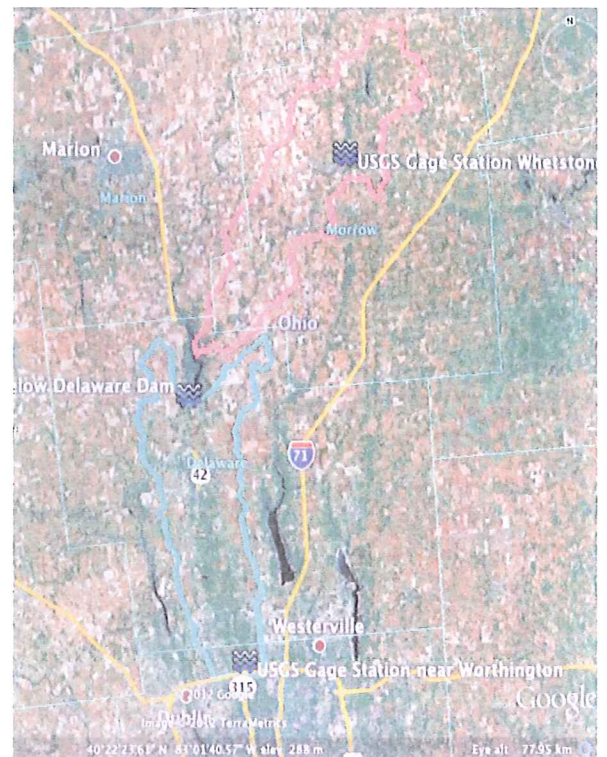
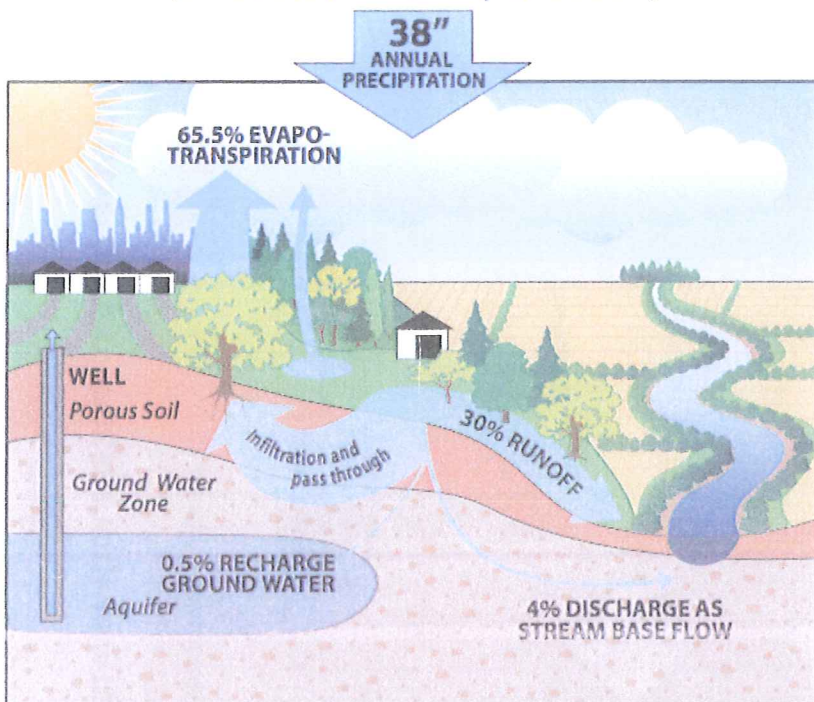


LAND DEVELOPMENT PROCESS WITH A WATER QUALITY POINT OF VIEW

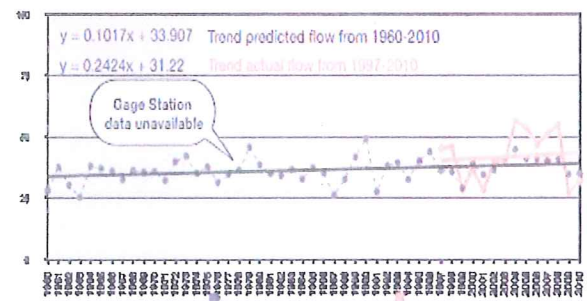
WATER QUALITY OPPORTUNITY	PHASE	PROCESS	EVALUATION	POST CONSTRUCTION SWP3 DEVELOPMENT	HIERARCHY OF LAND & WATER DESIGN	JURISDICTION CHECKLIST OR GUIDANCE	WHO IS INVOLVED
Very High	Comprehensive Plan	Goals: Codes, Regulations, Ordinances, Fee Structure			- Map Streams, Wetlands and Sensitive Areas - Tree Canopy Study - TMDL and Impaired Water ways - Grey Infrastructure Analysis		
High	Pre-Concept				- Streamway Setback - Wetland Setback - Woodland/Tree Canopy Protection - Open Land/Meadow Protection - Maintain Pre-Development Hydrology (LID Site Design - Preservation Deals		
Med-High		Concept or Sketch Plan		Consider SWP3	- Minimize & Disconnect Imperviousness - Conservation Subdivisions - Natural Area Establishment (Reforest, Revegetate) - Minimize Scope of Native Soil Disturbance		
Medium	Engineering Phase	Preliminary Engineering	Site Walk	Initial SWP3 Review	Manage Remaining 3/4" Volume (Runoff Reduction)		
Low		Final Engineering	Touch Review	Finalize SWP3. Submit NOI	Finalize System Perpetual Maintenance Plan		
Little to None (Avoidance)	Site Development	Construction Plat	Submit SWP3	Construction Site Erosion SWP3	Construction Site Check. & Soil Rehab.		
Avoidance	Occupancy	Operation & Maintenance		Submit NOT	- Over-site of Infiltration - Install Deep Till after major grading. Chisel Plow & Compost after site - Credentialed Green Infrastructure Maintenance		

Olentangy Permit Area Water Cycle

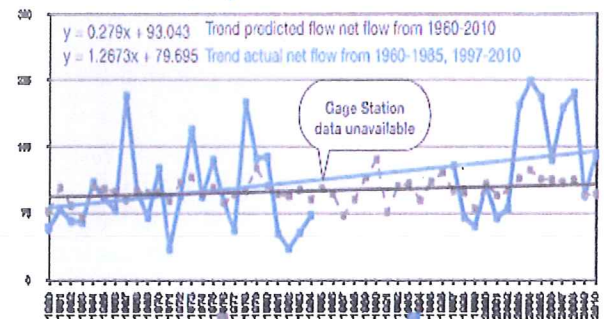
(Based on 1931-1980 period data)



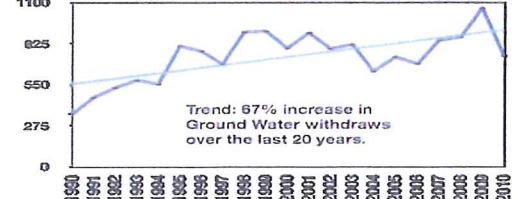
Whelstone Creek 2010 Flow 11% Over



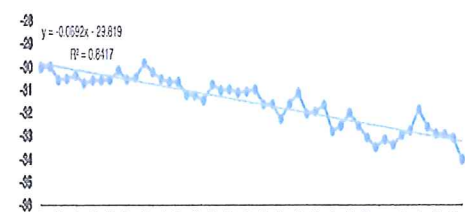
Worthington 2010 Flow 34% Over Prediction



Permit Area Public/Industrial Ground Water Use (MG)



Delaware Observation Well Water



Olentangy Permit Area Water Cycle

Reflecting 1980-2010 Land Use Changes

