



U.S. Fish & Wildlife Service

# National Conservation Training Center

*Conserving the Nature of America*

## CSP2201 - Principles and Techniques of Electrofishing

Course Code	<b>CSP2201</b>
Course Title	<b>Principles and Techniques of Electrofishing</b>
Description	<p>This class builds knowledge and skills that will enable biologists to increase the standardization and efficiency of electrofishing sampling while operating in a safer manner. Participants learn how to apply electrical circuit and field concepts to various challenges related to sampling, equipment performance, selection of suitable equipment, equipment trouble-shooting, fish injury, and safety.</p> <p><b>Objectives:</b></p> <ul style="list-style-type: none"> <li>o improve standardized sampling and efficiency by developing power/power density goal settings (power and electric field standardization), manipulating waveform attributes (type, frequency, duty cycle, voltage, etc.), evaluating electrode design and placement; and incorporating efficiency factors in sampling designs;</li> <li>o evaluate equipment by estimating effective operating range across water conductivities based on equipment specifications, electrode resistance, and power required for successful electrofishing;</li> <li>o evaluate equipment by considering waveform control, metering, and safety features;</li> <li>o operate electrofishing equipment safely;</li> <li>o develop a safety program for staff;</li> <li>o use a fish injury risk model to assess and minimize electrofishing-induced fish injury;</li> <li>o evaluate the usefulness of catch per unit effort data to detect trends;</li> <li>o describe a process to estimate capture probabilities and then to use these estimates to adjust catch per effort data to abundance estimates; and</li> <li>o understand and apply concepts presented in the electrofishing literature.</li> </ul> <p><b>Target Audience:</b> Aquatic biologists that use electrofishing as a sampling or collecting tool.</p>
Delivery Method	Instructor Led
Non-FWS Fee	\$1,195.00
Instructional Hours	36
Credits/CEUs	3.0
Course Content Contact	Alan Temple: alan_temple@fws.gov; (304) 876-7440; <a href="mailto:alan_temple@fws.gov">alan_temple@fws.gov</a>
Curriculum Category	<b>Aquatic Species Biology and Conservation</b>
Course Frequency	Once per year
Registration Link	LMS
DOI LEARN Course Type	ILT
College Credit Name	Semester Hours
College Credit Value	2

### Schedule: CSP2201 - Principles and Techniques of Electrofishing

Start	End	Session Information	Location	Session Contact
3/11/2019	3/15/2019	For registration questions contact: sharon_howard@fws.gov For course content questions contact: alan_temple@fws.gov	Camarillo, CA	Sharon Howard; sharon_howard@fws.gov