## CI-WATER products for water managers, researchers & developers



The CI-WATER project team has developed resources to help make advanced modeling capabilities more accessible to the people who need them. Access these products at <a href="http://ci-water.org/apps\_tools.shtml">http://ci-water.org/apps\_tools.shtml</a>

PRODUCT	DESCRIPTION	DEVEL	WATE	MAIN	RESEA
ADHydro	Simulate large watersheds in a massively parallel computing environment.	•			•
Canned GSSHA	Discover flood threat using the canned modeling approach & current hydrologic conditions; developed with Tethys Platform.		•	1	
Canned Modeling	Gain rapid access to pre-run simulations that may approximate the user's test parameters.		•	,	
CI-WATER Data Services	Use our Web services to access datasets commonly used as input to Hydrologic models for the Western US.	•	•	)	•
Climate Data Access Tool	Access FetchClimate data through a webmap interface or JavaScript API.	•			
CondorPy	Create, submit, execute & monitor large batch computing jobs with HTCondor, all from Python.	•			•
GSSHA Index Map Editor	Produce a before-and-after comparison report for runoff after the land use or soil type (index maps) of GSSHA models are altered.		•	,	•
GsshaPy	Expose GSSHA models to the power of SQL databases by using this product to interface between the principal model files & a database.	•			
HydroGate	Access heterogeneous HPC storage and computational resources using SSH via this science gateway service.	•			•
HydroGate Python Client	Access CI-WATER data & computational services with this Python client.	•			•
Observed Data	Visualize water data feeds from HydroServers using this web app developed with Tethys Platform.		•	,	
Parley's Creek Management	Evaluate the impact of management decisions & climate change on the Parley's Creek system; powered by the Parley's Creek Management GoldSim model & developed with Tethys Platform.		•	1	
SLC Integrated Urban Water Management	Use this system dynamics model to analyze integrated SLC water system reliability and vulnerability under population growth and climate change scenarios; evaluate alternative supply and demand side solutions; includes an online education tool.		•	,	•
Stream Forecaster	Visualize streamflow forecasts for high density stream networks.		•	)	
TethysCluster	Leverage the power of the Cloud with automated provisioning & configuring of computing clusters.	•			•
Tethys Platform	Create apps or convey models & data.	•	•	,	•
TMAPS	Automate the generation of a web-based interactive viewer that helps visualize massive models with multiple timestep outputs possible.	•	•	,	
TMAPS Tool	Facilitate the change of inputs to the TMAPS code through a user interface while benefiting from the computational power provided by TethysCluster.		•	1	
Utah Energy Balance (UEB) Data Input Tools	Set up a UEB model for any watershed in the western US using standard data products accessible through CI-WATER data services.		•	,	•
Utah Energy Balance (UEB) Parallel	Take advantage of high-performance cyberinfrastructure with this parallel version of the UEB snowmelt model to simulate snow processes in large watersheds at high resolution.		•	1	•
Water-Energy Nexus Model	Design collaborative water & energy conservation programs to meet city-wide reduction targets.		•		•
Water Evaluation and Planning (WEAP): Bear River	Use this simulation model to see how water supplies can meet prioritized demands in the Lower Bear River Watershed.	•	•	'	•
Water Management Data Model (WaM-DaM)	Organize network-based water management data.		•		•

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