Peer review: TRPA thresholds on right track, but plenty of room for improvement

By Kathryn Reed

INCLINE VILLAGE — Rain falling on a hillside golf course. It would have made for the perfect field trip for the Tahoe Regional Planning Agency Governing Board.

Instead, the board stayed inside to talk policy.

But had they walked outside The Chateau at the Incline Village golf course, they could have asked if this course uses a fertilizer with phosphorous on its grass, seen the impacts of stormwater runoff to the near shore, witnessed issues with stream environmental zones, viewed scenic concerns, and even investigated whether they could have used public transit to get to the meeting.



Improving Lake Tahoe
clarity's includes paying
attention to the
tributaries. On April 22,

Trout Creek in South Lake Tahoe was a brown-rust color. Photo/Kathryn Reed

After all, those were the issues they talked about all day Wednesday. Issues that amount to 2,500 pages — all of which are said to be on TRPA's website. These are issues that everyone living or doing business in the Lake Tahoe Basin will have to follow. Many are ones that have been in effect for decades.

Under the dark skies and intermittent rain, the Governing Board endured the first of what is expected to be two full days of dialogue about the proposed update to the Regional Plan and associated documents.

By the time the April 25 meeting came to a close at 4:45pm, a couple dozen people remained — while the morning had about 75 in attendance. Much of what was discussed Wednesday was a regurgitation of what has been talked about leading up to this point.

Thursday's session, which starts at 9:30am at TRPA's Stateline office, will be about the environmental documents related to the Regional Plan update and Regional Transportation update. Speculators expect more public comment and a livelier session.

Only two people commented on the first segment regarding the thresholds, while no one commented on the afternoon session that delved into the Regional Plan and transportation updates. However, public comment was not expected to be taken Wednesday per Executive Director Joanne Marchetta's opening comments, but people will have a chance to comment today on Wednesday's items.

While Marchetta was upbeat, saying the thresholds are working and more rigor will be used going forward to analyze progress, the fact remains that since 1997 when the environmental improvement program was created more than \$1.5 billion has been spent in the basin with the primary purpose being improved lake clarity.

Clarity is not declining as fast as it once did. That's the improvement TRPA officials continually point to.

Threshold update

While the nine thresholds must be updated every four years, this is the first time the data has been peer reviewed.

Within the nine categories are 151 subcategories, so to speak. The nine are air quality, water quality, soil conservation, scientific resources, wildlife, fisheries, vegetation preservation, recreation, and noise.

Of those 151 standards, TRPA made a status determination on 92 of them. Sixty-three percent of the 92 standards were attained and 37 percent have not been attained, Shane Romsos, acting measurement department manager at TRPA, told the board.

Board members raised questions about the monitoring process and why some things cannot be measured. Money is one reason, poor standards are another.

"We are trying to move the monitoring into the 21st century; to measure things that have relevancy for policy management action," Romsos said.

About \$2 million a year is spent on monitoring TRPA threshold requirements by agencies throughout the basin. Twice that amount is needed to measure everything. Five times that amount, or \$10 million a year, is what is need for "top of the line" monitoring, Romsos said.

"We have standards, but it's unclear what we are trying to achieve," he said.

He used wood smoke as an example. Smoke measurements are

ambiguous and what they were pre-1981 are not even known. The recommendation by the peer review and from Romsos to the board is to replace wood smoke with measuring particulate matter.

TRPA outlined the concerns in the threshold measurements as:

- Long-term annual average Secchi depth and summer clarity
- Phytoplankton primary productivity and near shore attached algae
- Uncommon plant communities
- Single noise events like aircraft
- Cumulative noise events like urban outdoor recreation sites.

Jim Mahoney, who led the peer review done with six others, said, "The panel does not find any fatal flaws." While that is the technical phrase for all is well, he went on to praise the threshold studies as one of the best he's seen in his 30 years.

Still, there is plenty of room for improvement. Romsos said some of the suggestions are being implemented, with others to be considered.

People who don't live or work in the basin did the review — in fact none of the seven lives in either California or Nevada.

Mahoney suggested in the next update that TRPA, "Expand the use of comprehensive land use perspectives." He said the panel found not enough emphasis was placed on looking at how the thresholds are interrelated and how the basin is affected as a whole.

"The peer review — they really want us to link the thresholds," Romsos said. "As we talk about policies it's those that have multiple threshold benefits."

Mahoney also stressed the importance of environmental and

economic analysis.

The panel, Mahoney said, recommends the TRPA find out "the connection between lake clarity and near shore water quality; the important links between regional soil conservation and water clarity; the possible adoption of some of the best practices for maintaining lake ecosystems previously developed for other lake systems; the beneficial effect of riparian and wetland restoration upon the eight wildlife species chosen for monitoring in the Tahoe basin; the spatial distribution of vegetation communities throughout the basin, including management practices that support fire reduction; continued focus on air quality monitoring the basin with special attention to ozone ambient air quality standard attainment; development of percentage-of-exceedance methods to evaluate the community noise thresholds; increased use of visual scenic value thresholds developed for illustrations in community and regional design applications; and network approaches to addressing the interconnectivity of recreational venues."

When it comes to the Regional Plan update, ways to gain threshold benefits, as presented by TRPA staff, are to:

- Transfer coverage out of sensitive lands
- Improve walkability and bike access
- Environmental redevelopment
- Phase out phosphorus fertilizers.

Muck closest to shore

What the shoreline looks like received the most dialogue by board members.

John Reuter with UC Davis, who for years has been working on lake clarity and helped create some of the thresholds, said Davis along with UNR and Desert Research Institute has received a grant to study the near shore.

"We are going to take a scientific and systematic evaluation of what the near shore indicator should be," Reuter said. "We don't want it just based on what the public would like. No one wants (algae). But what can be expected? What's realistic?"

For so long lake clarity has only been defined by how far a white dinner plate-looking disc can be seen by the naked eye from aboard a boat.

With the acceleration of algae and the browning of the lake where the water hits beaches, people are becoming alarmed.

It's a line of questioning board member Claire Fortier, who is also mayor of South Lake Tahoe, pursued.

Reuter said what's needed is more details about stormwater.

A bit of an irony is that while TRPA embraces the total maximum daily load mandates imposed by the Lahontan Water Quality Control Board, the effects of what comes out of the stormwater pipes is not analyzed. All that has to be quantified is that less comes out each year — especially in the form of fine sediment.

But Reuter pointed out, while decreasing the sediment load reaching the lake will help the near shore, "it does not mean the entire near shore improves."