# 2019 Delta Invasive Species Symposium: Remote sensing applications for management

August 29, 2019 - 9:00 a.m. – 3:45 p.m.

## University of California (UC) Davis Conference Center, 550 Alumni Lane, Davis, CA 95616

Presentations will explore remote sensing tools and applications for invasive species management in the Delta available today and opportunities for the future. The symposium is sponsored by the <u>Delta Interagency Invasive</u> <u>Species Coordination</u> (DIISC) team, Delta Stewardship Council's Delta Science Program, UC Agriculture and Natural Resources Cooperative Extension, The Freshwater Trust, and UC Davis.

Agenda: Titles and times are approximate and subject to change.

- 8:30 9:00 *Registration and coffee*
- 9:00 9:15 Welcome and introduction: Louise Conrad, Delta Science Program
- **9:15 9:40** *Opening presentation:* History and scale of remote sensing applications to managing invasive species Iryna Dronova, UC Berkeley
- 9:40 11:15 Morning session
- 9:40 10:05 Mapping aquatic plants in the water column and beyond using optical and sonar remote sensing - Shruti Khanna, California Department of Fish and Wildlife
- 10:05 10:30 LiDAR applications in aquatic ecosystems Erin Hestir, UC Merced
- 10:30 10:50 Break
- 10:50 11:15 Unmanned aerial vehicle mapping of invasive vegetation Rob Thoms, Stillwater Sciences

11:15 - 12:00 Program updates: Brief lightning talks providing updates on various invasive species, programs, and projects in the Delta

- The DIISC Team Thomas Jabusch, Sacramento-San Joaquin Delta Conservancy
- Remote Imagery Collaborative Dylan Chapple, Delta Science Program
- Using drones for invasive aquatic vegetation monitoring in the Delta Harry Spanglet, California Department of Water Resources and Ted Grosholz, UC Davis
- Collecting SAV and FAV field data Dan Ellis, California Department of Fish and Wildlife
- How to Win at Hide-and-Go-Seek: Bioacoustic Surveys of Non-Native Shrimp in Lake Tahoe– Katie Senft, UC Davis Tahoe Environmental Research Center
- Aquatic Invasive Plant Control in the Sacramento-San Joaquin Delta Michael Kwong, California State Parks Division of Boating and Waterways

### 12:00 - 1:20 Poster session and lunch break

#### 1:20 - 3:10 Afternoon session

- 1:20 1:45 Mapping of floating aquatic vegetation in the Delta using Satellites David Bubenheim, National Aeronautics and Space Administration
- 1:45 2:10 Vegetation Classification and Mapping Program: Update on the Vegetation Map of the Delta and the Rest of California Diana Hickson, California Department of Fish and Wildlife
- 2:10 2:35 I know what you ate last summer: Video monitoring for invasive species management Avery Scherer, Cramer Fish Sciences

- 2:35 2:45 Break
- 2:45 3:10 Cameras and Collars: The Ultimate Game of Nutria Hide and Seek Valerie Cook, California Department of Fish and Wildlife
- **3:10 3:40 Closing presentation and discussion:** current potential, limitations, and future opportunities for remote sensing of invasive species in the Delta Susan Ustin, UC Davis

### 3:40 - 3:45 Wrap up and adjourn

If you have any questions, please contact <u>Rachael.Klopfenstein@deltacouncil.ca.gov</u>.