

Butler Farms/Oak Creek Village Stormwater Study Group

City of South Burlington, Vermont

Fall 2005 Newsletter

This quarterly newsletter summarizes the work of the Butler Farms/Oak Creek Village Stormwater Study Group. The Stormwater Study Group is meeting monthly to focus on several stormwater and water quality-related issues affecting the neighborhood:

1. Addressing the neighborhood's stormwater conditions, including the property and water quality impacts that affect our quality of life and environment.
2. Working with a consulting engineer and the City/UVM team to define and evaluate different options for upgrading our stormwater system to meet City and State standards.
3. Communication with City officials on how changing stormwater regulations and financing may affect the neighborhood.
4. Helping to lead special projects, including neighborhood mapping, rain gauging, and rain garden design, to foster local participation in improving our neighborhood's environment.

CONSULTING ENGINEER SELECTED TO ASSIST STUDY GROUP

A South Burlington consulting engineering firm, Dufresne-Henry, was selected by the Stormwater Study Group to provide an engineering evaluation of the existing Butler Farms/Oak Creek Village stormwater systems. Jack Myers, PE, a senior associate of the firm, will be the project manager.

The overall goal of the consulting engineer's work is:

1. Determine the exact condition, location and function of the existing stormwater systems in Butler Farms and Oak Creek Village.
2. Tell the study group exactly how the systems deviate from the State standards that need to be met; and
3. Provide a range of options and alternatives for meeting the State standards.

The first step in this process was to find out exactly what the neighborhood's stormwater system is, and its condition. In October, a team from Dufresne-Henry worked with South Burlington's Stormwater

Superintendent, Tim Grover, to create a full field inventory of the system. This was then compared to record drawings obtained from the original system engineers. A composite system drawing was then made, that also shows exactly what areas drain to specific parts of the stormwater system. The map showing the "sub-drainage" areas is on the inset of this newsletter.



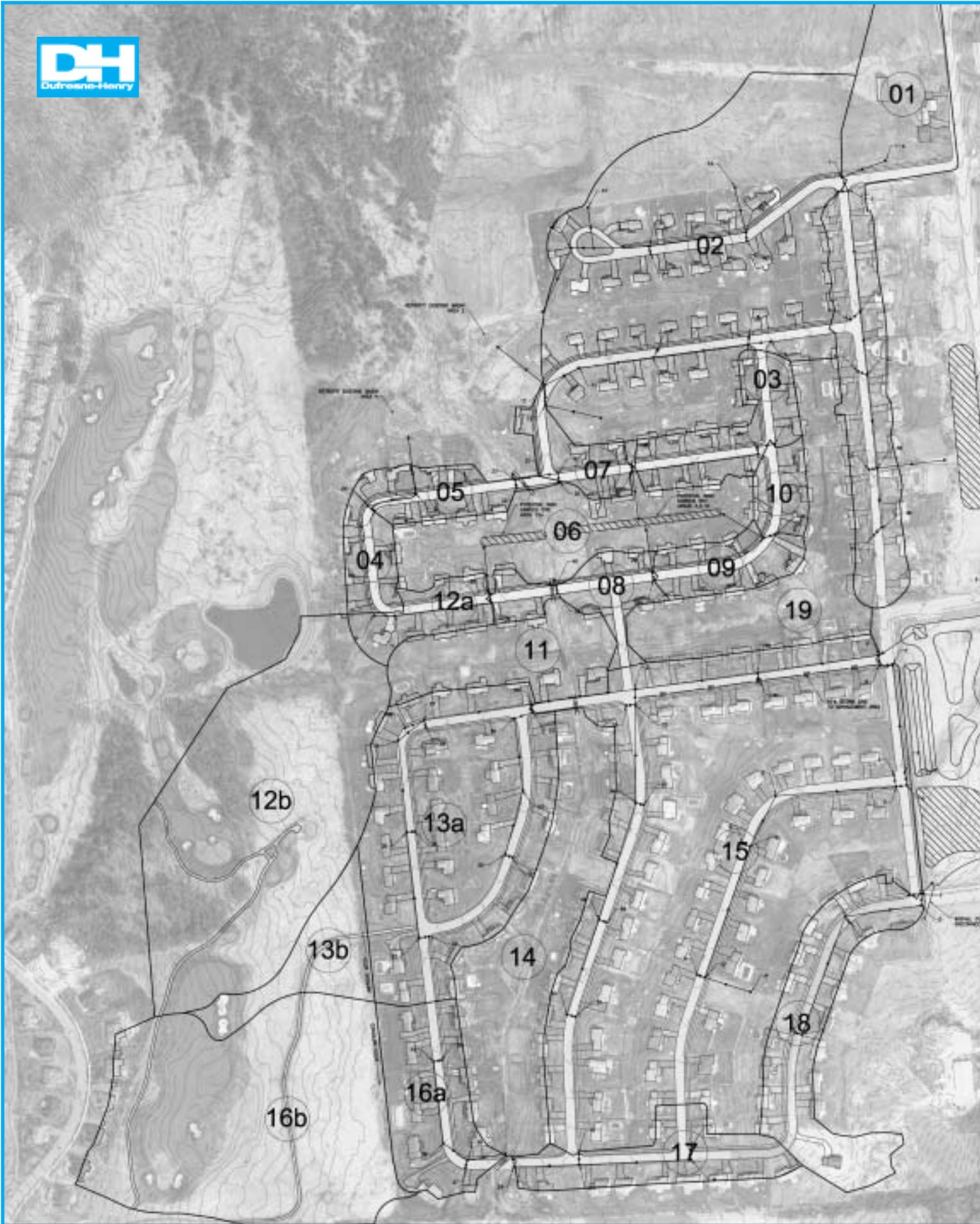
A number of findings, some unexpected, were made from this inventory. Generally, the systems do not provide sufficient water quality (pollution removal) treatment to meet state standards, and there are significant drainage concerns in Oak

Creek Village and along the back of Butler Drive by the Golf Course. However, *potential solutions are becoming apparent that will be presented and discussed at the Study Group in the coming months.*

Some other findings include:

- The Butler Farms system provides very efficient drainage, but no water quality (pollution removal) treatment. There appear to be several straightforward ways to retro-fit the system to meet this standard.
- Water quantity control and ensuring proper drainage are a greater concern for Oak Creek Village.
- While the Oak Creek Village system has two stormwater treatment basins, only a small portion of the neighborhood's runoff is treated in these basins. Much of the runoff is piped directly into Tributary 7 of Potash Brook.
- A few areas of Oak Creek Village have drainage areas in neighbors' back yards that are treating roadway runoff. While there are easements for this purpose, few owners knew about these and there are concerns about back yard flooding.
- A potentially dangerous situation occurs at the northwest corner of Oak Creek Village near Moss Glen Lane, where a vortex is created near a storm drain when large storm flows occur.
- A significant area of the Vermont National Country Club is draining into a long swale along the western edge of homes on Butler Drive and Moss Glen







This engineering evaluation prepared by Dufresne-Henry shows drainage areas throughout the neighborhood, and potential areas for stormwater improvements.

OAK CREEK-BUTLER FARM STORMWATER COLLECTION SYSTEM & WATERSHEDS

Lane. There is concern about the location of the VNCC pond's emergency spillway, which drains into this swale.

NEIGHBORHOOD MAPPING CONTINUES

In October, each home received a letter about the neighborhood mapping project undertaken by Helena Vladich at the University of Vermont – School of Natural Resources. Over 40 maps were returned, and the composite map shows areas where water-related problems such as basement flooding, ice jams, backyard ponding, or storm-related flows are affecting the neighborhood.

This information is especially important in evaluating which stormwater solutions will be best for the neighborhood. While engineering can accomplish a great deal, “fine-tuning” solutions to improve very local and sometimes unexpected problems can only happen with neighborhood input!

If you haven't returned your form, please do so – or call the planning & zoning office for a new copy (846-4106). Please be sure to leave your address so the correct map can be sent.

RAIN GAUGING VOLUNTEERS SOUGHT

One of your neighbors is Lesley-Ann Dupigny-Giroux, Vermont's State Climatologist and a professor at the UVM-SNR. Lesley-Ann's State Climatology website is: <http://www.uvm.edu/~ldupigny/sc/>

Through the EPA grant, several simple rain gauges were recently purchased. Rain gauge participants will be asked to keep manual records during rain events and report these back to Lesley-Ann. VOLUNTEERS ARE STILL NEEDED in the area at the far southwest corner of Butler Farms. If you live on Butler Drive south of the rec path entrance and you are interested in participating, please e-mail: State.climatologist@uvm.edu.

CITY COUNCIL, LEGISLATORS ADDRESSING COST CONCERNS

A subcommittee of the South Burlington City Council and the City's legislative delegation has begun drafting proposed strategies for financing costs related to compliance with the State's stormwater permitting standards.

Among the concerns the group is addressing are the time available for compliance with state permits; state responsibility for notice and transfer of expired permits; and methods of limiting or eliminating financial impacts on individual taxpayers as a result of state-imposed increases in stormwater treatment requirements.

This group will be drafting proposals for presentation at upcoming City Council meetings and potentially for the upcoming legislative session. The Study Group will be informed monthly of their progress, as well as the State's stormwater permitting status.

City of South Burlington
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STATE TO RELEASE WATERSHED REGULATING PLAN (TMDL) COVERING NEIGHBORHOOD ON DECEMBER 14TH.

State permits, requirements, and timelines continue to be in flux. However, the first draft of the TMDL or "Total Maximum Daily Load" plan that will outline how much must be done to the Butler Farms and Oak Creek systems to meet state standards will be issued for public hearing on Wednesday, December 14th at City Hall. Juli Beth Hinds will be the City's lead for reviewing the TMDL and outlining what this means for City neighborhoods and property owners.

The TMDL draft is available on the web at:
http://www.anr.state.vt.us/dec/waterq/stormwater/docs/sw_potash-tmdl.pdf.

Project Web Site: www.uvm.edu/~ran.

If you have specific questions, comments or concerns, please e-mail Juli Beth Hinds at the planning and zoning office: jhinds@sburl.com.

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