

# *A Symposium on SEZ Restoration Monitoring in the Tahoe Basin: Are we getting the information we need?*

**February 9-10, 2010  
Tahoe Center for Environmental Sciences  
291 Country Club Drive  
Incline Village, NV**

Note: Carpooling is strongly encouraged. No food or drinks will be provided. Please bring what food and drinks you need, or be prepared to participate in nearby foraging excursions. There is a cafeteria on campus.

## **Symposium Purpose:**

The enhancement and restoration of stream environment zones (SEZs) is an integral part of the Tahoe Basin Environmental Improvement Program. Between 1997 and 2007 government agencies have provided more than \$25.6 million for the restoration and enhancement of approximately 739 acres of wetland habitat in the Basin. These restoration investments are motivated by the desire to make changes that restore habitat conditions and ecological functions, and improve water quality. Effectiveness monitoring tells us if these changes are achieving project goals and, if supported over the longer term, whether these changes are sustained. This symposium will explore the approaches and techniques used to assess the effectiveness of stream channel and flood plain restoration projects in the Tahoe Basin, with the aim of assessing the efficacy of monitoring protocols used in the Basin. The specific objectives of this symposium are to

- Consider past and current Tahoe Basin SEZ restoration programs and examine the approaches developed to assess the effectiveness of stream channel and flood plain restoration projects.
- Learn about monitoring and assessment techniques from outside the Tahoe Basin, to understand their strengths and possible weaknesses.
- Consider proposed frameworks for planning and monitoring the effectiveness of stream and flood plain restoration projects.
- Consider tools to quantify stream and flood plain project-level water quality benefits and inform basin-wide progress in meeting Lake Tahoe TMDL targets.
- Identify research needed to develop new tools and address uncertainties.

**This symposium is sponsored by:**



## **DAY ONE: February 9, 2010**

**8:00** - Registration

**8:30** – Symposium introduction and agenda review – Zach Hymanson (TSC)

**8:40-12:30- Session I: Monitoring approaches applied to stream and flood plain restoration projects in the Tahoe Basin. Zach Hymanson (TSC) session moderator.**

- Introduction of a framework for assessing stream restoration projects in the Tahoe Basin – Matt Kiese (River Run) and Nicole Beck (2<sup>nd</sup> Nature)
- CA State Parks approach to monitoring stream and flood plain restoration projects: Angora creek restoration project – Cyndie Walck (CPR)

### *Morning Break*

- Lake Tahoe Basin Management Unit approach to monitoring stream and flood plain restoration projects: Cookhouse Meadow and Blackwood creek restoration projects – Sue Norman and others (USFS-LTBMU)
- CA Tahoe Conservancy approach to monitoring stream and flood plain restoration projects: Upper Truckee River restoration projects – Tina Carlsen and others (CTC)

30 minutes for each presentation + 10 minutes of Q&A/transition followed by 30-40 minutes for Q&A at the end of the session.

### *Lunch Break 12:30 – 2:00*

**2:00 – 4:00 Session II: Emerging strategies and tools for monitoring improvements and quantifying benefits of stream restoration. Jonathan Long (USFS-PSW) session moderator.**

- Overview, application, and validation of the California Rapid Assessment Methodology (CRAM) to riverine restoration projects – Josh Collins (SFEI)
- Flood plain deposition modeling: quantifying the sequestration of fine sediment – Stephen Andrews (UCD)
- Modeling stream bank erosion: quantifying fine sediment source control in an SEZ – Virginia Mahacek (Valley-Mountain Consulting)

20 minutes for each presentation + 10 minutes of Q&A/transition followed by 15 minutes for Q&A at the end of the session.

### *Afternoon Break*

**4:00 – 5:30 Session III: Information needs and monitoring approaches of interest to regulatory agencies. Zach Hymanson (TSC) session moderator.**

- Tahoe Regional Planning Agency – Scott Frazier
- Lahontan Regional Water Quality Control Board – Robert Larson
- Nevada Division of Environmental Protection – Jason Kuchnicki
- U.S. Army Corps of Engineers – Kristine Hansen

15 minute presentation from each agency representative followed by 30 minutes of Q&A at the end of the session.

**DAY TWO: February 10, 2010**

**1:00 – 3:00 Session IV: Monitoring future restoration projects: comments and suggestions from outside scientists. Jonathan Long (USFS-PSW) session moderator.**

Invited outside scientists:

- Mitch Swanson, Hydrologist/Geomorphologist, Swanson Hydrology + Geomorphology
- Tom Lisle, Research Hydrologist, USDA Forest Service Pacific Southwest Research Station)
- Robert Al-Chokhachy, Fisheries Biologist, USDA Forest Service Rocky Mountain Research Station)
- Jeanne Chambers, Research Ecologist, USDA Forest Service Mountain Research Station)
- Josh Collins, Wetland Scientist, San Francisco Estuary Institute
- Amy Lind, Research Wildlife Biologist~Herpetologist (USDA Forest Service Pacific Southwest Research Station)

≤45 minutes single presentation followed by 60± minutes of Q&A

*Afternoon Break*

**3:30 – 4:30 Session V: Discussion and prioritization of research needed to develop tools and protocols for quantifying the effectiveness of SEZ restoration projects. Jonathan Long (USFS-PSW) and Zach Hymanson (TSC).**

20 minute presentation followed by 30± minutes of Q&A

**Driving Directions to the Tahoe Center  
for Environmental Sciences Building**  
Located on the Campus of Sierra Nevada  
College  
291 Country Club Drive  
Incline Village, NV 89451



From Tahoe City

- Proceed EAST on CA-28 / N LAKE BLVD.  
Continue to follow CA-28 (Crossing into NEVADA).
  - Continue EAST on SR 28 (Tahoe Boulevard) through Incline Village until you reach Country Club Drive (the third traffic light in Incline Village, located past the golf course).
  - Turn RIGHT onto COUNTRY CLUB DR.
- \*\*Final Directions Continued Below

From South Lake Tahoe

- Proceed EAST on LAKE TAHOE BLVD / US-50. Continue to follow US-50 E (Crossing into NEVADA).
  - Turn LEFT onto NV-28.
  - Turn LEFT onto COUNTRY CLUB DR.
- \*\*Final Directions Continued Below

From Reno

- US-395 SOUTH toward CARSON CITY.
  - Merge onto NV-431 / MT ROSE HWY via EXIT 56 toward MT ROSE / NO LAKE TAHOE.  
Continue on NV-431 toward North Lake Tahoe until you reach Country Club Drive.
  - Turn LEFT onto COUNTRY CLUB DR and proceed south until you reach TAHOE BLVD / NV-28.
  - Continue straight on COUNTRY CLUB DR.
- \*\*Final Directions Continued Below

From San Francisco & Sacramento (via Interstate 80)

- I-80 E toward RENO.
  - Take the CA-89 / CA-267 exit- EXIT 188B- toward SIERRAVILLE / LAKE TAHOE.
  - Turn RIGHT onto GLENN CARLSON MEMORIAL BYP / CA-267 / TRUCKEE BYP. Continue to follow CA-267 south over Brockway Summit toward Lake Tahoe.
  - Turn LEFT onto CA-28 / N LAKE BLVD. Continue to follow CA-28 (Crossing into NEVADA).
  - Turn RIGHT onto COUNTRY CLUB DR.
- \*\*Final Directions Continued Below

**\*\*Final directions to follow from All Locations**

Once you turn onto Country Club Drive:

- Turn RIGHT at the THIRD DRIVEWAY onto the Sierra Nevada College campus (entrance located directly across from Mill Creek residential street). There is a parking lot located to your right and a loop driveway directly in front of the Tahoe Center for Environmental Sciences building.
- Walk on the path between the two buildings (Prim Library will be on your right, the Tahoe Center for Environmental Sciences will be on your left). This path will lead you to the front entrance of Tahoe Center for Environmental Sciences located on the north side of the building.



SIERRA  
NEVADA  
COLLEGE

## CAMPUS MAP

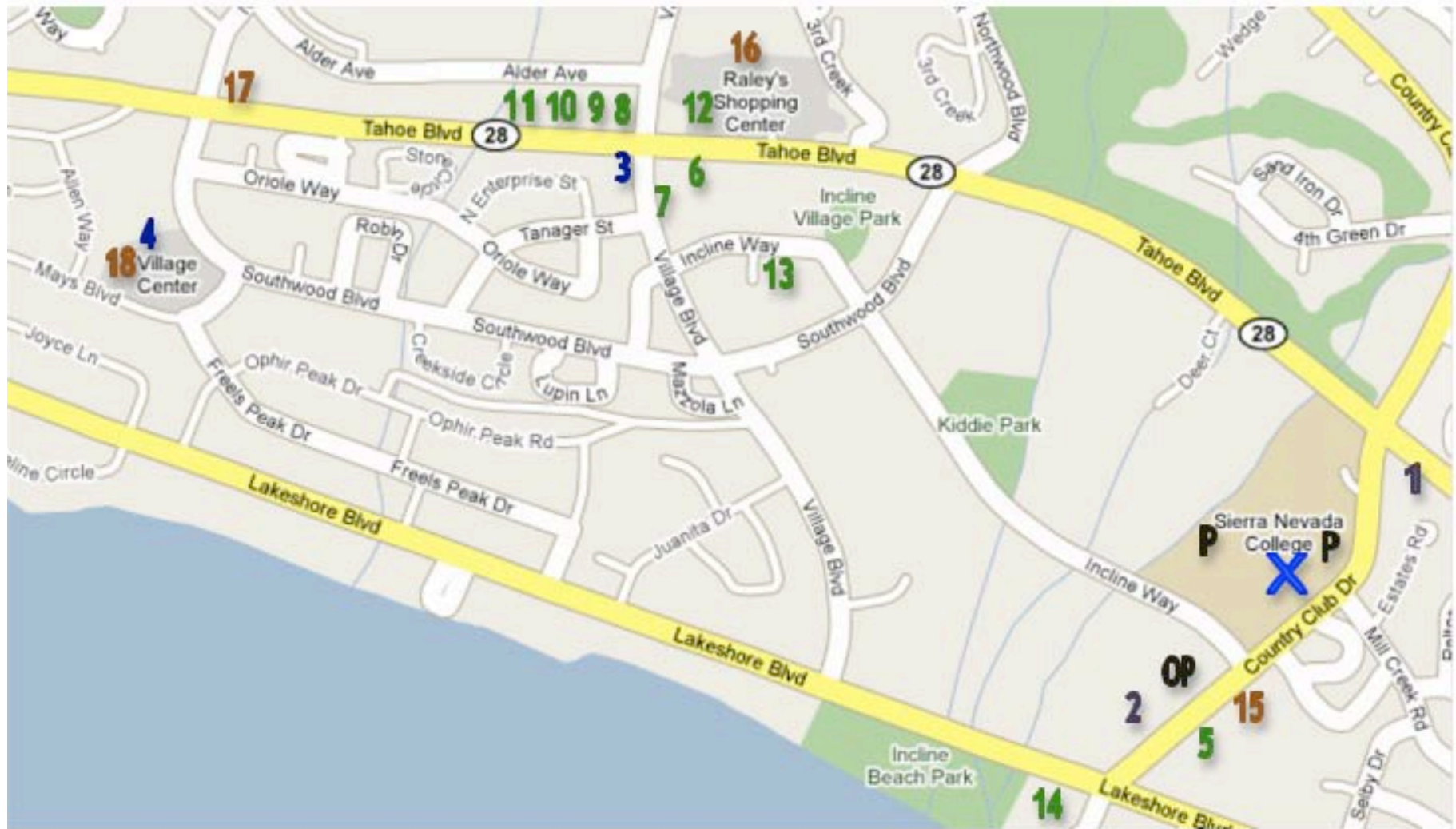


- 1** CAMPBELL-FRIEDMAN HALL
  - Residence Hall
- 2** DAVID HALL
  - Art Studios
  - Financial Aid
  - Registrar
  - Student Accounts
- 3** PATTERSON HALL
  - Cafeteria
  - Luria Dining Hall
- 4** PRIM-SCHULTZ HALL
  - Residence Hall
- 5** PRIM LIBRARY
  - Admissions Office
  - Office of the President
  - Rodney and Evelyn Smallwood Campus Store
  - Scarsella-Boleky Tutoring Center
  - Tahoe Gallery
- 6** TAHOE CENTER FOR ENVIRONMENTAL SCIENCES
  - Greenhouse and Herbarium
  - Redfield Cafe - Peet's Coffee
  - Science Teaching Laboratories
  - Thomas J. Long Foundation Education Center
  - UC Davis Tahoe Environmental Research Center
- 7** NORTH LAKE TAHOE DEMONSTRATION GARDEN
- PARKING
- CAMPUS NATURE TRAIL
  - .75 Mile Loop
  - Woodchip and Paved Paths

*The nature trail is the 2007 Eagle Scout project of Johnson Wong*

999 Tahoe Boulevard  
Incline Village, Nevada 89451  
(775) 831-1314  
[www.SierraNevada.edu](http://www.SierraNevada.edu)

## Map of Nearby Restaurants and Hotels



### Lodging

- 1 Parkside Inn at Incline
- 2 Hyatt Regency

### Coffee Shops

- 3 Starbucks
- 4 Art's Coffee House

### Restaurants

- 5 Austin's
- 6 Thai Recipe
- 7 T's Mesquite Rotisserie
- 8 Mofo's Pizza and Pasta
- 9 Yoshimi Sushi
- 10 Asian Noodles Too
- 11 Crosby's

### Restaurants/Delis

- 12 Wild Alaskan
- 13 Sunshine Bakery
- 14 Lone Eagle Grill \$\$\$\$
- 15 Black Bear Deli
- 16 Raley's Deli
- 17 Grog & Grist Deli
- 18 Village Market Deli

### TCES building

X Location of Symposium

### Parking

- P SNC campus parking
- OP Overflow parking at Hyatt