

From: [Heather Richards](#)
To: [Sarah Sullivan](#)
Subject: Fwd: Form submission from: Contact the City of McMinnville
Date: Tuesday, April 23, 2019 11:13:38 AM

Heather Richards
Sent from my Iphone

Begin forwarded message:

From: Melissa Bisset <Melissa.Bisset@mcminnvilleoregon.gov>
Date: April 22, 2019 at 8:08:31 AM PDT
To: Heather Richards <Heather.Richards@mcminnvilleoregon.gov>
Subject: FW: Form submission from: Contact the City of McMinnville

-----Original Message-----

From: McMinnville Oregon via McMinnville Oregon
<scott.burke@mcminnvilleoregon.gov>
Sent: Saturday, April 20, 2019 7:33 AM
To: Melissa Bisset <Melissa.Bisset@mcminnvilleoregon.gov>
Subject: Form submission from: Contact the City of McMinnville

Submitted on Saturday, April 20, 2019 - 7:32am Submitted by anonymous user:
172.16.64.18 Submitted values are:

Attention Department: Planning Commission First Name: Valerie Last Name:
Kelly
Email: vjk97214@gmail.com
Question/Comment:

I am somewhat new to McMinnville, having moved here in June of last year. I recently retired from the U.S. Geological Survey after more than twenty years working as a hydrologist. Additionally I completed a PhD in Fisheries with an emphasis in stream ecology ten years ago, and taught fish ecology and stream ecology at Portland State University for six years. This subject is my passion!

I attended the planning commission meeting on Thursday April 18 that focused on the planned development north of Baker Creek Road. While I stayed only for the staff report, not realizing how long the meeting was likely to last, I have a few thoughts to share with the commission. Please forgive any redundancies if these thoughts were shared in testimony.

First, and perhaps primarily, a reminder that delineation of floodplain extent and wetland function is not an exact science but rather a sophisticated statistical guess based on assumptions of the probability distribution and the availability of prior data. It may be the best guess we have but we should be very careful not to put

too much weight on these guesses. The first thing to know is that there is no long-term streamflow record for Baker Creek, apparently no data at all, none collected by U.S. Geological Survey or Oregon Water Resources Department. So peak flow estimates are based on interpolation from other data, which are scarce.

These estimates are therefore associated with wide error bars, and these errors are not shown on the floodplain maps. Since they are not shown they are not considered in planning, easily forgotten despite being critical elements of the situation. This uncertainty in predicting the volume and frequency of flood magnitude is further compounded by

the changes in hydrologic regime that are occurring as climate changes, and which suggest more frequent occurrence of extreme events may be likely. So I suggest that greater care be taken in interpreting and using these maps to guide planning decisions.

One thing to consider that I did not hear from the staff report on Thursday night, though perhaps it was mentioned in testimony after I left the meeting: the criteria and regulations that have been established should not be considered the only basis for deciding how to proceed. Of course we must abide by these bounds, but that does not mean that our decisions should proceed directly to building houses right up to the edges of floodplain and wetland shown on the maps without further consideration. We definitely should not forget the wide error bars associated with those maps, and especially should not ignore the hydrologic connectivity that certainly exists between stream and wetland, that is, the larger context for this development. It seems imperative to me that the planning commission should not simply rely on criteria and regulation as guard-posts and ignore the larger view of the situation. There are so many reasons why that is not a reliable assessment of what is possible.

Of course the City needs to provide homes for the growing population in McMinnville. Nonetheless, I suggest that limiting the number of houses around the edges of this development might be worth considering so that homes need not be built up so close to the so-called limits of the wetland and the floodplain. In this way, the City takes reasonable care that homeowners are not subject to inordinate risk of wetland inundation or flooding.

Thank you for your careful consideration of these thoughts.

Best--Valerie

The results of this submission may be viewed at:

<https://www.mcminnvilleoregon.gov/node/7/submission/16461>