



Incorporated in the State of Florida in 1988, HSW Engineering is an integrated earth science and engineering firm providing proactive, innovative, and cost-effective solutions for Environmental, Water Resources and Civil / Land Development projects. HSW has distinguished itself as a leader in the environmental industry by adhering to its philosophy of strategic long-range management of environmental concerns. This successful philosophy revolves around a project organizational structure that always includes one of the firm's principals to maintain strict quality assurance, effective communication and senior leadership. HSW has successfully applied innovative strategies to technical and regulatory issues nationwide, resulting in substantial cost and time savings. This approach assures our clients of the best possible service and value and is a key reason that over 90% of our work comes from previous customers.

LOCATIONS

Main Office: Tampa

3820 Northdale Blvd., Suite 210B
Tampa, FL 33624
(813) 968-7722 (phone)
(813) 962-2406 (fax)

Orlando

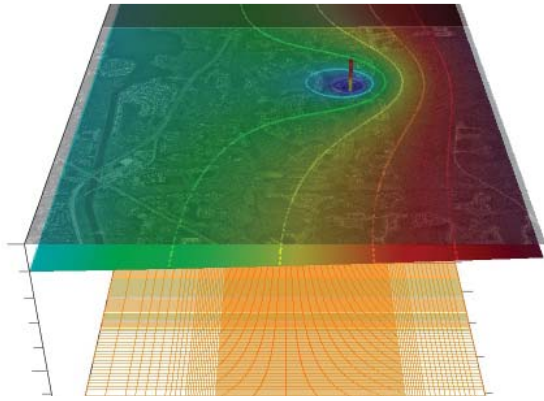
605 East Robinson St., Suite 308
Orlando, FL 32801
(407) 872-6893

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. You need to only have the publicly-available software to use the model. The list below is not exhaustive but covers many of the industry-standard publicly available hydrology/hydraulic models employed by HSW.

Groundwater Flow

ModFlow, ModPath, FEFLOW, GMS, 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

Solute Transport

MT3DMS, RT3D, N3Dade, WinTran, ACRU2000

UnSat Flow

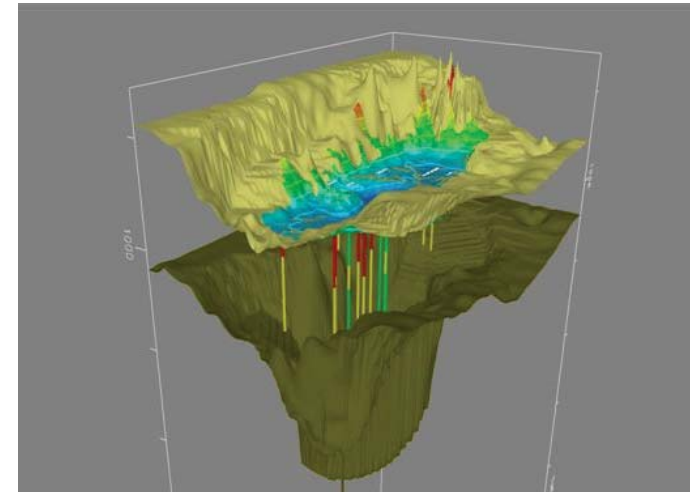
SUTRA, Analytic solutions, MODRET

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



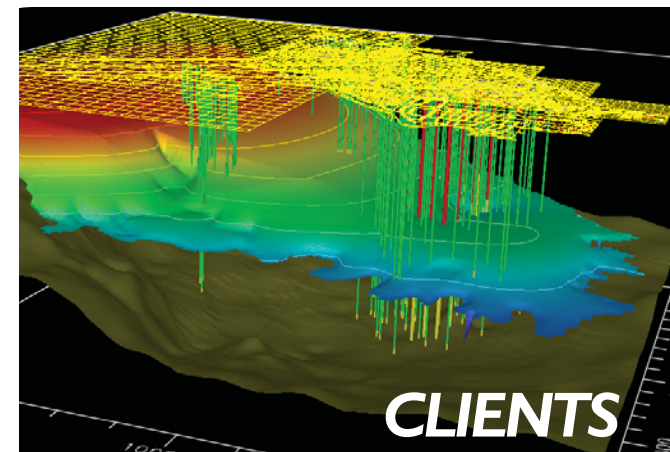
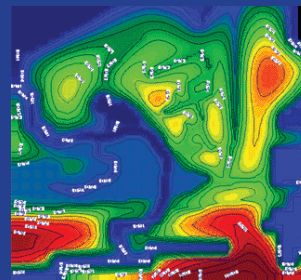
Dr. Ken Watson, C.P.H. is President of HSW and has over 25 years of modeling and project management experience. He has qualified as an expert in groundwater modeling and applied mathematics.

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.

Dr. Lei Yang is a Project Engineer with over 8 years of experience in hydrologic, hydraulic, and hydrodynamic modeling and model development of integrated surface water/groundwater flow and nutrient transport and transformation system. She specializes in surface-water modeling, large database development and management, statistical and geostatistical analysis, and GIS applications in support of permitting and MFL development.

Sally Garrett, E.I. is a staff engineer, performing rainfall-runoff and open-channel flow modeling.



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, Tuscon, AZ

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

Centrum Properties
Groundwater Flow Modeling in support of water use permit for proposed mine

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