

STORMWATER ORDINANCE UPDATE
TECHNICAL ADVISORY COMMITTEE (TAC)
Meeting #2: Wednesday, August 22, 2007
Washington Department of Fish and Wildlife
2108 Grand Boulevard
1:30 - 3:30

R E V I S E D N O T E S

Agenda / Comments

Members Attending

Gordon Euler, Patrick Harbison, Tim Kraft, Robin Krause, Jennifer McClure, Chad McMurry, Mike Misiak, Ali Safayi, Fereidoon Safdari

Members Absent

Tom Grange, Mike Soliwoda

Staff

Trista Kobluskie, Joel Rupley, Sue Stepan

Audience

Bob Carpenter, Sean Darcy, Eric Golemo, Jason Mattos, Andrew Stoeckinger, Tim Wines

The TAC Meeting #1 Notes were approved as submitted.

Mr. Krause reviewed the agenda. Today's objectives are to review the concept code on applicability written in response to Meeting #1, and to discuss exceptions and exemptions and Minimum Requirement 6: Water Quality Treatment.

Mr. Krause invited TAC members to the next Stakeholders Advisory Committee (SAC) meeting on September 11, 2007 from 6:00 - 8:00 p.m. at Public Works Operations Conference Room B-1, 4700 NE 78th Street, Vancouver. SAC convened last week and expanded the list of interested parties. The committee will discuss thresholds at the next meeting.

Mr. Krause reviewed the August 13, 2007 Technical Memorandum "Stormwater Ordinance Review for Clark County, WA," that compares other agencies' and jurisdictions' approaches to incorporating NPDES municipal permit requirements. Mr. Misiak clarified that WSDOT does not currently require forested conditions as existing. Mr. McMurry questioned if the city of Tacoma maintains a calibrated HSPF model for analysis. Mr. Kraft: only where they have done watershed analysis. Mr. McMurry questioned the accuracy of the page 15 statement "...but does make an exception for locating LIDs within the outer 25 percent of a Category III or IV wetland." Mr. Kraft will re-review the City of Bellingham's ordinance.

Mr. Krause invited TAC members to the Design Engineering Advisory Board (DEAB) meeting on September 6, 2007 at 2:30 p.m. at the Public Service Center, 6th Floor Hearing Room, 1300 Franklin St., Vancouver.

Mr. Krause discussed a preliminary plan to host an Ecology seminar to instruct users on modifying HSPF models for local Clark County conditions. A more general training on using that system will be going on locally in Vancouver in October. If the training conflicts with a TAC meeting, TAC will be rescheduled.

Definitions

Mr. Kraft said that Clark County development code contains all definitions in 40.100.070. He will make a master definitions document to compare county and Ecology terminology.

The group discussed options for defining terms in code, including:

- Add to / modify definitions in 40.100.070
- Reference definitions in the *2005 Manual's* glossary
- Define terms in stormwater code chapters for the chapters
- Where conflicting definitions exist, substitute a different term, and define it

Mr. Euler noted that revising definitions in 40.100.070 could impact other chapters of the code and would require research. Defining terms consistently throughout Title 40 is desirable.

Mr. Rupley stated that some definitions were added to 40.100.070 when the Habitat Ordinance was updated recently.

Other concerns include identifying which terms and chapters supersede others in case of conflict.

Mr. Kraft stated that TAC can use the list of master definitions to identify potential conflicts and terms that need revision in code.

Applicability Concept Code

Mr. Kraft presented the concept code written in response to the TAC meeting #1 discussion. He asked for comments.

Mr. Krause asked for feedback on the format of presenting changes.

Section 1 Purpose

Mr. Kraft stated that purpose statements can be important during appeals. The text is verbatim from CCC 40.380 until further review, likely at a SAC meeting.

Section 3 Applicability

The majority of the language in the Applicability section is verbatim from the *2005 Manual* with insertions of some details from existing code and proposed new language. It is the text from the threshold flow charts discussed at the last meeting, and it adds in specifics of county code.

Mr. McMurry asked about the difference between the permit's requirements 1-9 and the *2005 Manual's* requirements 1-10, the last being basin planning. The group will discuss this later.

Mr. Harbison asked about the applicability of releasing to a large water body. Mr. Safayi replied that direct discharges in a closed conduit directly to a large water body are allowed. Mr. Krause: the *2005 Manual* covers this in the details of Minimum Requirement 7.

Mr. Kraft: the committee has not reached a resolution on retaining the thresholds in CCC 40.380 that are more stringent than the *2005 Manual*.

3.1 New Development

Mr. Krause quoted from the 1977 manual for King and Snohomish counties that 5,000 sq. ft. is a "reasonable size lot to operate and maintain stormwater facilities." Mr. Krause noted that smaller runoff quantities result in small orifices that can be plugged by a pebble. Mr. Harbison asked if the trend toward underground facilities changes the base assumption that sizing a facility to handle runoff from less than 5,000 sq. ft. is largely unworkable. Mr. McMurry stated that a reasonably-sized orifice is still necessary, to protect it from clogging.

Mr. McMurry advocated removing the 2,000 sq. ft. threshold from code because

- It already needs to meet Minimum Requirements 1-5
- 3,000 sq. ft. of impervious usually will not result in significant impact on wetland hydrology
- Stormwater quantity and duration requirements (spoken of as "modeling requirements" in the discussion) are more stringent (e.g. he has gotten 1" orifices for 3-acre sites)

Mr. Krause stated that the specific requirement only applies when a 0.1 cubic feet per second (cfs) flow change occurs, so even if the threshold were to remain at 2,000 sq. ft., it is possible that those smaller developments would rarely trigger the requirement anyway.

Mr. Safayi pointed out that crossing out "activities" on the p. 2 line 7 may result in conflicts. Other parts of the code specify that the redevelopment "activity," not the redevelopment itself, triggers requirements. Staff will look into this.

Mr. Misiak asked about the first bullet on p. 1, line 30. Mr. Safayi replied that "replaced" was added to the code to fix problems. Mr. Misiak asked if it falls under Redevelopment. Mr. Krause stated that it is covered where it says "new or new plus replaced." Mr. Misiak said that it looks redundant, but it is for a different type of activity. Mr. Harbison said that the only difference is between development and redevelopment.

Mr. Misiak and Mr. Harbison discussed whether applicants might be confused by the 2,000 sq. ft. verbiage on p. 1, line 30 and the 2,000 sq. ft. verbiage on p. 2, line 2, which result in different requirements. Mr. Krause noted the discrepancy in the language.

Mr. Krause asked the committee to focus on the intent, rather than the exact verbiage.

Mr. McMurry requested the code to contain the titles of the minimum requirements near the top, to facilitate reading and comprehension of the code.

Mr. Misiak reiterated that higher requirements for detention might call for removing the 2,000 sq. ft. urban threshold; meeting requirements 6-9 might be difficult on smaller sites. Mr. Safayi said that under current code, most short plats trigger quantity and quality control; he asked if designing, constructing and maintaining a facility is feasible on a 2-lot short plat. He suggested using the 5,000 sq. ft. threshold across the board. Mr. McMurry agreed.

Mr. Harbison contended that for water quality, every little bit helps; for quantity requirements, the 2,000 sq. ft. threshold might be low. Mr. Misiak replied that the 2,000 sq. ft. threshold would still trigger Minimum Requirements 1-5. Mr. McMurry agreed, the 2,000 would still trigger source control, temporary erosion sediment control, a stormwater pollution prevention plan, and management of stormwater onsite, if possible.

Recommendations

Mr. Kraft asked if TAC recommends striking out "Creates or adds 2,000 square feet, or more, of new impervious surface within an urban area, or" from section 3.1 of the

concept code on p. 2, lines 2-3. Mr. McMurry: yes, but not from the list that triggers minimum requirements 1-5.

Mr. Kraft asked if TAC recommends striking out "within a rural area" from section 3.1 of the concept code on p. 2, line 5 so that language in the concept code will match the thresholds set forth by the permit. Mr. McMurry: correct, TAC recommends this.

Mr. Safayi asked why bullet items 11-13 on p. 2, lines 23-27 are less stringent than requirements in Appendix 1, p. 19 "Treatment-Type Thresholds," of the permit. There are even requirements for treating landscape areas in commercial and industrial development.

Mr. Safayi discussed the current code for oil control, which is much less stringent than Appendix 1, especially for apartment complexes and intersections.

Mr. Kraft asked if any of the bullet items 1-13 on p. 2, lines 10-27 duplicate Appendix 1, page 20 and thus could be removed without leaving anything out. He used a railroad berm as an example. Mr. Safayi replied that the concept code bullets 1-13 intermingle use-type criteria (bullets 1-11) and use-intensity criteria (bullets 12 & 13).

Mr. Misiak stated that the source control list in the *2005 Manual* is very similar to this. Mr. McMurry agreed; the county may not need a specific list in the Applicability section because each trigger may be addressed in the source control (Minimum Requirement 3) list. Mr. Krause stated that Minimum Requirement 3 applies to most things. Mr. Kraft offered to compare items listed in current county code with Appendix 1 and with the *2005 Manual's* requirements for source control.

Mr. Harbison asked why Minimum Requirement 6 in the permit restates the 5,000 sq. ft. threshold. Mr. Krause replied that there are project-level thresholds, which TAC is discussing now, and requirement-level thresholds, which apply only to the specific requirement. Mr. Harbison asked if a phased project that first creates a 3,000 sq. ft. parking lot, triggering Minimum Requirements 1-5, and later adds an additional 3,000 sq. ft. lot, again triggering Minimum Requirements 1-5, would have to address the sum of 6,000 sq. ft. of new impervious in the same manner as if the surfaces had been added at one time (Minimum Requirements 6-9). The group discussed this issue. Mr. Krause replied that the concept code section 3.2, Redevelopment, requires that runoff that is not separated must flow to treatment facilities sized for the entire flow directed to them.

Mr. Misiak clarified that the intent is that a facility must treat all flows going to it, so he suggested not directing flows to a facility if those flows are not required to be treated. Mr. Krause: so, a piecemeal project can stay under the thresholds and direct flows to different areas, thus potentially not having to treat them. Mr. Safayi said that developers frequently size projects under the thresholds, then add to the site a year or two later. Mr. Misiak stated that WSDOT uses that strategy to increase efficiency and meet the intent of the Minimum Requirements; otherwise retrofitting becomes necessary.

3.2 Redevelopment

Mr. Kraft stated that the Redevelopment section is largely the same.

Mr. Harbison asked why it does not include the same paragraph under discussion above. The group discussed whether Minimum Requirement 6 covers it; if bypass is an option; how much off-site flow can be captured and treated within the modeling limitations; channelizing flows to bypass the facility. Mr. Harbison stated that in eastern Clark County, sometimes the only place for a pond is at the bottom of a hill, and there is no way to direct the water elsewhere.

Mr. Krause tabled the discussion until Minimum Requirement 7 is reviewed.

Mr. Darcy asked if the applicability in redevelopment applies to both urban and rural equally. Mr. Krause: in current code, it is not differentiated for redevelopment.

Mr. Misiak: in the *2005 Manual* the only difference between urban and rural areas is level of treatment required. Mr. McMurry: and dispersion. Mr. Kraft: the *2005 Manual* requires rural single family homes to disperse downspout runoff.

Mr. Safdari recommended defining "equivalent area" in the last paragraph of 3.2, p. 3, line 35.

3.3 Additional Requirements for Re-development Project Sites

Mr. Safayi asked what instrument would be accepted as a valid valuation (p. 4, line 8-9):

- contractor estimate
- county estimate
- value from the county Building Department (might not include some site improvements)

He said that the current code is ambiguous; he requested more clarity in the new code.

Mr. Misiak pointed out that the development phase is different than the building phase. He expressed concern that the valuation system would not work for residential redevelopment. The committee questioned if residential development would usually trigger the redevelopment code. Mr. Safayi had no residential developments qualify for redevelopment in his experience in development review.

Mr. Krause clarified that the value threshold only triggers treatment for existing impervious surfaces; in all cases that apply, the new and replaced impervious have to be treated.

Ms. McClure asserted that the term "existing site improvements" on p. 4, line 9 specifically excludes the value of the land.

The committee discussed whether "road-related projects" on p. 3, line 40, needs a specific definition in the code. What is a road-related project?

Mr. Krause: staff will look at the types of valuation that are possible. Mr. Kraft: the *2005 Manual's* supplemental guidelines give four different options for evaluating the valuation of proposed improvements, including "exceeding a certain ratio of the new impervious surfaces to the total of replaced plus new impervious surfaces" and "exceeding a certain dollar value of improvements." One of these might be simpler.

Mr. Misiak asked if the roadway requirements could be applied to all sites. Ms. McClure stated that roadway site limits could be defined more loosely. Mr. Misiak: Ecology needs to define the rights-of-way to right-of-way requirements more clearly. Ms. McClure asked how to include road frontage in a site plan or replacing a sidewalk along roadway improvements. She stated that the bigger the site extent, the more impervious can be added without triggering a redevelopment, and that might not be the intent.

Exemptions and Exception

The committee reviewed the Exception/Exemptions draft rewrite.

3.1 Exemptions

Agriculture

The committee discussed definitions of agriculture and commercial agriculture in various county code, such as 40.070.100 (Definitions), 40.440 (Habitat Ordinance), and the zoning code; the *2005 Manual*; the Growth Management Act (GMA); and the Revised Code of Washington (RCW).

Several members advocated for consistency among definitions in county code.

Mr. Euler stated that the definition of agriculture in the concept code conflicts with county zoning because agriculture is allowed anywhere in Clark County.

Ms. McClure asked if the county limits the length of time land has lain idle and still considered agricultural. Mr. Rupley replied that leaving land fallow is a normal part of agriculture; also, it is difficult to prove that land has *not* been used for agriculture.

Mr. McMurry and Mr. Krause discussed the purpose of the exemption: to allow agricultural practices, such as tilling and some clearing, to continue without requiring compliance with the stormwater code, while ensuring that conversion from timber to agriculture and the creation of impervious surfaces do trigger the stormwater code.

Mr. Rupley noted that CCC 40.440 provides protection from discharge of sediment, nutrients, and chemicals into all types of streams. He asked if the habitat ordinance could help with equivalency to the *2005 Manual*.

Other Exemptions

Mr. Harbison asked why several exemption are included, such as 9 on p. 2, line 45, when it reiterates the thresholds. Mr. Krause agreed; much of the language in red on p. 2 duplicates the thresholds and can probably be deleted. He asked the committee if it agrees.

Mr. Safayi countered that 9 is more than a restatement, but also a description of how to perform the runoff calculation. Mr. Harbison asserted that runoff calculation instructions should be in that Minimum Requirement description. Mr. Safayi countered that the language is necessary for the preliminary review; the amount of runoff generated determines whether a final stormwater plan is required. Mr. Krause argued that Minimum Requirements 1-5 are necessary regardless, so even projects exempt from flow control and water quality must produce a the plan (Minimum Requirement 5). Mr. Safayi agreed. He stated that exemption 9 can be deleted except for infill. Mr. Euler asked if infill is exempt from stormwater requirements. Mr. Safayi: only if less than 5,000 sq. ft. of impervious surface is created.

Mr. Harbison recommended removing exemptions 7-11. Mr. Kraft: except 10.

Drainage Projects

Mr. Safayi asked about exemption 8; do drainage projects trigger Minimum Requirements? Mr. Misiak asked for the definition of a drainage project. Mr. Kraft read from county code, "excavation and construction of pipes, culverts, channels, embankments or other flow-altering structures in any stream, stormwater facility, or wetland in Clark County." Mr. Krause: the idea is that drainage projects should be exempt from flow control and water quality requirements, but should have to comply with Minimum Requirements 1-5. Mr. Kraft recommended exempting

drainage projects from Minimum Requirements 6-10 and 1. Mr. Safdari: they *may be* exempt from 1.

Rural Single-Family Homes

Mr. Safayi expressed a concern about exemption 7. Currently, the BOCC's intent in exempting rural single-family homes includes even the creation of a new subdivision in the rural area. Everything in the site is exempt from the stormwater code, so quantity and quality control are only required for private and public roads. Whatever happens inside the lot, even the addition of 20,000 sq. ft. of impervious surface, is currently exempt. He guessed that the exemption conflicts with the NPDES permit.

Mr. Krause argued that on a truly rural lot with significant native vegetation, flows could be dispersed (as a BMP). Therefore, the exemption may be unnecessary. He clarified that dispersion requires 100 feet of vegetation, and lots without 100 feet between runoff-generating surfaces and a stream *should* control stormwater. The exemption does not address proximity to surface water in the rural single-family lot. Mr. Safayi recommended LID techniques.

Mr. Kraft stated that the *2005 Manual* requirements for single-family lots in rural areas are not stringent but do exist. Flows are required to be fully dispersed. The exemption in current county code may counter the requirements, and would require work to identify conflicts.

Mr. McMurry argued that builders of a single home and driveway on a rural lot should not have to get an engineering analysis to demonstrate lack of impact. The analysis is onerous and is not proportionate to the impact, if any, of a single-family home.

Mr. Kraft recommended drafting submittal requirements that address Mr. McMurry's concern instead of exempting rural single-family homes.

Mr. Krause stated that SAC will be asked to provide direction on balancing process costs, such as engineering costs, with potential impacts that are not being addressed.

Mr. Safayi stated that he has no issue as long as the development review role is clearly defined and is not in conflict with the NPDES permit.

Next Steps

The next meeting will address Water Quality and Definitions, as well as continuing discussion of Exemptions. The group will receive a brief update on LID, too.

Mr. Krause requested sample projects for cost models.

Public Comment

None.

Respectfully Submitted,

Trista Kobluskie