

STORMWATER ORDINANCE UPDATE
TECHNICAL ADVISORY COMMITTEE (TAC)
Meeting #10: Wednesday, December 12, 2007
Clark County Operations Conference Room B-1
4700 NE 78th St.
1:30 - 3:30 p.m.

REVISED NOTES

Agenda / Introduction

Members Attending

Patrick Harbison, Mike Misiak, Chad McMurry, Jennifer McClure, Fereidoon Safdari, Mike Soliwoda, Ali Safayi, Fereidoon Safdari, Gordon Euler, Scott Wilson

Members Absent

Patrick Harbison, John Milne

Staff

Tim Kraft, Robin Krause, Trista Kobluskie, Sue Stepan, Matt Hall

Audience

Sean Darcy, Jay Oster, Andrew Stoeckinger

The notes from the November 28, 2007 meeting were approved as submitted.

The group discussed the recent flooding events in the Northwest. Does it affect how we build our stormwater code? Most jurisdictions have compensatory storage when building/filling in a floodplain.

Mr. Safdari noted that Gee Creek showed 10-year flows (900 cfs) even though the rainfall did not reach a 10-year event level. There is not much development within that basin yet. Mr. Kraft: rainfall variation was significant throughout this region. In some areas, there was a 10-year recurrence rainfall. Mr. Wilson: no roads overtopped. Salmon Creek did OK. Mr. Krause: although Klineline Bridge is still closed due to scour.

Board Work Session

Mr. Krause summarized the work session with the Board of County Commissioners on December 9. The BOCC announced that it is not supportive of forested for the pre-European settlement condition. The administrative appeal period is over, and this provision was not appealed as part of the Phase I permittee appeal. At the next work session, we hope the BOCC will clarify what Commissioners perceive is the purpose and intent of the stormwater code, and staff will provide examples. Staff will present an approach to the next work session to SAC at its next meeting. TAC decided early on that this is a policy-level issue and so would not address it.

Mr. Kraft: we're brainstorming ideas to present in lieu of that requirement. Mr. Misiak offered a proposed retrofit strategy that WSDOT has submitted to DOE for approval, but it requires a

lot more effort on WSDOT for accounting. Mr. Krause: it would be like taking credit for all the Clean Water Program projects in our capital facilities projects. Mr. Misiak: kind of like wetland banking. Mr. Kraft: stormwater banking. Mr. Kraft: instead of doing flow control to forested condition on a tiny stretch of highway, let's do some mitigation for the whole stretch perhaps to a lower level. Mr. Krause: the approach that WSDOT is proposing to use will offer a list of sites, scoped and prioritized in the basin. Mr. McMurry: it would be nice not to have to do a whole basin plan (privately) in order to apply the banking. Mr. Krause: the county would have to do basin planning to say what sites are suitable for mitigation. Otherwise, developers could pick anywhere. Mr. Safdari: in Washington County, every basin has been studied at least twice. Clark County must go in that direction. Mr. McMurry asked what will happen to projects that fall between the adoption of the new code and when the first basin studies would be finished in a couple of years. Mr. Misiak: a longstanding dilemma is using the one-size-fits-all approach. Doing local studies for site specific variability could help provide efficiency and latitude for how development occurs. It would require more of Clark County to manage something like that. Mr. Krause: right - and it all depends on basin studies, to find different standards for different localities. Mr. Misiak: find what areas were predominantly prairie rather than forest. Mr. Krause: we found some good maps that showed that the historic prairie was either wetland or areas that infiltrate really well, so it does not help the regulation. Pierce County was able to get a different flow standard for one of their creeks. Ecology is happy to hear scientific-based proposals for changing the standards, but our understanding is that they are not entertaining policy-based proposals.

Ms. McClure: isn't it reasonable to say that the streams have adjusted to the development and status quo flow they get today is now healthy for them and reducing flows to forested conditions would affect the ecosystems that have evolved? [Point of information: the studies that we do have don't support that claim. Depending on the soil, streams can remain stable or continue to degrade.] In the situation of wetlands, Minimum Requirement number 8 says you can't change the hydroperiod.

Decisions from Last Meeting / Action Items

Low Impact Development

Mr. McMurry commented on the Bridge Creek Village site, which was used as an example of LID. The pervious pavement sidewalks would have worked, but a 10'x10' raingarden would not fit on any of the lots. Therefore, the LID analysis is not accurate in showing how much pond size could be reduced in the real world. Mr. Kraft: correct. The pond size reduction is accurate only if you could fit all of the LID techniques on the development. Krause: raingardens are not the only LID technique available. Is there another LID practice that could be used on a lot that size with a similar impact? Mr. Misiak: reduce street widths. Mr. McMurry: make parking area pervious. I want to reflect what challenges developers deal with in reality. Mr. Kraft: our objective was not to find out what will fit on a small lot. If we need to do that analysis, then maybe we should do that separately.

Mr. Misiak argued that the concept of low impact development is so much more than these specific structural BMPs. By breaking down the LID planning process, you may not get measurable benefits. Developers may not have any incentives to go that route if they can't use some of the other aspects.

The group discussed other options, including narrower street widths and pervious pavement on neighborhood roads (less than neighborhood collector). Another option is to allow stormwater ponds to be subtracted from the density calculations.

Mr. McMurry: we can't address transportation code and other codes. Mr. Krause: we can take those ideas as next steps. Mr. McMurry: pond size is not subtractable from density

requirements. Mr. Safayi: what about combining raingardens then they don't have to be on the lot, then you could subtract that area from the density requirements. That would provide flexibility and let you get the same number of lots. He stated that there is also a conflict with Fire Districts on narrow streets.

Mr. Wilson's concerns about using pervious concrete on neighborhood roads were contractors dumping stuff on the weekends and allowing moisture in subgrade.

Mr. Krause listed several ideas that SAC had suggested

- Density transfer
- Density bonus
- Reduced minimum lot size
- Pervious pavement
- Narrow streets
- Property tax incentive for LID
- Expedited review for LID proposals
- Simplified review for LID proposals
- Remove frontage improvement requirements in some situations

Mr. Euler: Vancouver and the county applied to Community Trade and Economic Development (CTED) for a \$125,000 grant to look at impediments to sustainable development in building code. One objective is to find 6-8 successfully completed sustainable projects permitted in other jurisdictions and run them through local code to find the impediments.

Mr. Misiak: the principles of LID seem better suited to low density than high density. Is there a threshold where LID can't be considered? Mr. Euler: one potential aspect of the grant investigation is to find how small you can go.

The group discussed eliminating frontage improvement requirements for development in order to compensate for increased cost of managing stormwater. 200' of new curb & sidewalk in an area with no curbs and no plans for road updates is not necessary. Mr. Safayi explained that code already has two mechanisms for exempting frontage improvements for infill. Mr. Krause suggested that code could be improved by allowing the exemption for more than just infill and by putting it in code instead of requiring administrative review. Mr. Safayi replied that Community Development is attempting to modify code to require frontage improvements based on the number of trips generated. Otak is doing a study - first in nation - to figure out what is proportional and what is not. This would allow staff to have a scientific basis for frontage improvements.

Mr. Krause stated that the trip generations justify significant frontage upgrades. Our idea is to automatically exempt frontage improvements on small projects because they have no value. Mr. McMurry: when the road gets improved, those tiny frontage improvements get torn out.

Mr. McMurry advocated pursuing the idea of frontage improvement exemptions. Mr. Safayi: trying to get into the transportation code will not fit into the timeline. Mr. Krause: correct, but the advisory committees can recommend further changes to code to occur in the future.

LID Manual

Mr. Kraft: one of the downsides of what we're doing is that we're reinforcing the incorrect idea that LID is a way to reduce pond sizes. LID is actually a holistic approach that starts in the planning phase, and would involve updates to planning codes, transportation codes, and building codes in addition to stormwater codes. Unfortunately, with our short timeline, the most we have time to do is to introduce some LID components into the stormwater code. Mr.

Misiak suggested that the approach may backfire; the available techniques are so constrained that they may not provide tangible benefits, thereby turning off developers. Mr. Krause: the intent is to provide some standard to review and approve to. Whether or not developers use the whole approach, the county must provide some LID tools in the toolbox. Also, our approach of using a manual will allow updates as technology changes and as the county has time to evaluate other aspects of LID.

Ms. McClure argued that developers need LID tools now. Mr. Misiak asked if the county can reasonably get the manual done by February. Mr. Krause: we can get the design details and design standards done by the August deadline. Mr. Safdari: and a maintenance manual. Mr. Kraft: we need to add Construction Qualifications.

Ms. McClure suggested an after-construction check to make sure raingardens work; many of them fail due to construction compaction. Mr. Kraft: we have got to revisit infiltration in this group. It will be back on the agenda, including how we address it in LID approaches.

Submittal Requirements

Mr. McMurry contended that current code is confusing on stormwater submittal requirements for several reasons. Language is confusing because different terms are used interchangeably, so it is hard to know if what is required is a report, drawing, or 24 x 36 plan sheet. Information frequently is required in multiple places; for instance, there is a lot of overlap between the Preliminary Stormwater Report submittal requirement and the Preliminary Development Plan requirement. Mr. Krause questioned whether duplicate information needs to be provided on the engineering plan, the preliminary plan, and in the report. Mr. Safayi questioned whether the complaint is the terminology or the provision of certain information. Information is used to find out if there is a conflict. Mr. McMurry: just *how* we have to submit information.

Mr. McMurry: it is hard to see what is clearly expected. There are some overlaps and some duplication of information. GIS packets provide a lot of information that was not available when these requirements were made. Reduce duplication of information that is required. He clarified that the stage in question is after pre-application, when making a formal application for approval of site plan, but before construction documents.

Mr. Safayi thought some duplication is appropriate. Some of the critical information needs to be with the plan itself in order to facilitate review. Staff cannot go through a 400-page Technical Information Report (TIR) to find critical information.

Mr. McMurry requested a code that allows the relevant information to be presented in the best and clearest way and not multiple times.

(A) - General

Mr. Kraft stated that this is pretty much the same as current code.

(B) - Preliminary Stormwater Plan Submittal Requirements

Mr. Kraft: has a lot of the same, and some text (in green) that is verbatim from code but is in different sections from current code. (5) Preliminary Stormwater Design Report. What is your existing site plan, follow the procedures in the new Ecology manual - look at applicability to find out which Minimum Requirements apply, then work your way down to determining sizes of facilities, then look at roof downspout feasibility.

Mr. Misiak and Mr. Kraft discussed the order of information. Mr. Misiak stated that at a project level, don't you have to evaluate project-level things prior to the requirement-level. This is written to match Chapter 4, so submittal requirements will match.

Mr. Krause asked the group to discuss the intent of this section. Should it be a how to? Should it list out the data required for submittal? If we want it to be a how to, then we need to review & comment with that in mind. If it should be a list, it should be reviewed in that light.

Mr. Misiak: think about the reader; how will they interpret the intent. Without any real direction up front, you might not know where to go. Mr. Kraft: it can reference Chapter 4 of the Ecology Manual. Mr. Krause: yes, this should be the list and the manual should be the how to. Mr. McMurry: when you turn your book in, here is what has to be in it. Mr. Safayi: the goal is to turn in enough information to get to feasibility for stormwater. Mr. Kraft: this is not supposed to be THE how to, but the intent is to follow along with the how to manual.

Mr. Misiak: as an example, the 50% requirement is in Ecology's Manual. Mr. Krause: it will be in the threshold section of the code (.020). Is that presumed to be known? Mr. Safayi: putting the exemption in that section like B(2) makes it a how to. Mr. McMurry thought that Mr. Safayi was making a distinction between how to determine whether to submit a paper, report, or letter in the Preliminary Stormwater Plan Submittal Requirements and how to determine which Minimum Requirements apply.

Mr. Darcy asked if submittal requirements should be in code or in a reference document. Mr. Safayi: many jurisdictions refer to a checklist or matrix. Mr. Krause: right, King County has a list that you fill out that gives the reviewer all the critical information. So does Portland. Mr. Misiak: can you enforce it if it is not in code? Mr. Krause: code must reference the form. Mr. Safayi suggested that the form/list/matrix be in the standard detail manual.

Mr. Euler agreed that submittal requirements should be very brief. It should state no more than what information is required and at what time. He referenced Clark County Code 40.500 Site Plan Submittal Requirements. It says: if you're doing this type, submit this, and if you're doing that type, submit that. Mr. McMurry: you need a fairly well-defined list to avoid the discussion "you need to provide *this* in order to demonstrate that you've met *that*."

Mr. Euler said that an example of gratuitous wording is "Identify runoff treatment facilities proposed for all TDAs." That's fine, then "Follow the procedure for identifying facilities in..." you don't need that. You're already supposed to know how to get that information. You just need to say, "Get the information, put it on a piece of paper."

Mr. Krause: some easy wordsmithing would get us to Mr. Euler's solution. Mr. Euler: if some stuff is preliminary and some final, make two columns and put a box in either on or the other (or both). Ms. McClure approved the checklist idea in the standard details. It is flexible as these things keep evolving, and it is easier to reference than code. It is easier to verify I've provided all the required information. Mr. Misiak: would you have to write a checklist for each type of development? Mr. McMurry: no, a single checklist should work, but the supporting information gets more complicated. Mr. Safayi: and you can always say that a requirement is N/A if it does not apply to your project.

Mr. Kraft asked if reviewers want information such as which Minimum Requirements apply and how that was determined? Minimum Requirement. Safayi: definitely. We want to see in detail how a developer decides which Minimum Requirements apply. Minimum Requirement. Krause: the difference is between saying "go find out which Minimum Requirements apply, and here's how" vs. "state which Minimum Requirements apply and how you determined that." We could have a set list of submittal requirements for each Minimum Requirement. Mr. Kraft questioned if that would reduce or lengthen the code. Mr. McMurry noted that the Ecology manual has report writing instructions for jurisdictions that have no separate requirement. Mr. Safayi suggested that it might be redundant. Ms. McClure said that the Minimum Requirements stack and would be unlikely to require duplicate information.

Mr. Darcy: the code is supposed to be black & white. Mr. Krause: our code is all-inclusive. We don't have a separate stormwater manual. Mr. Euler: we're basically saying, send us an encyclopedia. You need to decide on a level of detail; I am seeing more in here than needs to be there. The regulation section should guide all decisions about what is required to be *done or analyzed* while the submittal section should guide only *what information must be submitted to demonstrate compliance*.

Mr. Safayi recommended clarifying the location of internet links, in case the linked document's location changes, such as on page 5. Mr. Kraft: we can reference "the Clark County stormwater web site." Mr. Krause tabled that question until later.

Mr. Safdari: what is the status of requiring FIRM maps? The currently adopted ones still apply. Ms. Stepan: FEMA is analyzing new maps. Both sets are available online. The issue is in legal discussion and not appropriate for this forum.

Mr. Safayi: on page 7, the reference to SCS must change to NRCS.

Mr. Safayi: there was a question on the submittal of abbreviated stormwater plan, which showed under exemptions. Is there a section for that in here? Mr. Kraft: the only thing we talked about requiring is for single family rural, agricultural, and drainage projects. Those have not been written up yet; I've got a placeholder for them. Mr. Safayi: E - G has a drainage project submittal. Mr. Krause: if we structure submittal requirements so that we say, if Minimum Requirement 6 applies, do this, and then we couldn't have different submittal requirements for those rural single family homes.

Mr. McMurry requested that reports be organized similarly, so preliminary can become final report, with modifications. Currently, the formats are so different that the preliminary report gets chucked.

Mr. Kraft stated that he would rearrange the submittal requirements in order of the Minimum Requirements. Ms. McClure recommended also using a different word than "identify", which is ambiguous.

Mr. McMurry reiterated that each report, plan, drawing must be defined and use each term used consistently.

Mr. Krause asked for comments prior to the next TAC meeting on January 9, 2008.

Respectfully Submitted,
Trista Kobluskie