintenance is not considered land disturbing activity if conducted according to established standards and procedures.

Large development: any new development or any redevelopment activity that includes: (1) The creation or cumulative addition of 5,000 square feet or greater of impervious surface area from the predevelopment conditions; or (2) Land disturbing activity of 1 acre or greater; or (3) Grading involving the movement of 500 cubic yards or more of material.

Low-impact development (LID): a stormwater and land use management strategy that strives to mimic pre-disturbance hydrologic processes of infiltration, filtration, storage, evaporation, and transpiration by emphasizing conservation, use of on-site natural features, site planning, and distributed stormwater management practices that are integrated into a project design.

Native vegetation: plant species which are indigenous to the area. pursuant to the NPDES Permit, vegetation composed of plant species other than noxious weeds that are indigenous to the coastal region of the Pacific Northwest and which reasonably could have been expected to occur naturally on the site. Examples include trees such as Douglas Fir, western hemlock, western red cedar, alder, big-leaf maple, and vine maple; shrubs such as willow, elderberry, salmonberry, and salal; and herbaceous plants such as sword fern, foam flower, and fireweed.

Non-stormwater discharge: any discharge to the stormwater system that is not composed entirely of stormwater.

NPDES Permit Area: The area of unincorporated Skagit County defined by the Department of Ecology's Phase II Western Washington Municipal Stormwater Permit (modified January 16, 2014), issued pursuant to the federal National Pollutant Discharge Elimination System.

Operation and maintenance manual: a written manual, prepared by a professional engineer, that provides a description of operation and maintenance procedures for specific stormwater control facilities for use by operation and maintenance personnel.

Peak discharge: the maximum surface water runoff rate determined for the design storm.

Permanent stormwater control plan (PSCP): a plan which includes permanent BMPs for the control of pollution from stormwater runoff after construction and/or land disturbing activity has been completed.

Permeable pavement: Pervious concrete, porous asphalt, permeable pavers or other forms of pervious or porous paving material intended to allow passage of water through the pavement section.

good-but where is water management for a single family home? My uphill neighbor has "low impact" - I get all the impact from his water.

soils engineer, who shall be directly involved in the soil characterization either by performing the investigation or by directly supervising employees.

Source control BMP: a best management practice (BMP) that is intended to prevent pollutants from entering stormwater. Examples include, but are not limited to, erosion control practices, maintenance of stormwater and drainage facilities, constructing roofs over storage and working areas, and directing wash water and similar discharges to the sanitary sewer or a dead-end sump.

Stabilized: The application of BMPs or other approved mitigation plan sufficient to protect soil from the erosive forces of raindrop impact and flowing water. Examples include, but are not limited to, vegetative establishment, mulching, plastic covering, the early application of gravel base, and outlet and channel protection.

Stormwater means runoff during and following precipitation and snowmelt events, including surface runoff, drainage, or interflow.

Stormwater Design Management Manual: the Stormwater Management Manual for Western Washington or a subsequent manual adopted by Ecology the County's manual for design of stormwater facilities, as adopted in SCC 14.32.040.

Stormwater facility: a component of a manmade drainage feature or features designed or constructed to perform a particular function or multiple functions. These include, but are not limited to, pipes, swales, ditches, culverts, street gutters, detention basins, retention basins, wetponds, constructed wetlands, infiltration devices, catch basins, and sediment basins, and low-impact development facilities. Stormwater facilities shall not "Stormwater facility" does not include building gutters, downspouts, and drains serving <u>1-only one</u> single-family residence.

Stormwater Pollution Prevention Plan (SWPPP): a document which describes the best management practices and activities to be implemented by a person to identify sources of pollution or contamination at a premises and the actions to eliminate or reduce pollutant discharges to stormwater, stormwater conveyance systems, and/or receiving waters to the maximum extent practicable.

Stormwater quality control: the control of the introduction of pollutants into stormwater and the process of separating pollutants from stormwater. Stormwater quality control facilities include, but are not limited to, source controls, biofiltration/biofilter facilities, wetponds, wetland forebays, constructed wetlands, and erosion and sedimentation control facilities.

Stormwater quantity control: the control of the rate and/or volume of stormwater released from a development site. Stormwater quantity control facilities include, but are not limited to, detention and retention facilities.

Stormwater system: all natural and manmade systems that function together or independently to collect, store, purify, discharge, and convey stormwater. Included are all stormwater and drainage facilities as well as natural systems such as streams and creeks and all natural systems which convey, store, infiltrate, or divert stormwater.

Technical deviation: permission granted by the Administrative Official to deviate from the provisions of the Stormwater Design Manual (when technical analysis can support it).

Treated: water quality treatment in accordance with current adopted Skagit County standards.

Water quality design storm event: the water quality design storm used for the design of water quality treatment facilities shall be the 6-month frequency, 24-hour duration storm event. In that the

Megligence of owner or Sc road drains? See text from 1962 plat: it could be copied from plats 1845-1888.

- (4) Exemptions.
 - (a) The following discharges are exempt from the provisions of this Section:
 - (i) The regulated effluent from any commercial or municipal facility holding a valid State or Federal wastewater discharge permit or NPDES stormwater permit.
 - (ii) Acts of God or nature not compounded by human pegligence.
 - (iii) Properly operating on-site domestic sewage systems.
 - (iv) Discharges from agricultural activities that are compliant with SCC 14.24.120.
 - (b) A person does not commit an illicit discharge if:
 - That person has properly designed, constructed, implemented and is maintaining BMPs and is carrying out AKART as required by SCC Chapter 14.32, even if pollutants continue to enter surface and stormwater or groundwater; or
 - (ii) That person can demonstrate that there are no additional pollutants being discharged from the site above the background conditions of the water entering the site.
- (5) Best Management Practices (BMPs).
 - (a) Compliance with this Chapter must be achieved through the use of best management practices described in the Stormwater Management Manual or as described below.
 - (b) BMPs must be applied to any business or residential activity that might result in illicit discharges. In applying the Stormwater Management Manual, the Administrative Official must first require the implementation of source control BMPs. If these are not sufficient to prevent pollutants from entering stormwater, the Administrative Official may require implementation of treatment BMPs as set forth in AKART (all known, available, and reasonable methods of prevention and treatment technology).

16.32.040 Illicit connections and uses.

- (1) No person may use the stormwater system, directly or indirectly, to dispose of any solid or liquid matter other than stormwater.
- (2) No person may make, allow, use, or allow the continued existence of any connection to the stormwater system that could result in an illicit discharge.
- (3) Connections to the stormwater system from the interiors of structures are prohibited.
- (4) Connections to the stormwater system for any purpose other than to convey stormwater or groundwater are prohibited and must be eliminated.

16.32.050 Inspection and enforcement.

The Administrative Official is authorized to carry out inspection and enforcement actions pursuant to SCC Chapter 14.44, Enforcement/Penalties.



	Tent on drainage, plats 1945 - 1998, at least	8
	RA	
	KNOW ALL MEN BY THESE PRESENTS, that we, the undersigned, Orville B. McCorkle and Esther M. McCorkle, his wife owners in fee simple of the locic hereby plated of the locie of the locic hereby plated of the locie of the loci of	
	to be known as RANCHO SAN JUAN DEL MAR, SUBDIVISION NO. 8, and dedicate to the use of the	
	and the use there of for any and all public purposes not inconsistent with the use there of for public high-	3 m
	upon the lots or tracts shown on the plat in the reasonable original grading of all the streets shown thereon, also easement for roads. Water mains and power lines on such late or tracte as is parameters	
T	for ingress and egress to adjacent lots or tracts, and also the right to drain all streets, over and across any lot or lots where water might take a mirre after the drain all streets, over and	
	tracts or parcels of land embraced in this plat are subject to and shall be sold only under the fol-	
a.	or parcel of this plot or adjoining property as designated which does not conform to Stagit County Zoning Regulations. The lots or tracts herein to he cold chall he used for dusting and the	o par
	and no part thereof shall be used for dance hall, store, amusement resort or for any commercial purpose of any kind or nature whatsoever Only one main residence to the any commercial	
	to cost not less than twelve thousand dollars, and any dwelling or structure erected or placed on any lot in this plat shall be completed as to external appaarance within an use for the structure erected or placed on	
2		
	a husband and wife shall be considered as one owner. All residence units shall be con- nected to a septic tank and drain field. No building or structure shall be built or constructed on	
	nearer than forty (40) feet from the outer boundary line of Lots 1, 2, 6, 7, 8, 9 and 10, to wit, the boundary line neorest the waters of Puget Sound. Purchaser agrees to purchase a membership in	

From:	Diane
To:	PDS comments
Subject:	"Stormwater Code Update" - July 5th
Date:	Friday, June 12, 2015 10:56:16 AM
Importance:	High

Attention: Michael See, Public Works Water Resources Section Manager, et al

Given our State's current focus on local drought conditions and the Federal government's June 8th inquiry regarding the severity of same, we wonder if the Stormwater Code Update hearing should be postponed for an indefinite period of time.

Your consideration and response would be much appreciated.

Thank you! Diane Freethy, *President SKAGIT CITIZENS ALLIANCE for RURAL PRESERVATION* PO Box 762, Sedro-Woolley WA 98284 360-856-2290 Peter Haase 14951 Benson heights, Bow 98232

Regarding LID requirements in NPDES permit ..

I like the general use of the Stormwater Manual in the permit, rather than using customized wordings. I suspect most engineers, architects, designers, builders, contractors, landscapers, etc. work in many cities and counties around here and the Stormwater Manual is probably most well used and understood by them and they are familiar with it's practices. wordings, and requirments.

Thanks.