



Incorporated in the State of Florida, with offices located in Orlando, Tampa, Sarasota, and Gainesville, Florida, HSW Engineering, Inc. (HSW) was founded in 1988 as an environmental services firm. HSW has grown into a full-service engineering and environmental science firm. Staff members have backgrounds in engineering (chemical, civil, environmental), geology, hydrogeology, soil physics, hydrology, hydrologic (groundwater and surface water) and solute transport modeling, chemistry, ecology, toxicology, GIS and mapping. All professional and technical staff members, including the principals, maintain focus on their areas of practice and client relationships.

HSW provides a unique blend of expertise in engineering design, construction management, environmental compliance, permit acquisition and knowledge of state and federal regulations. HSW has acquired a national reputation for using innovative and streamlined approaches to assess and resolve a broad range of complex engineering and environmental concerns.

LOCATIONS

Main Office: Tampa

15711 Mapledale Blvd., Suite B
Tampa, FL 33624
(813) 968-7722

Orlando

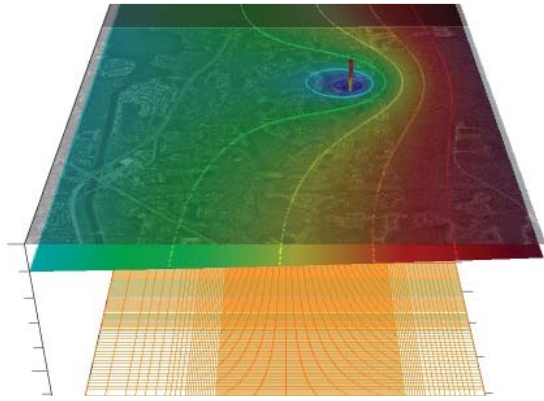
605 East Robinson St., Suite 308
Orlando, FL 32801
(407) 872-6893

Gainesville

8000 NE 51st Street
Gainesville, FL 32609
(352) 371-7841

Sarasota

4411 Bee Ridge Road, Box #305
Sarasota, FL 34233
(941) 378-3074



WE HAVE THE TOOLS...

HSW uses non-proprietary modeling software whenever possible. All the model codes are verifiable and defensible. Our belief is that once the model is developed it belongs to you. The list below is not exhaustive but covers many of the industry-standard hydrology/hydraulic models employed by HSW.

Groundwater Flow

GMS (ModFlow / ModPath / FEFLOW), GW Vistas, WinFlow, GW/SW Interface Analytic Solutions

Hydraulics

KY Pipe, WaterCAD, CulvertMaster

Hydrodynamic Model

EFDC, CE-QUAL-W2

Mixing Zone

CORMIX, PLUMES

Natural Attenuation

MONA - Monitored Natural Attenuation Data Toolkit
Bioscreen/Bioplume, Biochlor

Open Channel Flow / Water Quality

HEC-RAS, WASP-WASP5, PONDS, PondPack, FlowMaster, QUAL2E, ICPR

Solute Transport

GMS (MT3DMS / RT3D), N3Dade, WinTran, ACRU2000

UnSat Flow

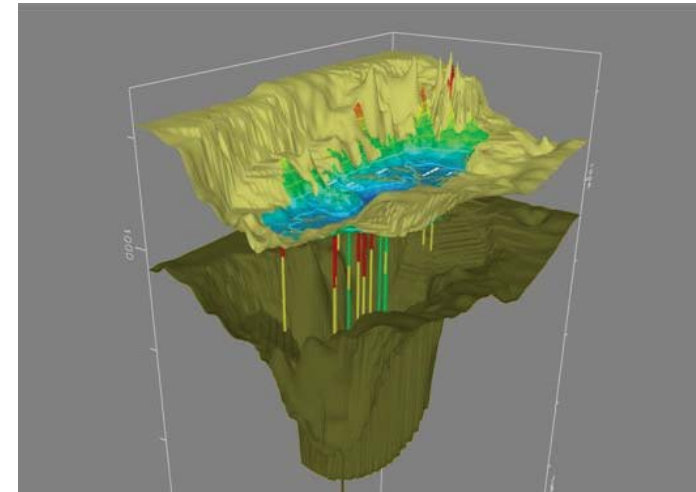
SUTRA, Analytic solutions, MODRET

Watershed and Stormwater Modeling

HEC-HMS, Basins, SCS, PondPack, ICPR, SWMM, WaSh

HSWENG.COM

Engineering & Scientific solutions
within your reach...



MODELING

SOLUTIONS

HSW provides the foundation for integrated hydrology and hydraulics modeling.

Integrated modeling of groundwater and surface water flow, solute, and sediment transport and hydraulics...

OUR TEAM



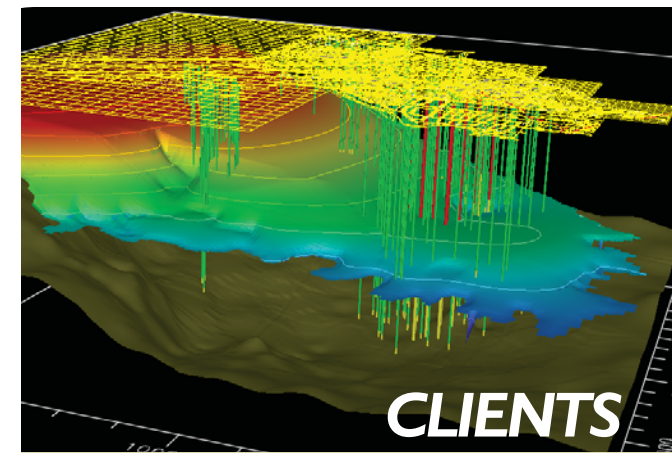
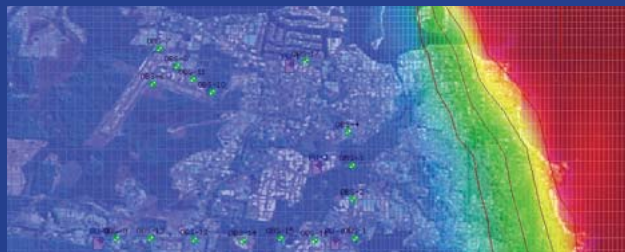
Dr. Ken Watson, C.P.H. is President of HSW and has over 25 years of modeling and project management experience. He has qualified as an expert in groundwater modeling and applied mathematics.

Dr. Donald Carpenter, P.E., LEED AP is a Senior Technical Consultant with HSW and has over 10 years of hydrologic and hydraulic modeling experience solving complex civil engineering problems. His areas of expertise include hydrodynamic and watershed modeling, environmental field data collection and assessment, sediment transport, river engineering and restoration, stormwater management and Low Impact Development.

Dean Mades, P.E. is a Senior Hydrologist with HSW and has over 30 years of experience with water resource assessments, permitting, and environmental restoration. He has qualified and provided expert testimony in regards to surface- and groundwater hydrology, modeling, monitoring and water-resources evaluations.

Ravi Nalamothu, P.E. is a Project Engineer with over 8 years of experience in hydrologic and hydraulic modeling, model development of integrated surface water/groundwater flow, and nutrient fate and transport modeling. He specializes in surface-water modeling, groundwater, statistical and geostatistical analysis, and GIS applications in support of permitting and MFL development.

Tim Roth, E.I. is a Senior Designer, performing watershed and stormwater modeling. He is experienced in analyzing and designing projects utilizing conventional and Low Impact Development methods for surface-water/groundwater runoff solutions.



We have done this many times before...

Our engineers and scientists have applied our modeling expertise to a variety of hydrology and hydraulics problem. We have numerous completed projects across the country and understand local and regional impacts.

Arizona National Guard, 162nd Fighter Wing
Groundwater Flow and Contaminant Transport Modeling, Tucson, AZ

AFCEE, Wurtsmith Air Force Base
Groundwater Flow and Contaminant Transport Modeling, Oscoda, MI

Northrop Grumman
Bioaugmentation Design Modeling, Milledgeville, GA

St. Johns River Water Management District
HEC-RAS Modeling to Support determination of Minimum Flows and Levels (MFLs)

Southwest Florida Water Management District
EFDC Hydrodynamic Modeling to evaluate the impacts of freshwater withdrawals on the salinity and thermal regime of the Homosassa River, FL

South Florida Water Management District,
Rainfall-Runoff Modeling and Water Balance Reservoir Design Analysis in support of the Indian River-St. Lucie Counties Water Resources Study