



# Pulsed Flow Program



## Pulsed Flow Conference

Alumni Center, University of California, Davis, CA 95616

September 18, 2007, 9:00 AM - 4:30 PM

### Checking the Pulse of our Streams and Rivers

#### PROGRAM

**Coordinator:** Cincin Young (University of California, Davis)

- 9:00 - 9:10 AM      **Welcome address**  
Douglas E. Conklin (Program Director, UCD-CEC Pulsed Flow Program,  
University of California, Davis)
- 9:10 – 9:20 AM      **Opening remarks**  
Joseph O'Hagan (Commission Program Manager, Public Interest Energy  
Research, California Energy Commission)
- 9:20 - 9:40 AM      **Geomorphic importance of winter peak flows and annual snowmelt  
hydrographs in a Sierra Nevada boulder-bedrock river**  
Scott McBain (McBain and Trush, Inc.)
- 9:40 - 10:00 AM      **Ecological roles of natural pulse flows in a boulder-bedrock Sierra  
Nevada river: Woody riparian vegetation**  
John Bair (McBain and Trush, Inc)
- 10:00 - 10:10 AM      **BREAK**
- 10:10 -10:30 AM      **Evaluating pulsed flow-based disturbances of stream benthos**  
Ian Chan (Garcia and Associates)
- 10:30 – 11:10 AM      **Ecological roles of natural pulse flows in a boulder-bedrock Sierra  
River: Benthic macroinvertebrates**  
Bill Trush (McBain and Trush, Inc)
- 11:10 – 11:30 AM      **Effects of temperature and flow on *Ceratomyxa shasta* actinospore  
and polychaete host survival**  
Sarah Bjork\* and Jerri Bartholomew (Oregon State University)

- 11:30-11:50 AM **Reproductive timing of freshwater mussels and potential impacts of pulsed flows on reproductive success**  
Lorrie Haley\* and Maria J. Ellis (Spring Rivers Ecological Sciences)
- 11:50 – 1:00 PM **LUNCH**
- 1:00 – 1:20 PM **Pulsed flow effects on the foothill yellow-legged frog (*Rana boylei*): Summaries and re-analyses of FERC re-licensing data and study reports**  
Amy J. Lind (USDA Forest Service)
- 1:20 – 1:40 PM **The effects of velocity manipulation on tadpoles of the Foothill yellow-legged frog (*Rana boylei*)**  
Sarah Kupferberg (Questa Engineering)
- 1:40 – 2:00 PM **Identifying climatic and water flow triggers associated with the onset of breeding activities in a Foothill yellow-legged frog (*Rana boylei*) population on the north fork Feather River, California**  
Joseph E. Drennan (Garcia and Associates)
- 2:00 – 2:20 PM **Pulsed flow effects on the foothill yellow-legged frog (*Rana boylei*): analysis of hydraulic habitat conditions using 2-dimensional modeling**  
Sarah Yarnell-Hayes (University of California, Davis)
- 2:20 – 2:40 PM **Ecological roles of natural pulse flows in a boulder-bedrock Sierra Nevada River: Fish and amphibians**  
Bill Trush (McBain and Trush, Inc)
- 2:40-3:00 PM **Adult hardhead minnow and rainbow trout preference in a large, annular apparatus**  
Dennis Cocherell\*, Sarah Hamilton, Joe Cech, Jr., and Pete Klimley (University of California, Davis)
- 3:00-3:10 PM **BREAK**
- 3:10-3:30 PM **Trout behavior and responses to pulsed flows: investigations utilizing electromyogram telemetry**  
Sarah Hamilton, Dennis Cocherell, Lisa Thompson, Joe Cech, Jr., and Pete Klimley\* (University of California, Davis)
- 3:30-3:50 PM **Longitudinal movement of fish in response to a single-day flow pulse**  
Lisa Thompson\*, Sarah Hamilton, Stephanie Chun, Joe Cech, Jr., and Pete Klimley (University of California, Davis)
- 3:50-4:10 PM **Guidelines for prescribing pulse flows in Sierra Nevada boulder-bedrock rivers**  
Bill Trush (McBain and Trush, Inc)
- 4:10-4:30 PM **Concluding remarks**  
Jim Canaday (Division of Water Rights, State Water Resources Control Board)  
Carson Cox (Sustainable Conservation)