Urban Irrigation and Septic Fields

A monthly time-series for indoor, outdoor, and indoor that would go to septic was developed for each sub-watershed. This effort started with utility records compared to parcel records then extended to account for domestic self-supply and areas in Florida and Georgia where there were no utility records. Additional detail about the development of this dataset is provided in the documentation of the urban water use component of the NFSEG project.

The irrigation and septic volumes were applied uniformly within each month and uniformly across all urban land uses. Since this uniformity implied a low application rate, the irrigation was applied as Surface Lateral Inflow (SURLI) to avoid interception losses that would occur if applied as precipitation. Volume from septic fields was applied to Lower Zone Lateral Inflow (LZLI). All water for urban irrigation and septic field contribution was considered to come from groundwater.

Golf Courses

Golf course irrigation use was established based on the best available data for the region. Where available, permitted or measured values were used. Otherwise, USGS estimates were used. Additional detail is available in other NFSEG documentation.

Monthly time-series of golf course volumes were established per irrigated area. The volumes were imposed into HSPF as SURLI and, from an evaluation of sourcing data in SJRWMD, an estimated split of 50/50 was established between surface water and groundwater. The volume to supply the surface water component is taken from the local reach within HSPF.

Table 9-9. Irrigation type matched to appropriate part of HSPF water balance

Irrigation System	Application to HSPF Water Balance
Micro Drip	SURLI: Surface Storage Lateral Inflow
Container Nursery	SURLI: Surface Storage Lateral Inflow
Crown Flooding	LZLI: Lower Zone Lateral Inflow
Low Volume	SURLI: Surface Storage Lateral Inflow
Micro Spray	SURLI: Surface Storage Lateral Inflow
Overhead	SURLI: Surface Storage Lateral Inflow
Seepage (Pipeline, Linear Pipeline)	LZLI: Lower Zone Lateral Inflow
All other types	Applied as precipitation (PREC)