

Council Questions on Stormwater LRP Report

Does it make sense to move forward with the non-land acquisition portions of projects if funds are not available to complete an entire project at once?

This approach may make sense in some cases. Additional information and analysis is required prior to making a determination. After proceeding with more detailed engineering design, staff will be able to provide better project scope and cost information and possibly identify opportunities to phase projects. If the cost of land makes some projects cost prohibitive it may make sense to move forward with less costly projects.

What percentage of the Village is currently unserved or underserved by stormwater infrastructure? To what percentage of protection does this plan raise the Village?

It is difficult to estimate the percentage of the Village that is currently underserved by stormwater infrastructure. Service levels vary across the Village, depending on the period when the stormwater infrastructure was completed. Much of the infrastructure south of 63rd Street and north of 39th Street was constructed when at least some minimal standards were in place for stormwater infrastructure, and as such generally meets the minimum level of service. (There are exceptions to this, however).

The older sections of the Village are served by a wide assortment of pipes, ditches and overflow routes. Problem areas have been identified through resident complaints and staff observations during the recent historic flooding events. Staff estimates that the projects included in this plan would bring almost all identified areas up to the minimum level of protection, based on known flooding and drainage issues.

Have we exhausted all avenues or state and federal contributions to these projects?

Yes. State and Federal grants for stormwater projects are primarily focused on purchasing structures that were previously built within the FEMA designated floodplains. The Village has applied to FEMA through the Hazard Mitigation Grant Program (HMGP) to purchase four properties that meet the HMGP requirements and also lie within the floodplain. There are a few grant programs that are available for the construction of "green" infrastructure projects, and the Village has selectively applied for - but not received - these grants over the past few years. These programs generally have very limited funding, and priority is mostly given to projects that deal with the separation of combined sewers (which the Village does not have) and/or the reduction of sanitary sewer overflows.

Why is flood storage better than flood water conveyance?

By introducing storage at or near the point where the rain falls, the system mimics more closely what happens in nature (evaporation and infiltration into the soil), which puts less pressure on downstream infrastructure. It also allows the Village to use smaller pipes and ditches for conveyance, which reduces overall project cost and future maintenance/replacement expenses. Without storage in developed areas,

infiltration and evaporation will be replaced by run-off which causes erosion, sedimentation, and increased flooding in creeks and rivers downstream.

Can we determine what percentage of our current stormwater problems are due to residential redevelopment?

It is difficult to determine what is due to residential redevelopment. In general, the Village's stormwater problems are due to undersized infrastructure built in an era when standards were not in place to ensure a minimal level of protection. Development of all kinds contributes to the problem by increasing the amount of impervious area within each drainage catchment area. It is difficult to estimate the specific impact of residential redevelopment overall, as it depends on existing infrastructure, soils, groundwater, etc, within each catchment area, sub-watershed, and watershed on a case by case basis.