Riley-Purgatory-Bluff Creek Watershed District

Memorandum Supporting and Providing Explanation of Revisions of the Riley-Purgatory-Bluff Creek Watershed District Rules

December 11, 2019

Summary

In spring 2019, Riley-Purgatory-Bluff Creek Watershed District engaged property owners and developers, along with staff and council members from cities in the watershed, to understand concerns with RPBCWD's regulatory requirements. Informed by these discussions, RPBCWD drafted revisions to its rules to address the concerns, while maintaining a rigorous program that provides a high level of resource protection and flood-risk mitigation. After issuing the draft revisions for comment in September, holding a public hearing on the revisions in November and reviewing and responding to the comments received, the RPBCWD Board of Managers adopted the revisions at its December 2019 regular meeting. The revisions are effective January 1, 2020.[1]

This memo is a revision of the one issued with the draft revisions in September. It has been revised to explain the relatively few changes that were made in response to comments received. Accompanying this document is a table of the comments received and RPBCWD's responses, which address comments that did not result in changes to the rules.

The changes are not tweaks, but provide meaningful, responsive reduction in the scope and extent of RPBCWD's regulatory requirements. The changes underscore that RPBCWD staff and managers understand that the need to protect resources must be balanced against the burden on regulated parties of compliance, and wish to finalize the rules so the regulatory program can focus for the foreseeable future on efficient, effective operation in cooperation with RPBCWD's other programs and projects, and the development and redevelopment in the watershed.

Particularly notable changes:

- Exempt certain repair and replacement-in-kind projects from the Floodplain Management and Drainage Alterations Rule;
- Remove placement, alteration or removal of 50 cubic yards or more of earth as a trigger for the Stormwater Management Rule;
- Increase the linear-project threshold on the Stormwater Management Rule from 5,000 square feet or more of new and/or fully reconstructed impervious surface to 10,000 square feet of new impervious and 0.5 acre of disturbed impervious;

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[1] Permit applications that are not complete as of the effective date will be subject to the amended rules, though an applicant who has submitted a complete application prior to that date may request to have the matter determined in accordance with the revisions.

- Provide the option to manage stormwater offsite, on a property within the same subwatershed as the proposed land-disturbing activities, as long as rate control is maintained onsite;
- Revision, in several places, of the narrative standard requiring "no adverse effect" to the less rigid "not reasonably like to" cause an adverse effect;
- Rescind Rule I - Appropriation of Groundwater.

RPBCWD considered incorporating additional flexibility and exemptions into the rules – notably including an exemption for projects creating less than 10,000 square feet of impervious area, allowing an applicant to provide extended onsite detention of stormwater when abstraction is not feasible, providing a fee-in-lieu compliance option for the Stormwater Management Rule – but determined that those changes would have provided relief and flexibility at too high a cost in terms of lost resource protection and (moreso) program-management inefficiencies. RPBCWD also considered including a cost cap on stormwater-management infrastructure expenses needed to comply with RPBCWD requirements, as some other watershed organizations in the metro area have done. But a cap runs contrary to the principle that the RPBCWD rules set performance standards necessary to protect water resources, allowing the applicant/property owner to determine how to design and specify projects and associated stormwater-management to meet the requirements. A cost cap would necessarily – and unadvisedly – draw RPBCWD staff and engineers into discussions of the methods applicants choose to meet the rules.

RPBCWD instead has focused on setting the proper balance between the burden of compliance on property owners and effectively protecting water resources. Revisions RPBCWD did make to the rules – such as allowing abstraction and water quality performance standards to be met offsite in the same subwatershed as the land-disturbing activity – will provide similar flexibility without the downsides noted here.

Introduction

This memorandum presents background on and explanation of amendments of the Riley-Purgatory-Bluff Creek Watershed District rules. The memo supports the RPBCWD Board of Managers' determination that the changes to the rules will improve the efficiency and cost-effectiveness of its regulatory program's efforts to protect water resources and mitigate the risk of flooding. It describes the basis for RPBCWD's determination that the effectiveness of the rules, as revised, reasonably balances the burden incurred by property owners in complying with the rules.

RPBCWD proposes to amend the following rules:

- Rule A – Procedural Requirements
- Rule B – Floodplain Management and Drainage Alterations
- Rule C – Erosion and Sediment Control

- Rule D – Wetland and Creek Buffers
- Rule F – Shoreline and Streambank Improvements
- Rule G – Waterbody Crossings and Structures
- Rule J – Stormwater Management

In addition, RPBCWD proposes to adopt accompanying changes to the rules definitions and vacate Rule I – Appropriation of Groundwater.

Opportunities to comment
RPBCWD solicited written comments on its proposed revisions during a 45-day comment period that ended October 21, 2019.

In addition to the written comment period, RPBCWD held a public hearing on the revisions on November 6, 2019, prior to the managers' regular monthly meeting.[2]

Several written comments on the proposed revisions were received, but the only comments at the public hearing were from staff from the City of Eden Prairie and effectively reiterated the city's written comments.

The final changes were revised in response to comments. Those final tweaks are highlight in the show-changes rules document provided for the December 11, 2019 adoption action by the managers. These changes are discussed in the rule-by-rule review below. The reasoning for RPBCWD's declining to make additional changes in response to comments is provided in the response-to-comments document accompanying this memo.

II. BACKGROUND

Authority
Readers interested in understanding the statutory framework underpinning RPBCWD's regulatory program are directed to the memo supporting the November 2014 adoption of RPBCWD Rules or the August 2018 adoption of amendments.

Development of the Proposed Changes
After adoption of the 2018 amendments to rules, RPBCWD received several permit applications that presented particularly difficult circumstances and challenging permitting questions, resulting in approvals fraught with variances. Staff and the engineer have also heard concerns from several managers about the level of detail in permit analyses presented to the board. Some of these were for city projects, and independent discussions with these applicants led RPBCWD to conduct a listening session in April 2019 to collect feedback on the regulatory program.

[2] RPBCWD will administratively amend its watershed management plan to include the updated rules when they are adopted.

Thirteen people (two consultants, two developers, nine city staff) attended. Most of the discussion concerned RPBCWD's stormwater rule and tracked results of a survey RPBCWD had sent before the session to all past permit applicants. The following summarizes concerns and challenges that were cited with some consistency and frequency:

- Minor street repair projects (e.g., pothole repairs) and utility repair trigger an RPBCWD permit;
- The permitting process involves excessive requests for information, especially if a variance is requested;
- Permit-review comments are too detailed;
- Too much focus on regulatory program, undermining collaborative approach to projects and other work by RPBCWD;
- Treatment of run-on should be credited toward compliance with stormwater-management requirements;
- Simple city projects result in engineering costs greater than cost of actual repair.
- RPBCWD's stormwater-management threshold/trigger for linear (street) projects is significantly lower than other watershed organizations' (i.e., it is overly inclusive);
- For 'restricted sites' (as defined in the stormwater rule) narrative standards ("at least" and "maximum extent practicable") necessarily require judgment of the engineer and involve unproductively lengthy dialogues between the applicant and engineer/staff;
- Compliance with other narrative standards – for example "no adverse impact" or "minimal impact solution" is very difficult to demonstrate, because the engineer needs extensive documentation to achieve the level of assurance necessary to represent to the board that there will be *no* adverse impact;
- RPBCWD staff and the engineer require data and demonstration of analytical methodologies rather than accepting applicants' stated results.

Since the reinstatement of the program in 2014, RPBCWD staff have worked to improve the efficiency with which the rules are administered. The 2018 amendment of the rules clarified uncertainties and streamlined the rules, but, as noted, some regulated entities still encountered difficulties complying with the rules. The principal goal of these revision is to improve the balance between the burden on the regulated community and projects of compliance with the protection of water resources and mitigation of flood risk.

RPBCWD is eager to ensure that the efforts expended by project proponents to comply with the rules and the efforts of RPBCWD staff and the engineer to assess compliance result in meaningful and significant protection of water resources and mitigation of flood risk. Beyond the rule-text changes proposed, RPBCWD will provide additional guidance on its website to support efficient permitting. Staff and the engineer regularly receive applications that are supported by incomplete or incorrect designs and analysis. In addition to continuing to make

themselves available for advance review of developing plans, RPBCWD staff and the engineer will update the flow charts on the website that provide a graphic guidance on how to determine application of rules and criteria to a particular project. RPBCWD also will produce 'how to read the rules' guidance document that explains the operation of the rules. In addition, RPBCWD is planning to provide:

- Rule-by-rule submissions checklist.
- Guidance on the application of the definition of "reconstruction" to various kinds of frequently undertaken work – e.g., mill & overlay of parking lots and roads, rehabilitation of impervious areas, for purposes of determining whether RPBCWD's stormwater-management requirements apply.
- Guidance on how to determine the extent of the "site" for purposes of the rules.
- Clear deadlines, to provide clarity and manage expectations regarding when complete application-support materials must be submitted to ensure that the permitting decision can be made at the next meeting of that managers. The reality of the matter is late materials on a complicated or significant regulatory element serve no one's best interests.
- Guidance on erosion- and sediment-control practices, and maintenance of stormwater facilities and buffer-maintenance guidance, supplementing only where necessary and otherwise referencing state best-practice materials, principally the Minnesota Stormwater Manual.[3]
- Stormwater modeling support; for hydraulic and hydrologic modeling, with examples.
- A basic monitoring protocol and guidance on how to report the results of such monitoring.
- Guidance on how the RPBCWD engineer determines whether a site is suitable for infiltration of stormwater or not (i.e., 'restricted') for purposes of determining stormwater-management requirements and the submissions and steps necessary to support an assertion that an applicant is providing stormwater-runoff retention, when applicable, to the maximum extent practicable. Importantly, the guidance will underscore the need for applicants to demonstrate *technical* (not fiscal or political) barriers to stormwater management, rooted in conditions inherent to the site. The process of determining whether an applicant has demonstrated stormwater management to the maximum extent practicable is necessarily an iterative one, as RPBCWD staff and engineer need to ensure that the goals, purposes and policies of the rule are achieved to the greatest extent reasonably feasible.
- Guidance on submissions necessary to release a financial assurance and close out a permit.

3 https://stormwater.pca.state.mn.us/index.php?title=Main_Page

As noted, RPBCWD will rely whenever possible on the Minnesota Stormwater Manual and draft supplemental materials only when necessary (e.g., to address RPBCWD-specific provisions or conditions or cover some topic the manual does not). In doing so, RPBCWD seeks to ensure that its regulatory program operates as consistently as possible with other watersheds and state-issued best practices.

It would be useful if commenters on the rules made note of whether the guidance described above would be substantially helpful to them in applying for RPBCWD permits. Also, if there is other guidance or support that would be helpful, RPBCWD would like to hear about it.

RPBCWD cannot revise the rules to account for some applicants' engineers' occasional unwillingness to submit properly prepared technical and analytical materials necessary to determine compliance nor for their philosophical disagreement with the appropriateness of rules. But the watershed district will do all it can to help applicants and their technical representatives readily understand how the rules operate.

III. PROPOSED CHANGES

In many cases, the changes now proposed to the RPBCWD rules flow self-evidentially from the issues and drivers cited above. Some of the proposed changes are discussed further in the following sections.

DEFINITIONS

"**Parcel**" & **"site"** – the rules are revised to use "site" in virtually all instances, harmonizing and simplifying the property area to which rule requirements apply. A "site," for RPBCWD rule-application purposes, is not just the portion of a legal parcel that is proposed to be disturbed, and can be more than just a single parcel when the application pertains to a scheme of development or redevelopment that will be implemented over two or more adjacent parcels. Very often the configuration of parcels will be in transition at the time of RPBCWD permit-review, and approval may be conditioned on recordation of, e.g., drainage and maintenance rights to ensure that the efficacy of a stormwater-management scheme applicable to a multi-parcel site will not be subverted by changes to the parcel configuration subsequent to RPBCWD's permitting decision.

A definition of "**pervious**" is added for general specification and to clarify qualification of sidewalk and other linear pathways for the exemption from the RPBCWD stormwater requirements in 2.2d of Rule J.

"**Subwatershed**" is defined for purposes of the Stormwater Management Rule.

The definition of "**topsoil**" is significantly simplified from that adopted in 2018.

RPBCWD also has revised the definition of "**stormwater-management facility**" to clarify that it includes existing low areas that will be incorporated – either with alterations or not – into an applicant's stormwater-management plan and will be relied on to provide runoff volume, treatment and/or rate control. Such areas will need to be maintained in accordance with subsection 3.7 of the Stormwater Management Rule.

RULE A – PROCEDURAL REQUIREMENTS

In the procedural rule and elsewhere, paragraph numbering in the "Policy" section of the rules is replaced with bullets, to underscore that the policy statements support the rule and establish its purpose and the managers' intent in adopting it. But these statements are not substantives requirements of the rules.

The revision of subsection 2.3 – replacing "signed" to "authorized" – allows applicants to proceed with reliable indication that the property owner has authorized the application. The application form itself need not necessarily be signed by the property owner(s). In keeping with this change, RPBCWD has removed the requirement that an application must "bear[] the original signature of the property owner(s)" from subsection 2.1. The owner need not sign the application, but must in fact authorize the application. RPBCWD will be flexible in administering the requirement, which remains critical to proper and efficient administration of the regulatory program.

RULE B – FLOODPLAIN MANAGEMENT AND DRAINAGE ALTERATIONS

The rule triggers in section 2 are proposed to be amended to allow minor repairs to public infrastructure to proceed without a permit – as long as no decrease in flood-storage volume results. The onus will be on city engineers, who pushed strongly for such a provision, to design and monitor such work to ensure no loss of floodplain capacity results.

In addition, subsection 3.3 is one of several places in the rules where an absolute narrative standard – "will not adversely affect" – is replaced with the more relative "is not reasonably likely to" standard, making life a little bit simpler for engineers throughout the watershed. (The other rule criteria where this change is made include 3.2c and 3.5d of the Waterbody Crossings & Structures Rule and 3.3 and 4.1a of the Stormwater Management Rule.)

RULE C – EROSION PREVENTION AND SEDIMENT CONTROL

In response to feedback from members of the Technical Advisory Committee, subsection 3.3 is revised to bring RPBCWD's provisions for site inspection during construction into closer alignment with the terms covering the same topic in the 2018 state construction stormwater general permit.[4]

In addition, subsection 3.3h has been revised to clarify that loosening of soils beneath an infiltration practice – vegetated or constructed – is necessary to ensure best possible conditions for conduct of stormwater to the subsurface. But RPBCWD staff and engineer concurred with comments noting the difficulty of loosening soils to a depth of three feet, and reduced that number to 18 inches.

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4 *See* https://www.pca.state.mn.us/sites/default/files/wq-strm2-80a.pdf.

The change to subsection 3.2c has been revised to include both English and metric measurements.

In response to comments, RPBCWD has extended the time allowed for repair, replacement or amendment of a nonfunctional best management practice during construction to 48 hours or prior to the next rainfall event. While acceding to the comments requesting more flexibility on this point, RPBCWD determined that continuing to require performance in a specific, clearly articulated timeframe was critical (though assessment of and reaction to relevant weather conditions will remain an important responsibility of a permittee).

Finally, "with approved methods" has been removed from 3.3d as unproductively vague.

RULE D – WETLAND AND CREEK BUFFERS

Most of the changes to the buffer rule are small clarifications. More significant is the change to 3.3d, which clarifies that the prohibition on impervious surfaces in a buffer area pertain to newly constructed impervious, not existing impervious. An applicant still must meet the buffer-width average requirement, and if existing imperviousness prevents achieving that standard, a variance will be required. The allowance for stormwater facilities in buffer area also is clarified, though the RPBCWD engineer will still require a facility design that functions properly, and placing, say, a rain garden too close to a water resource may not be technically feasible.

The final changes to cross-references in subsection 3.2 are typographical corrections.

RULE F – SHORELINE AND STREAMBANK STABILIZATION

As with the floodplain rule, the triggers in the regulation section of the Shoreline and Streambank Stabilization Rule are modified to exempt minor repair of public and private utilities in certain instances. RPBCWD considered exempting maintenance and in-kind replacement of public infrastructure altogether, but since conducting work that affects the bed or bank of a public water triggers state requirements anyway, RPBCWD did not want to undermine the utility of General Permit 2015-1192, issued for work permitted by the watershed district, for property owners in the watershed. The upshot is that the new exemption in subsection 2.4 is limited to non-public waters.

The change to subsection 3.3b.v is a simple clarification.

RULE G – WATERBODY CROSSINGS AND STRUCTURES

(Please see the explanation of the expanded exemptions to Rule F, which applies equally to Rule G, and the explanation of the change to paragraphs 3.2c and 3.5d under the section above on Rule B.)

RULE I – APPROPRIATION OF GROUNDWATER

Rule I is proposed to be deleted. Unlike the other RPBCWD rules, Rule I requires affirmative outreach by staff to advise property owners of the potential applicability of the rule to their use of groundwater. Unlikely the other RPBCWD rules, it also requires property owners to obtain a

permit for ongoing activities – not a new proposed scope of land-disturbing activities to which permitting requirements would be expected to apply. Given these unique factors, it is not terribly surprising that RPBCWD has had very few applications under Rule I since it was implemented five years ago. The purpose of the rule was to gather data on small groundwater appropriations (i.e., less than is regulated by the Department of Natural Resources), and since that goal is not being fulfilled, RPBCWD does not wish to keep the rule on the books.

RULE J – STORMWATER MANAGEMENT

As elsewhere in the rules, the changes to RPBCWD's stormwater-management requirements are proposed to streamline the permitting process – with a couple of exceptions:

- The citation to infiltration as an example of volume-control practices is removed from the policy statement support Better Site Design and Low-Impact Development in response to a comment from the City of Eden Prairie.
- The rule is clarified in paragraph 3.1b.iii to allow pretreatment facilities or practices only as consistent with the state stormwater best practices and to state RPBCWD policy that whatever pollutant-removal is achieved by pretreatment does not count toward compliance with the water-quality requirement in subsection 3.1c.
- Subsection 3.6 is clarified to ensure that low-floor requirements clearly apply to structures constructed adjacent to water resources, as well as construction of stormwater-management facilities. (Although the rule is also clarified to allow siting of structures in accordance with Appendix J1 when subsurface conditions provide reasonable assurance that flood risk is minimal.)
- The wetland bounce and inundation requirements (3.10a) are amended to make them simpler and require that applicant ensure wetlands won't be starved of runoff needed to ensure wetland health. In addition, the requirement to treat runoff to wetlands in paragraph 3.10b is modified to require treatment to the RPBCWD standard in Rule J, subsection 3.1c before discharge to low- and medium-value wetlands and treatment to the higher standard stated in 3.10b when discharging to a high- or exceptional-value wetland. Since the RPBCWD rules require treatment of runoff discharged from a site already, the treatment-to-wetlands requirement will come into play as an additional criterion most often when there is discharge to a wetland wholly contained on a project site. The requirement is clearer and more specific than the provisions addressing the same topic in the state construction stormwater general permit and is badly needed to protect wetland resources. Note that the requirement does not apply to incidental wetlands.
- The exhibit list is amended with a requirement for onsite storm-sewer systems data (5.2) and clarified (5.4c) to require that infiltration data be submitted by a person with the appropriate professional credentials.

Otherwise the rule is amended to provide more options and quicker paths through the rule for applicants:

- Projects that excavate 50 cubic yards or more of soil or other site material do not necessarily need to comply with the RPBCWD stormwater requirements. It's only when 5,000 square feet of a site is disturbed that the rule is triggered. This change is to accommodate small maintenance and repair projects that do not present significant risk to receiving waters and do not necessarily create a ready opportunity to provide stormwater treatment facilities.
- At the urging of road authorities, the linear-project area triggers in paragraph 2.4 are increased, bringing them closer into line with those of other watershed organizations' while continuing to account for the very significant portion of the watershed that is paved for transportation. The increase to 10,000 square feet of new impervious surface means that a road authority can add a turn lane to a road without needing to construct stormwater treatment; larger projects (e.g., a new city street) will need to do so. The 10,000 square feet of new impervious represents the amount of new impervious that would tend to increase discharge from existing condition by between 1 and 2.5 cubic feet per second for the 2- and 100-year events, respectively. In addition, 10,000 square feet or more of new impervious is estimated to add more than a half pound of phosphorus annually to runoff. Left untreated this additional nutrient loading to receiving waters can exacerbate an existing or developing impairment. For reconstruction, the increased allowance before treatment is required is even greater: from 5,000 to 25,000 square feet of fully reconstructed impervious surface. Existing road surfaces account for one-third of the impervious surface within the RPBCWD boundaries and represent a significant source of runoff and pollutant loading. It will be difficult to meet water-quality and water-quantity goals in the watershed plan without addressing this source. In addition, reconstructing more than 25,000 square feet (about half an acre) typically requires significant land-disturbing activities and presents an opportunity to reduce pollutants from existing conditions to help address the numerous waterbodies with nutrient impairments in the watershed. Final tweaks to this section were made to clarify the operation of the provision as described here: Either addition of 10,000 square feet of new impervious OR 25,000 square feet of fully reconstructed impervious in a road project will trigger the RPBCWD stormwater requirements.
- Changes to subsection 3.1b provide flexibility in meeting the RPBCWD runoff-retention requirement.
    - First, compliance with stormwater abstraction (and water-quality) requirements may be achieved not only onsite, but anywhere in the subwatershed – as long as runoff rates are maintained onsite. ("Subwatershed" is defined for the purpose in a manner that is designed to ensure that receiving waters are protected even while this flexibility is provided.) RPBCWD realizes there will be few applicants who own multiple dispersed (non-adjacent) properties within a subwatershed such as can take advantage of this option. But certain city projects have encountered particular difficulty in meeting onsite stormwater-management requirements, and cities and other public entities own property in quantities and

configurations that may well allow them to take advantage of the subwatershed option.

  - Second, an applicant may comply with the volume-abstraction requirement by retaining the volume from the 95th percentile storm event from the site. Since RPBCWD reinstated its statutorily required regulatory program, one of the policies of the stormwater management rule – encouraging the use of better site design, low-impact development and other techniques – has rarely been embraced by applicants. To help incentivize increased use of better site design and green-infrastructure techniques, retaining the volume from the 95th percentile storm event from the site was incorporated as an alternative volume-compliance approach. Based on the extensive work conducted during the state's development of the Minimal Impact Design Standards, retaining the runoff from the 95th percentile storm achieves very similar volume reduction to the abstraction of 1.1 inches from impervious surfaces. Because this alternative volume abstraction measure considers runoff from both pervious and imperious surfaces, it provides permit applicants with greater flexibility to design and implement green-infrastructure methods, protect forested areas, improve soil health and consider ecosystem interconnections.

- The water-quality criterion in 3.1c is amended to allow the stormwater-abstraction requirement in 3.1b to serve as a surrogate for compliance with the base water-quality requirement. (Wetland-runoff treatment requirements and the like still apply.) In other words, an applicant demonstrating that its stormwater-management system will provide 1.1 inches of stormwater runoff abstraction need not submit additional data (e.g., modeling) demonstrating that the 60 percent phosphorus and 90 percent sediment standards are met.
- The policy adopted by the managers this spring with regard to application of the chloride-management requirement in subsection 3.8 to residential subdivisions is codified as part of this rulemaking.
- The changes to subsection 5.2 clarify that RPBCWD is not requiring an applicant to model the entire storm-sewer system downgradient from its site, but rather to ensure the model submitted by an applicant captures the runoff conveyed to the stormwater-management facilities from the site. (Please see further explanation in the responses-to-comment document.)
- Final changes in subsections 3.4, 3.6 and 3.10 and Table J.1 are typographical/cross-reference corrections.