

SECTION C

Upper Truckee Updates

Upper Truckee River and Marsh Restoration Project
California Tahoe Conservancy
1061 Third Street
South Lake Tahoe, CA 96150
www.uppertruckeemarsh.com

UPPER TRUCKEE UPDATE

Public Meetings

Tuesday, October 24, 2006
Public Scoping Meetings

12:00 p.m. – 2:00 p.m.

6:00 p.m. – 8:00 p.m.

Inn by the Lake
3300 Lake Tahoe Blvd.
South Lake Tahoe, CA 96150

Wednesday, October 25, 2006
TRPA – Governing Board Meeting

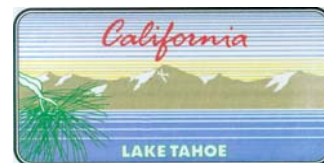
9:30 a.m.

See agenda item at:
<http://www.trpa.org>

Tahoe Regional Planning Agency
128 Market Street
Stateline, NV 89449

The Environmental Review Process

- Preparation of an *Environmental Impact Report (EIR)/Environmental Impact Statement (EIS)/EIS*
- This review identifies environmental impacts that might result from a project and what can be done to reduce or *mitigate* any significant effects. Possible impacts include: traffic circulation, water quality, archaeological resources, vegetation and wildlife. Public and agency review and comment begins October 2006. Alternatives will be analyzed to identify a preferred alternative at the end of the process in 2008



For additional information about this restoration project and the Wildlife Program please contact:

Jacqui S. Grandfield, University of California Consultant
Wildlife Habitat Enhancement Program
California Tahoe Conservancy
1061 Third Street
South Lake Tahoe, California 96150
(530) 543-6048
jgrandfield@tahoecons.ca.gov



State of California
The Resources Agency
Arnold Schwarzenegger, Governor

UPPER TRUCKEE RIVER AND MARSH RESTORATION PROJECT

This newsletter is the second in a series of periodic issues that will guide you through the *California Tahoe Conservancy's* process of restoring the Upper Truckee Marsh, one of the largest wetlands remaining in the Sierra Nevada Range.

The Upper Truckee River has been severely impacted by human development. The river was put in a ditch to allow for construction of the Tahoe Keys. This has resulted in an eroding river, lowered groundwater and a dry, non-functional meadow.

The Conservancy will begin the environmental review process to restore the river with the first of several public meetings (see back page for dates, time and location). The project objectives (listed in the box to the right) will guide you through the proposed alternatives for river restoration.

The Conservancy hopes this outreach effort will keep you informed so you are better able to provide input and participate in this restoration project with us. The success of this project will be enhanced by your contributions.

Project Objectives:

- Restore natural and self-sustaining river and floodplain processes and functions
- Protect, enhance and restore naturally functioning habitats
- Restore and enhance fish and wildlife habitat quality
- Improve water quality through enhancement of natural physical and biological processes
- Protect and, where feasible, expand *Tahoe Yellow Cress* populations
- Provide public access, access to vistas, and environmental education at the Lower West Side and Cove East beach
- Avoid increasing flood hazard on adjacent private property
- Design with sensitivity to the site's history and cultural heritage
- Design the wetland/urban interface to help provide habitat value and water quality benefits
- Implement a public health and safety program, including mosquito monitoring and control



The Tahoe Basin contains a rich diversity of fish, wildlife, and native plants. Flycatchers, warblers, mallards, and other waterfowl feed in the basin's marshes and meadows. Ospreys nest on lakeside snags; bald eagles roost in winter forest. Rainbow, brook, and brown trout dart about in the basin's streams. Hundreds of brick-red kokanee salmon run up Taylor Creek to spawn, and huge Mackinaw swim in the depths of Lake Tahoe itself.

* *Internet search words are in green italics*

Through its land acquisition, planning, site improvement, and management activities, the California Tahoe Conservancy plays a major role in the basinwide effort to restore and sustain the equilibrium between the natural and the human environment and between public and private uses at Lake Tahoe.

DRAFT RESTORATION ALTERNATIVES

The Upper Truckee River and Marsh Restoration Project team has assembled a set of four draft alternatives for the restoration of the Upper Truckee River and Marsh. These alternatives draw on years of work by the Conservancy in developing an understanding of the site, on recent compilation of existing information regarding the physical and ecological processes at work on the site, the results of the restoration design session held in June 2003 and numerous meetings with members of the public.

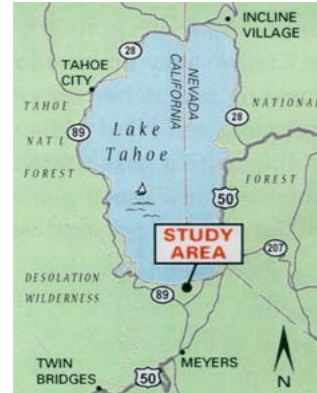
The Upper Truckee Marsh is located along the south shore of Lake Tahoe. The study area is approximately 592 acres and includes parcels owned by the California Tahoe Conservancy and other public and private entities. The study area includes the mouths of Trout Creek and the Upper Truckee River, wetland and upland habitats, and a restored wetland area known as Lower West Side. The Lower West Side project site is located in the 24-acre Cove East, the western portion of the study area, just east of Tahoe Keys Marina. This area was the first component of the Upper Truckee River and Marsh Restoration Project to be implemented. During the summers of 2001 and 2002, approximately 11 acres of former wetland, which was filled during Tahoe Keys construction, was excavated and wetland restoration was initiated.

Among the considerations that guided the process of assembling these alternatives were the following:

- Each alternative is conceived of as a “full-spectrum” alternative; each is intended to address, to varying degrees, all project objectives.
- Many of the individual concepts shown in each alternative are modular and could be transferred to other alternatives.
- Draft alternatives were assembled to embody a diverse range of concepts for particular components of the plan.
- Each alternative is intended to be a feasible alternative that the Conservancy could realistically construct.
- Alternatives were developed within the bounds set by the various critical constraints identified and mapped earlier in the planning process.

Common Elements

Each of the four alternatives has common river restoration elements. These include: 1) reestablishing an active floodplain connection for the river, 2) replacement of the straightened channel adjacent to the Lower West Side with a new, sinuous channel with a bankfull capacity, 3) reducing the size of the river mouth to limit backwater effects from Lake Tahoe, and 4) the development of treatments to control the accelerated bank erosion downstream of the bridge. Three of the four alternatives also propose re-establishing a river-overflow lagoon at Cove East.



Reestablish an Active Floodplain

The overall objective of river restoration in all four alternatives is to decrease channel capacity and reestablish the channel's connection to an active floodplain. This will increase the frequency and duration of *overbank* flows and allow the deposition of suspended sediment onto the meadow. These restored river processes will enhance plant communities, aquatic and terrestrial habitat, water quality, and the ecological value of the site.

The Upper Truckee River between the Highway 50 Bridge and the straightened reach is incised and over-widened. Because of this channel degradation, the river can convey, on average, 800 to 1,000 cubic feet per second (cfs) in the channel before water begins to overtop the banks and flow out onto the meadow. A reduction in channel capacity would increase the frequency of overbank flow, resulting in a beneficial increase in local groundwater levels and deposition of suspended sediment on the floodplain. Deposition removes the microscopic sediment particles that diminish lake clarity and allows nutrients, such as phosphorous and nitrogen, to be utilized by the wetland plants that are then in turn used by wildlife. All four alternatives propose actions for reducing the channel capacity and reestablishing an active *floodplain*.

Each alternative replaces the existing straightened channel by reducing the width of the channel and decreasing the distance between the channel's streambed and floodplain surface. These objectives are accomplished differently in each alternative.

- **Alternative 1** - Raise the bottom of the stream in the existing channel closer to the existing meadow surface.
- **Alternative 2** - Excavate a new channel that flows out of its banks every other year or so and reestablishes the existing meadow as a naturally functioning floodplain. Most of the new channel alignment would be located east of the existing channel

- **Alternative 3** - Create a new channel in the middle of the marsh. A new channel would be excavated to connect the remnant channels in the middle of the marsh to the Lower West Side. Two channels would be constructed through the Lower West Side, with the west channel flowing into and out of a redesigned lagoon (“Sailing Lagoon”) west of the river mouth.
- **Alternative 4** - Different from the other alternatives in that the existing meadow surface would not be reestablished as the active floodplain. Instead, portions of the meadow surface would be excavated along the corridor of the existing channel to create an inset floodplain.
- **Alternative 5** - No project / No action

New Sinuous Channel in Straightened Reach

The incision and excess capacity of the straightened channel have converted the meadow from an active floodplain to an area that is infrequently inundated. The straightened channel also has poor diversity of flow velocity and often lacks sufficient suitable habitat to support healthy aquatic life. All four alternatives replace the existing straightened reach near the LWS with a new channel that has a sinuous *planform*, bankfull capacity, and active *floodplain* connection with the existing meadow surface. The alternatives mostly differ in their alignment of the new channel. The key restoration actions for each alternative are:

- Alternative 1 - Construct a single channel through the Lower West Side.
- Alternative 2 - Construct a channel east of the LWS and straightened reach.
- Alternative 3 - Construct two smaller and shallower channels that overflow frequently to the east and through the Lower West Side.
- Alternative 4 - Construct a single channel that flows out of the stream bank every 2.5 years along a similar alignment as the straightened reach using local cut and fill.

Recreation and Access

Overlain on the four river restoration concepts shown in the alternative plans are a range of ideas for managing public access to and recreational use of the site. These ideas are expressed at three levels of intensity of development of recreation-related infrastructure:

- Alternative 1 displays a potential “maximum” level of infrastructure development
- Alternative 2 shows a “minimum” level of infrastructure development
- Alternatives 3 and 4 offer two variations of a “moderate” level, with infrastructure development falling between the two extremes

In most cases, there is no necessary connection between the recreation and public access approach included in a particular alternative and the river restoration ideas in that alternative. Many of the recreation and access elements, and the different intensities of infrastructure development could be implemented with any of the four river restoration ideas. All ideas for recreation infrastructure development were conceived within the context of existing land use regulations and Conservancy purposes in acquiring the property. Land east of the existing alignment of the Upper Truckee River is to be used as wildlife habitat, and even the maximum recreation alternative recognizes this. However, visitors are currently accessing this area and any future plan must contain provisions to direct and manage existing use. Cove East Beach and adjacent lands west of the current river alignment are presently much more heavily used by the public, and this use would continue in any future restoration scenario.



Getting Involved

The planning process provides two key opportunities for the public to become involved in the development of the project. Public “scoping” takes place at the beginning of the process when the planning effort is announced. During scoping the public is asked to raise questions and concerns to help the design team identify the major issues to be addressed in the environmental review document. With the release of the draft document the public is provided the opportunity to examine the project alternatives and present comments. The comments are then analyzed and may be used to revise portions of the draft document and guide the development of the preferred alternative.

For more information about how to get involved in the Upper Truckee planning process, to view maps of the alternatives, and provide comments, visit the project web site at

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UPPER TRUCKEE UPDATE

Public Meetings

Future Public Meetings have not yet been scheduled. Several meetings are being planned for late Winter 2006 and throughout most of 2007. Your questions, comments and suggestions are very important in choosing the preferred alternative for the project. The environmental documentation process will likely take about a year and a half so there is ample time to attend public meetings and make comments. Look for future mailings, newspaper notices, and meeting presentation dates. All are welcome and everyone's thoughts are greatly appreciated. See you at the meetings.

Our website www.uppertruckeemarsh.com will be updated regularly.

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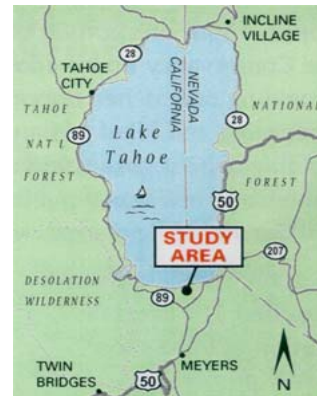
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SECTION D

Newspaper Advertisement

Legal Notice

The California Tahoe Conservancy invites you to attend one (or all) of three upcoming meetings to comment and provide input for the restoration of the Upper Truckee Marsh. The environmental review process has begun and public input is essential to the overall success of this project.

The Upper Truckee River and Marsh, located directly east of the Tahoe Keys Marina, has been severely impacted by human development. The river was put in a ditch to allow for construction of the Tahoe Keys, resulting in an eroding river, lowered groundwater and a dry, non-functional meadow.

The California Tahoe Conservancy, the United States Department of the Interior Bureau of Reclamation and the Tahoe Regional Planning Agency are preparing a joint Environmental Impact Report (EIR)/Environmental Impact Statement (EIS)/EIS for the Upper Truckee River and Marsh Restoration Project.

The Conservancy will begin the environmental review process to restore the river and marsh with the first of several public meetings. The project objectives presented at these meetings will guide you through four proposed alternatives for river restoration (a fifth alternative is no project/no action).

Public scoping meetings are being conducted to provide you with the opportunity to learn more about the proposed action and to express oral comments about the content of the EIR/EIS/EIS, in addition to your opportunity to submit written comments. The scoping meetings will be held at the following times and locations:

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12:00 p.m. – 2:00 p.m.
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3300 Lake Tahoe Blvd.
South Lake Tahoe, CA 96150

Tuesday, October 24, 2006
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Wednesday, October 25, 2006
Governing Board Meeting
Tahoe Regional Planning Agency
See agenda item at:
<http://www.trpa.org/default.aspx?tabid=258>
128 Market Street
Stateline, NV 89449

Interested persons may download copies of the Notice of Preparation (NOP) through the TRPA and the California Tahoe Conservancy websites at: <http://trpa.org/default.aspx> ? and www.uppertruckeemarsh.com. The Notice of Intent (NOI) filed with the Department of the Interior can be accessed through the Federal Register: www.gpoaccess.gov/fr/index.html. Additional information can be obtained from:

State of California
California Tahoe Conservancy
1061 Third Street
South Lake Tahoe, CA 96150
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Tahoe Regional Planning Agency
P.O. Box 5310
Stateline, NV 89448
Contact: Mike Elam, Associate Environmental Planner
Phone: (775) 588-4547 ext.308
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Email: MElam@trpa.org



