



**Wells National Estuarine Research Reserve**  
**Teachers on the Estuary (TOTE): Preparing Students to Be Water Stewards**  
**Workshop Agenda: 23.5 contact hours**  
**August 1, 2 & 3, 2023 (with an evening fall follow-up via Zoom)**

**Tuesday, August 1**

High tide: 11:24am    Low tide: 5:12pm

7:00am	Bird banding demonstration (optional)
7:45am	Breakfast snacks & drinks will be available (optional)
8-8:30am	Introductions
8:30-9:30am	Nature journaling, part I
9:30-9:45am	Break
9:45-11:45am	System-wide Monitoring Program (water quality & weather)
11:45am-12:30pm	Lunch
12:30-2:30pm	Water quality monitoring at the salt marsh
2:30-3pm	Evaluations

**Wednesday, August 2**

High tide: 12:17pm    Low tide: 6:07pm

7:45am	Breakfast snacks & drinks will be available (optional)
8-8:30am	Group discussion on classroom applicability (day 1)
8:30-9:30am	Nature journaling, part II
9:30-9:45am	Break
9:45am-12:45pm	Kayaking on the Little River Estuary
12:45-1:30pm	Lunch
1:30-4:30pm	Solutionary Teaching & Learning (15-minute break will be incorporated)*
4:30-5pm	Evaluations

**Thursday, August 3**

High tide: 1:09pm    Low tide: 7:02pm

7:45am	Breakfast snacks and drinks will be available (optional)
8am-12pm	Solutionary Teaching & Learning (15-minute break will be incorporated)*
12-12:45pm	Lunch
12:45-2:15pm	Nature journaling, part III
2:15-3:30pm	Wrap-up and evaluations

## **\*Solutionary Teaching and Learning**

Mid-day Wednesday (August 2) through mid-day Thursday (August 3): This part of the TOTE workshop will focus on how you can use a four-part [Solutionary Framework](#) from the [Institute for Humane Education](#) (IHE) to prepare your students to be water stewards.

We will use

- water science and observation and data detective work from the first day and a half;
- knowledge and understanding with learning about the UN's Sustainable Development Goals [6: Access to Clean Water](#) and [14: Life Below Water](#); and
- information and experience with bodies of water near your school.

We will pay attention to how to develop curiosity and compassion, ways to teach critical, systems, strategic and creative thinking, and an understanding of what it means to be a water steward. We will identify problems that exist that human stewardship, advocacy and restoration ideas could help to ameliorate. Then, by engaging with a variety of hands-on experiences that you can use with your students, we will explore the four phases of the Solutionary Framework: *Identify, Investigate, Innovate and Implement*. You will create models for some of the analysis activities that IHE uses and make plans for how to support your students to develop the knowledge, skills and dispositions to be water stewards and, ultimately, solutionaries.

TOTE participants will get IHE President Zoe Weil's book *The World Becomes What We Teach*, a copy of IHE's *Solutionary Guidebook* and online access to many free resources.

This part of the TOTE workshop will be facilitated by Dr. Julie Meltzer, IHE's Director of K-12 and Teacher Education. Julie has played many roles over the course of her career: teacher, professor, district administrator, principal coach, author, program evaluator, content developer, workshop leader, speaker, and researcher. She believes that educating students to be changemakers is both an essential purpose for schools to take on and excellent pedagogical practice because it is a student-centered, highly engaging, project-based approach to teaching and learning. Julie is currently working with educators throughout the United States and in nine other countries on IHE's mission to educate a generation of solutionaries.