K-Beach High-Water Relief and Prevention Feasibility Study





















Recommendations

- 1. Form a <u>Technical Working Group</u> (TWG). The TWG would consist of Borough, DNR, DOT and State Hydrologists, Borough Engineer(s), etc as appropriate. The Mayor had asked for a peer review of Jim Munter's hydrology work. The TWG could do this in the course of coming to a unified consensus concerning the K-Beach flooding issues.
- 2. Proceed with the <u>Feasibility Study</u>. Clearly our storing water behind 'roads-as-dams' is evidence, on the ground, of our being in non-compliance with the State's DNR regulation 11 AAC 93.035 (SLIDE 12) and our storing water in 'drainage-galleries' is clear evidence, on the ground, of our being in non-compliance with our own Borough Code 14.170 (SLIDE 13). An urgency is added in that both methods of water storage lead to stagnating water bodies with the clear prospect of contamination of our water well aquifers!

- 11 AAC 93.035. Requirement to apply for the use of a significant amount of water
- (a) A significant amount of water is that amount of water for which an application for a
 water right or an application for a temporary water use authorization is required, as
 described in (b) of this section.
- (b) A person shall file an application for a water right under 11 AAC <u>93.040 or for a</u> temporary water use authorization under 11 AAC <u>93.220 before</u>
- (1) the consumptive use of more than 5,000 gallons of water from a single source in a single day;
- (2) the regular daily or recurring consumptive use of more than 500 gpd from a single source for more than 10 days per calendar year;
- (3) the non-consumptive use of more than 30,000 gpd (0.05 cubic feet per second) from a single source; or
- (4) any water use that may adversely affect the water rights of other appropriators or the public interest.
- (c) A person using less than the amount of water described in (b) of this section acquires no water right or priority unless an application is filed and a permit or certificate is issued under 11 AAC 93.035 - 11 AAC 93.140. The use of water without a permit or certificate is subject to appropriation by others, and the use of water without a water right is subject to curtailment in order to supply water to lawful appropriators of record or to protect the public interest.

14.06.170. Road Construction Standards

"Roads shall be constructed to prevent **ponding** of runoff waters in roadside ditches. Drainage ditches shall be constructed such that runoff waters will be <u>conveyed</u> to natural drainage courses, ditches or waterways, or other man-made drainage courses. (i.e. such as the encouraged Seventh Street Drainage Ditch.) – and the ordinance continues"

'Drainage-galleries' depend on percolation. By Webster's definition, 'percolation is the <u>slow</u> movement of water through the pores in soil or permeable rock'. In a sense, percolation is a cousin to osmosis and evaporation. None of them are, in any way, that which 'conveys' anything!

Clearly, our 'drainage-galleries' are evidence of our being in non-compliance with our own Code, not to mention the clear prospect of stagnation, bacterial growth and contamination of drinking water!



