



U.S. Fish & Wildlife Service

National Conservation Training Center

Conserving the Nature of America

CSP7306 - Watershed Analysis and Hydrologic Modeling

Course Code	CSP7306
Course Title	Watershed Analysis and Hydrologic Modeling
Description	<p>This intermediate-level GIS course provides training on the acquisition, processing, and analysis of appropriate spatial datasets to make sound watershed management decisions. The course is delivered in an online format spanning two weeks and combines independent, self-paced work with daily instructor interaction in a virtual classroom. Topics covered include estimating stream flow and water quality, modeling riparian habitat, integrating future climate predictions, and performing scenario analysis for better adaptive management of watersheds. Participants work through a series of online learning modules, including video lectures, specialized software demonstrations, case studies, and hands-on exercises designed to build skills using ArcGIS Pro. A daily virtual classroom forum is provided to engage in Q & A and interact with instructors and other students. Participants should be prepared to dedicate 4 - 6 hours to pre-class assignments and 16 - 18 hours per week to class work and virtual forum attendance.</p> <p>Objectives:</p> <ul style="list-style-type: none"> • Track the path of pollution sources to find potentially affected streams • Estimate stream flow for ungauged areas • Predict water quality from land cover loading coefficients • Analyze historic and future climate predictions for decision support • Perform stream suitability analysis • Perform multi-criteria analysis to prioritize projects <p>Target Audience: Anyone who works with watersheds</p>
Delivery Method	Instructor Led Online
Non-FWS Fee	\$995.00
Instructional Hours	36
Credits/CEUs	3.0
Course Content Contact	Clarissa Mathews, Ph.D.; email: clarissa_mathews@fws.gov
Curriculum Category	Geospatial Technologies
Course Frequency	Every Other Year
Registration Link	Register in DOI Talent
DOI Talent Course Type	(OLT) On-Line Training
College Credit Name	Semester Hours
College Credit Value	2

Schedule: CSP7306 - Watershed Analysis and Hydrologic Modeling

Start	End	Session information	Location	Session Contact
6/1/2020	6/11/2020	For course content questions: clarissa_mathews@fws.gov For registration questions: katie_poston@fws.gov	Online	katie_poston@fws.gov