

**Red Brook Watershed Management Plan Project
Land use Workgroup Meeting Minutes**

**September 22, 2010
Scarborough Town Office
6:00 to 8:00**

<p>NEXT MEETING Thursday, October 28, 2010 6:00 PM to 8:00 PM Scarborough Town Office</p>
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1) Welcome/Introductions/Overview

Betty Williams

Dan Bacon-Town Planner, Wendy Garland-DEP Grant Administrator, Jeff Dennis-DEP Biologist, Betty Williams-Project Manager, CCSWCD, Chris Baldwin-Engineer, CCSWCD, Ronald Blanchard, Robyn Saunders-MTA, Sarah Bernier-Recycling Coordinator Town of Scarborough/Saco, Jean Marie Caterina-landowner, Warren Knight-Smiling Hill Farm, Tom Raymond-ecomaine, Catherine Rogers-landowner.

2) Review of water quality impacts

Wendy Garland

(presentation posted at www.cumberlandswcd.org/redbrook)

Land use impacts on streams

- A watershed is an area of land that drains to a stream; determined by the high points of the land, and the water drains downhill.
- The boundary has been tweaked and changed over the past few months to make sure the boundary is more accurate. The watershed is just over 3 square miles and is mostly in Scarborough, but also has small parts in South Portland, Westbrook and Gorham.
- The watershed has changed over the past 60 years from rural/agricultural to residential/retail/commercial. In the more recent past, the development of the Maine Mall area and now there are also more residential developments in the southern reaches of the stream/the lower reaches of the watershed.
- A stream flowing through an urbanized area will not be as pristine as a stream flowing through a forest.
- There is a correlation between the amount of impervious cover in a watershed and the detriment of the watershed. Impervious surface prevents water from infiltrating.
- More pavement, roof tops, hardened surfaces leads to declining water quality.
- Ideally there should be less than 10% impervious, Long Creek has 28% impervious cover, Red Brook has a little bit more than 8% impervious cover. We are starting to see impacts on aquatic life and habitat.
- The water runs off of impervious surfaces and drains directly into the stream. It impacts the stream channel itself, and can lead to eroded stream banks, steeper stream banks and the channel wider.
- There are also deposits of sediment on the stream bottom, making it shallower.
- Stormwater pollutants: suspended solids, nutrients, metals, oil/grease, bacteria, pesticides, herbicides, temperature, PCBs
- Stream Habitat: smothering of habitat by sediment deposits, loss of habitat variety and woody debris, loss of stream buffer

Where does Red Brook Stand?

- Healthy stream
- Good water quality
- Supports diverse aquatic life,
- Potential to be excellent
- Very vulnerable to development

Prescription/Recommendations:

- Requires greatest level of protection including land conservation
- Classic suburban stream
- Water quality depends on watershed protection techniques
- Can support fairly diverse aquatic life

Tools used to protect streams

Watershed planning, (what this grant project is), looks at current and future watershed development. Utilizes zoning to focus development in some areas and protect other sensitive areas.

A) Land Conservation, keep the most important and vulnerable parts of the watershed undisturbed.

B) Stream buffer protection, a buffer is a transition zone between a developed area and a waterbody, provides flood control, habitat, shading, wetland protection

C) Stormwater Management, requirements of thresholds of development.

D) Low Impact Development, reduces impervious cover, conserves natural area, and provides stormwater treatment. Can be applied to new residential and commercial developments.

3) Overview of current zoning

Dan Bacon

- **Pink area is the B2**, town's most liberal commercial zone, big box development, restaurants, and commercial uses
- **RH, in Orange and tan, RH2**, eastern end of running hill road, mixed use zone. Area rezoned very recently, allows fairly intense development of both commercial and residential. This location is very close to the Maine mall and apartment style housing, and commercial offices may be appropriate. Development is more likely to be vertical than horizontal, not so much a target/retail/fast food, more for multi story buildings,/parking garage.
- The boundaries of the zone creep towards Red Brook, and there are a lot of flat/wetland areas along the highway, and the developable land is further upstream so the development is not likely to get that close to Red Brook.
- **The green, RF, rural and farming**. There are single family homes and residential neighborhoods, along with ecomaine and Smiling Hill Farm. This zone is very much inline with the low impervious coverage.
- There is a small area, **TVC2 and RPO, a mixed use zone**, allows small scale commercial and small scale residential, allowing a village center, having North Scarborough eligible for a convenience store and to develop into an area where goods and services would be available.
- **RH, TVC and RPO** are under developed.
- The stream is in bold blue, illustrating the existing stream protection district, with a 75' buffer according to the state mandate, from the edge of the stream.
- The town reviews the stormwater facilities through a review process. The town relies on site design review that facilities meet DEP standards.

4) What is the vehicle for implementing changes?

Coming up with stormwater management performance standards tailored to the needs of this watershed and goals of the watershed. Use something that has lower triggers than the state standards.

Ideas for land use and stormwater regulations and incentives:

- Land conservation efforts; prioritize preserving undeveloped areas abutting Red Brook and tributaries, work with willing sellers of land and pair them up with the land trust. Use development transfer program and prioritize use of program
- Greater buffer to Red Brook through stream protection 2 district; consider greater no –development buffer to the stream (150’-250’).
- Hold existing residences and buildings harmless, require cluster development, and incentivize development transfer.

Stormwater management standards:

- Specific to watersheds, tailored for Red Brook’s needs and design goals. Reduces layers of review, streamlining
- Stormwater standards and incentives for redevelopment
- Create incentives, reduce impervious area; stormwater system enhancements, improve riparian corridors
- Encourage stormwater upgrades by existing development
- Seek funding

Stormwater facility inspections and maintenance:

- Require annual inspections of facilities, require repairs and maintenance.
- The town’s post construction ordinance applies to new development; this would/could apply to existing development

5. Discussion:

1) There was some discussion on the PCB issue further up stream at the Public Meeting. There are concerns about the impacts of the land fills. Some studies are being done right now, but there won’t be any data for another month, the EPA is doing this testing. This piece is covered in the plan.

- Kimberly Klark, SD Warren, the Larson landfill and other paper land fills were/are the one with the issues, not so much an issue from ecomaine. There are multiple land fills within the watershed.
- Tom Raymond now monitors the land fill and ecomaine sends their water/leachate to Portland along with their own.
- SD Warren is still on the hook for the water quality of their property. The land fill is unlined but fully capped.
- This leachate has high conductivity, Westbrook didn’t want it anymore, but Portland can take it because they discharge to salt water.

Inspection and maintenance program question?

- Would this apply to all new development? That is an option, it depends on our suggestions.

Peak matching detention ponds are only designed for 2 year storms and don’t protect the stream. Try to work with existing development, so that the existing basins do some treatment of the sediment and take care of the smaller storms. There are retrofits available in the lower portion of the stream.

Construction permit

Multisector industrial permit, only applies to certain industrial sectors, the mall is exempt, but.....A *residual designation* is what is going on in Long Creek. Mandated by EPA and the permit is administered by MDEP. They need a stormwater permit in that watershed, including other sources have been designated.

Tributaries- include in protection zone:

Opportunities to protect the tributaries of the Red Brook, include them in the resource protection, these things should be mapped?

Buffer expansion:

- Concern: When people who own the properties now, may have bought them as investments with the expectation of future development.
- Existing housing can add onto houses, or add accessory buildings.
- Do these rights run with the land or stay with the existing owner? They run with the land
- There are some properties that are already conserved, or there are steep slopes that prevent development anyways.
- The flood zoning increased in the back yard, with the flood zone increases done by the feds, this will help because it impacts the ability to build due to the fees required in insurance in flood zones
- Do the new flood zones make expanding the buffers redundant?
- Are changing uses the same thing as grandfathering existing homes? Other types of uses are a concern as well, there are conditional uses also.

6. Recap/Summary:

- **Greater buffer widths and restoring flood plain** – needs more discussion and a little research as to what the Federal Flood zone changes entail **and how different parcels/landowners would be affected with different widths.**
- **Stormwater Management Standards** – town is willing to potentially adopt similar standards as City of So Portland recently has **to address gaps with currently state laws.**
 - **Land conservation efforts**-town currently and has in the past worked with willing landowners who want to sell and matches them up with Landtrust and encourages “development transfer program”
 - **Incentives program**- currently being done by the Town but due to economy not much activity of late.
- **Redevelopment standards**-again, town is willing to look into/adopt similar standards as the State or City of So Portland. Need to tread the fine line between allowing re-development and also treating stormwater.
- **More stringent construction standards within watershed:** *there is not a lot of control over small lot development in terms of erosion control during construction. Do we want to require contractors working within the watershed to have DEP erosion control courses and certification? Could require erosion control standards to all development within the watershed?*
- **Low impact development:** *encouragement of LID/ Reducing impervious areas such as green roofs, etc.*