

# 2011 APTF Field Trip

## Saturday, January 8



### SCHEDULE:

10:00 AM Meet at parking lot near Hetch Hetchy / O'Shaughnessy Dam  
10:30 AM Explore adit tunnel to look for overwintering treefrogs  
11:30 PM Poopenaut Valley Overlook  
12:30 PM Lunch (Park at Early Intake)  
1:30 PM Hike from Early Intake to *Rana boylei* site (approx 1.5 hrs round trip)

GEAR: Warm clothes, water proof hiking boots or rubber boots, head lamp

LUNCH: Bag lunches will be available for \$10.00. Order forms will need to be completed and turned in on Thursday. (Ham, turkey, roast beef, or hummus sandwich, cookie, chips, water, and fruit)

link to Google Maps (control click to view link)

[http://maps.google.com/maps?f=d&source=s\\_d&saddr=Yosemite+Valley,+CA&daddr=Hetch+Hetchy+Reservoir,+CA+to:Early+Intake+9-000+Dam&hl=en&geocode=FeXqPwId52rf-CmvY\\_I4\\_vGWgDFu4slULj8hGQ%3BFcAOQwIdYwHd-ClxWuQB3OGWgDEtjU1AL8EdXw%3BFzsqQId0Z3Z-CkrvPsFDNiWgDG7\\_vGsWVu41Q&mra=pd&mrcr=1&sll=37.862949,-119.753517&sspn=0.519321,1.234589&ie=UTF8&ll=37.979386,-119.559402&spn=0.259251,0.617294&t=h&z=11](http://maps.google.com/maps?f=d&source=s_d&saddr=Yosemite+Valley,+CA&daddr=Hetch+Hetchy+Reservoir,+CA+to:Early+Intake+9-000+Dam&hl=en&geocode=FeXqPwId52rf-CmvY_I4_vGWgDFu4slULj8hGQ%3BFcAOQwIdYwHd-ClxWuQB3OGWgDEtjU1AL8EdXw%3BFzsqQId0Z3Z-CkrvPsFDNiWgDG7_vGsWVu41Q&mra=pd&mrcr=1&sll=37.862949,-119.753517&sspn=0.519321,1.234589&ie=UTF8&ll=37.979386,-119.559402&spn=0.259251,0.617294&t=h&z=11)

## OUTLINE OF TOPICS FOR DISCUSSION:

Drivers for the San Francisco Public Utilities Commission's (SFPUC) initiation of the Upper Tuolumne River Ecosystem Project (UTREP), a collaborative effort between SFPUC, the Stanislaus National Forest, Yosemite National Park, the U.S. Fish and Wildlife Service, and McBain and Trush Contractors

Goals of UTREP and how this process differs from FERC relicensing; O'Shaughnessy Dam is not FERC licensed

NPS participation in the (UTREP); how the NPS mission shapes the park's perspective on how to manage impounded rivers for maximizing ecological benefit

Methods used by UTREP scientist to establish flow recommendations and status of process

FERC relicensing process overview (bring flow chart diagram of ILP process)

Main issues for amphibians and aquatic reptiles (e.g., western pond turtle):

- flow timing, hydrograph shape, peaking, recreational flows; stranding and scouring
- decoupling of flow conditions from environmental cues for key life cycle events (e.g. first fall rains and juvenile movements)
- water temperatures affecting development rates, growth, survival
- dispersal / movement barriers - canals, penstocks, reservoirs
- non-native / invasive species dynamics
- longer time scale effects of flow regime on habitat
  - riparian vegetation encroachment on bars and banks
  - altered sediment supply / sediment transport regimes

Common "conflicts" during relicensings:

- trout - frogs due to water temperature issues
- power peaking and water delivery - timing of flows and magnitude of variation
- recreational boating on peaking

Status of Sierra Nevada relicensings

- most are wrapping up
- next phase is post-license monitoring and adaptive management - very important!

Climate change has not been very well considered so far....