From:	Stockwell, Abbey (ECY) <abst461@ecy.wa.gov></abst461@ecy.wa.gov>
Sent:	Tuesday, February 9, 2021 1:25 PM
То:	William Lider
Cc:	Heye, Amanda (ECY)
Subject:	RE: Bioretention Design

Hello Bill,

These questions should be covered in the BMP design guidelines, see <u>BMP T7.30</u> for additional details. Here are some yes, no responses as requested (in red) to your questions, but again, you must review in light of the BMP guidelines for additional context.

- 1. Is it acceptable to design bioretention facilities using lawn-type, turf grasses such as Tall Fescue, Perennial Ryegrasses, Creeping Red Fescue, Colonial Bentgrass for stormwater treatment? No
- 2. Is it acceptable to use nitrogen fixing plant species such as clovers or other non-facultative plants in bioretention facilities? No
- 3. Is it acceptable to use pesticides, fertilizers, lime, or other lawn chemicals in lawn covered bioretention facilities? No
- Is it acceptable to run push lawn mowers over lawn covered bioretention facilities on a weekly or biweekly basis? No
- 5. Is it acceptable to use bioretention facilities as play fields, soccer fields, parks, and other foot traffic/play areas? No
- 6. Is it acceptable to allow frequent use of bioretention facilities for dog runs and for domestic pets to relieve themselves on? No
- 7. Is there an approval or BMP design for deep rock chambers, (e.g. 15-feet deep) for maintenance when they become clogged? No
- 8. Are any of the above uses prohibited under municipal NPDES permits for phase I or phase II municipalities? Yes, 5 and 6 at a minimum

Questions regarding Ecology's Stormwater Management Manuals are best routed to Amanda Heye (cc'ed here). Please reach out to her first in the future, she can best route your question. Best, Abbey

Abbey Stockwell (she/her) | Municipal Stormwater Senior Planner |WA Department of Ecology - Water Quality Program | PO Box 47600 Olympia, WA 98504-7600 |Desk: 360.407.7221 | <u>abbey.stockwell@ecy.wa.gov</u> |

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From: William Lider <Bill@LiderEngineering.com>
Sent: Thursday, February 4, 2021 10:29 AM
To: Keltz, Colleen (ECY) <ckel461@ECY.WA.GOV>; Stockwell, Abbey (ECY) <abst461@ECY.WA.GOV>; Labib, Foroozan (ECY) <flab461@ECY.WA.GOV>; Kaufman, Mak (ECY) <makk461@ECY.WA.GOV>
Subject: Bioretention Design

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I have several questions regarding bioretention facility BMP T7.30 design, that I would like to request a written response to:

- 1. Is it acceptable to design bioretention facilities using lawn-type, turf grasses such as Tall Fescue, Perennial Ryegrasses, Creeping Red Fescue, Colonial Bentgrass for stormwater treatment?
- 2. Is it acceptable to use nitrogen fixing plant species such as clovers or other non-facultative plants in bioretention facilities?
- 3. Is it acceptable to use pesticides, fertilizers, lime, or other lawn chemicals in lawn covered bioretention facilities?
- 4. Is it acceptable to run push lawn mowers over lawn covered bioretention facilities on a weekly or biweekly basis?
- 5. Is it acceptable to use bioretention facilities as play fields, soccer fields, parks, and other foot traffic/play areas?
- 6. Is it acceptable to allow frequent use of bioretention facilities for dog runs and for domestic pets to relieve themselves on?
- 7. Is there an approval or BMP design for deep rock chambers, (e.g. 15-feet deep) for maintenance when they become clogged?
- 8. Are any of the above uses prohibited under municipal NPDES permits for phase I or phase II municipalities?

I believe most of these questions should be a yes or no answer.

Thank you in advance for your prompt reply.

William (Bill) Lider, PE, CESCL Lider Engineering, PLLC 2526 – 205th Place SW Lynnwood, WA 98036 425-776-0671 (W)