Water Supply Issues: Haines Boulevard Redevelopment Plan

Waterford Township

October 25, 2016
In 1987, the Camden County Municipal Utility Authority (CCMUA) proposed an interbasin transfer of wastewater from the Regional Growth Area in Chesilhurst, Waterford and Winslow to the Delaware River Basin.

CCMUA evaluated the proposal’s potential effects which Pinelands Commission staff concluded would result in significant reductions in subbasin recharge.

PC Study: “An Assessment of Sewer and Water Supply Alternatives for Pinelands Growth Areas in the Mullica River Basin, Camden County”
Background

- The assessment considered 16 scenarios
- Water/wastewater planning:
  - How much water can be transferred without depleting Pinelands streams?
  - How much water can be recharged without polluting Pinelands streams?
- Demand reduction through downzoning
The PC assessment resulted in:

- Density decreases in all three municipalities
- Adoption of a water supply master plan
- Amendments to the wastewater management plan
- A stream monitoring program with USGS
Future Water and Sewer Demands

Future water demands were reduced for the three municipalities to 2.6 million gallons per day (MGD).

<table>
<thead>
<tr>
<th></th>
<th>Winslow</th>
<th>Waterford</th>
<th>Chesilhurst</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.2 MGD Export</td>
<td>0.44</td>
<td>0.10</td>
<td>0.54</td>
</tr>
<tr>
<td>0.3 MGD Non-K/C</td>
<td></td>
<td>0.19</td>
<td></td>
</tr>
<tr>
<td>1.4 MGD In-basin Recharge</td>
<td>1.09</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Totals</td>
<td>0.44</td>
<td>1.19</td>
<td>1.63</td>
</tr>
</tbody>
</table>

Total Future Demands: 2.60 MGD
Future Water and Sewer Demands

- As amended in 1988, Waterford is allocated 592,000 gallons per day (GPD) of wastewater flow to the CCMUA’s Camden facility.
- Waterford has a current water supply allocation of 652,000 GPD (approx. 521,000 GPD in terms of wastewater, which is under the current cap).
- Future development will have to use non-K/C water:
  - Current water allocation: 652,000 GPD
  - Current usage: - 348,000 GPD
  - Remaining allocation: 304,000 GPD
Haines Blvd. Redevelopment Plan

- Waterford’s redevelopment plan for Haines Boulevard permits 792 new residential units and nonresidential development, for which water demands would exceed the Township’s water allocation.

- The Township proposes a self-imposed limit to 70% of total K/C water supply allocation.

- Upon reaching this limit, the Township will secure a non-K/C source to meet future demands.

- PC staff will work with Waterford to track development approvals and projected water use to ensure compliance.
Haines Blvd. Redevelopment Plan

Present water supply situation in Waterford:

- Current allocation: 652,000 GPD
- Usage: 348,000 GPD (53%)
- Available allocation: 304,000 GPD (47%)
Water supply situation after redevelopment plan:

- Upon reaching the 70% cap, Waterford will cease diverting water from the K/C aquifer
- 70% of full allocation: 456,400 GPD
Haines Blvd. Redevelopment Plan

Water supply situation after redevelopment plan:

- Revised “allocation”: 456,400 GPD
- Usage: 348,000 GPD
- Available “allocation”: 108,400 GPD
Haines Blvd. Redevelopment Plan

- PC build-out analysis suggests a Township-wide future water demand of 720,000 GPD
  - 310,000 GPD from redevelopment plan
  - 160,000 GPD from other RGA units
  - 250,000 GPD from commercial development

- With 108,400 GPD of the revised “allocation” still available, at best, one-third of the redevelopment area could be served before a non-K/C source is required