TAHOE REGIONAL PLANNING AGENCY (TRPA)
AND TRPA COMMITTEE MEETINGS

NOTICE IS FURTHER GIVEN that on **Tuesday, January 31, 2017** commencing at **9:30 a.m.,** at the **Tahoe Regional Planning Agency**, **128 Market Street, Stateline, NV,** the Governing Board Regional Plan Implementation Committee of the Tahoe Regional Planning Agency will meet. The agenda is attached hereto and made part of this notice.

January 24, 2017

Joanne S. Marchetta, Executive Director

This agenda has been posted at the TRPA office and at the following locations: Post Office, Stateline, NV, North Tahoe Event Center in Kings Beach, CA, IVGID Office, Incline Village, NV, North Tahoe Chamber of Commerce, Tahoe City, CA, and South Shore Chamber of Commerce, Stateline, NV

TAHOE REGIONAL PLANNING AGENCY	
REGIONAL PLAN IMPLEMENTATION COMMITTEE	
TRPA	January 31, 2017
Stateline, NV	9:30 a.m.

All items on this agenda are action items unless otherwise noted. Items on the agenda, unless designated for a specific time, may not necessarily be considered in the order in which they appear and may, for good cause, be continued until a later date.

All public comments should be as brief and concise as possible so that all who wish to speak may do so; testimony should not be repeated. The Chair of the Committee shall have the discretion to set appropriate time allotments for individual speakers (3 minutes for individuals and 5 minutes for group representatives as well as for the total time allotted to oral public comment for a specific agenda item). No extra time for speakers will be permitted by the ceding of time to others. Written comments of any length are always welcome. So that names may be accurately recorded in the minutes, persons who wish to comment are requested to sign in by Agenda Item on the sheets available at each meeting. In the interest of efficient meeting management, the Chairperson reserves the right to limit the duration of each public comment period to a total of 2 hours. In such an instance, names will be selected from the available sign-in sheet. Any individual or organization that is not selected or otherwise unable to present public comments during this period is encouraged to submit comments in writing to the Governing Board. All such comments will be included as part of the public record.

"Teleconference locations for Board meetings are open to the public ONLY IF SPECIFICALLY MADE OPERATIONAL BEFORE THE MEETING by agenda notice and/or phone message referenced below."

In the event of hardship, TRPA Board members may participate in any meeting by teleconference. Teleconference means connected from a remote location by electronic means (audio or video). The public will be notified by telephone message at (775) 588-4547 no later than 6:30 a.m. PST on the day of the meeting if any member will be participating by teleconference and the location(s) of the member(s) participation. Unless otherwise noted, in California, the location is 175 Fulweiler Avenue, Conference Room A, Auburn, CA; and in Nevada the location is 901 South Stewart Street, Second Floor, Tahoe Hearing Room, Carson City, NV. If a location is made operational for a meeting, members of the public may attend and provide public comment at the remote location.

TRPA will make reasonable efforts to assist and accommodate physically handicapped persons that wish to attend the meeting. Please contact Marja Ambler at (775) 589-5287 if you would like to attend the meeting and are in need of assistance.

AGENDA

I. CALL TO ORDER AND DETERMINATION OF QUORUM

II. PUBLIC INTEREST COMMENTS – All comments may be limited by the Chair

Any member of the public wishing to address the Governing Board Regional Plan Implementation Committee on any item listed or not listed on the agenda may do so at this time. TRPA encourages public comment on items on the agenda to be presented at the time those agenda items are heard. Individuals or groups commenting on items listed on the agenda will be permitted to comment either at this time or when the matter is heard, but not both. The Governing Board Regional Plan Implementation Committee is prohibited by law from taking immediate action on or discussing issues raised by the public that are not listed on this agenda.

III. APPROVAL OF AGENDA

IV. APPROVAL OF MINUTES

V. PLANNING MATTERS

A. Shoreline Planning Concepts Regarding Water-Dependent Structures	**Discussion and Possible Direction to Staff**	**Page 1**

VI. MEMBER COMMENTS

VII. PUBLIC COMMENT

VIII. ADJOURNMENT

TAHOE REGIONAL PLANNING AGENCY
REGIONAL PLAN IMPLEMENTATION COMMITTEE

TRPA December 14, 2016
Stateline, NV

Meeting Minutes

I. CALL TO ORDER AND DETERMINATION OF QUORUM

Chair Mr. Shute called the meeting to order at 8:34 a.m.

Members present: Ms. Aldean, Mr. Bruce, Mr. Lawrence, Mr. Sass, Mr. Sevison, Mr. Shute, Mr. Yeates

II. PUBLIC INTEREST COMMENTS

Ellie Waller, Tahoe Vista resident said the Penny Pines Memorial Tree plantation which once existed within the 64 acres in Tahoe City has been devastated forever. Close to 100 Garden Clubs throughout northern and central California planted Penny Pine trees in conjunction with the National Forests Lands including the remembrance of 120 New York City Fire Fighters and Police who lost their lives in 911. The planned devastation of the memorial forest for the construction of State 89 bypass through 64 acres was never disclosed during public meetings held by the Tahoe Transportation District. The request for involvement to preserve or relocate the forest was brought to the attention to the Central Federal Lands Highway Division, the Placer County Board of Supervisors, TRPA, Tahoe City Public Utility District, Assemblyman Dahle, Congressman McClintock, etc. She submitted the letter written by the Garden Clubs for public comment.

III. APPROVAL OF AGENDA

Mr. Shute said the agenda is deemed approved as posted.

IV. APPROVAL OF MINUTES

Ms. Aldean said she provided Ms. Ambler with her minor clerical edits and moved approval of the November 16, 2016 minutes as amended.

Motion carried unanimously.

V. Item No. 4: Recommendation on certification of Placer County Tahoe Basin Area Plan and Tahoe City Lodge Final Environmental Impact Statement and approval of the Placer County Tahoe Basin Area Plan

Ms. Maloney, TRPA, Ms. Jacobsen, Placer County, and Mr. Lewandowski, Ascent Environmental provided and overview.

Ms. Jacobsen, Placer County said the Area Plan will consolidate all the existing community plans, general plans, and replace all the land use regulations in the Basin area for

Placer County. This has been consolidated into one document and a set of implementing regulations.

The final draft and environmental document was released on November 4, 2016. The key objective is to implement the Regional Plan by carrying forward the redevelopment incentives within the town centers. It implements the Regional Plan through area wide amendments, substitute standards and mixed use districts. Mixed use would be allowed in the commercial nodes along with a limited pilot program for the transfer of commercial floor area to tourist accommodation units, an allowance for non-contiguous project sites within the town centers, a revised level of service standards, secondary dwelling unit program that allows secondary units on parcels less than one acre.

The land use plan includes zoning sub districts and carrying forward the existing regulatory provisions in areas outside of the town centers. Within the town centers there are mixed use sub districts; town center core and transition areas. The Kings Beach Town Center land use classification cleanup is to align the town center boundary with survey data. Land that has been acquired for recreation and conservation in perpetuity are being rezoned to recreation and conservation. Special planning areas are overlay districts for future planning or for projects coming forward to utilize redevelopment incentives. There will be a town center boundary change in Tahoe City that will result in a net reduction of three acres. Two opportunity sites identified in the Area Plan and analyzed in the environmental document are the Kings Beach Design Center concept and the Tahoe City Lodge project. There are two in the Kings Beach area; one at the intersection of Highway 267 and State Route 28 which is being proposed to have connected sidewalks, stream environmental zone restoration and scenic enhancements. The second is the North Stateline Area that would have the existing regulatory provisions carried forward. If the property owners wanted to redevelop those lands they would need to prepare a town center plan in order to utilize those town center incentives through the Regional Plan.

Mitigation measures and other modifications were made as a result of comments received after the document was released on November 4. Mitigation Measures 10-1h and 10-1g that were in the November 4 final environmental document have been added to the Area Plan as policy. Mitigation Measure 10-1h implements TRPA's congestive management process and 10-1g requires a four-year review of their transportation plan. Mitigation Measure 10-1c was modified to clarify that traffic impact fees that are paid by the Tahoe City Lodge project are dedicated to capital improvement projects in the Tahoe region and Measure 12-1 was to refine that mitigation related to reducing greenhouse gas impacts. The secondary residential unit program was modified in response to comments received by TRPA Governing Board. There will be a provision that requires a four-year review cycle and evaluation of the program.

The Area Plan and Tahoe City Lodge was recommended by the North Tahoe Regional Advisory Council (NTRAC) on November 10, 2016 and the Placer County Planning Commission recommended approval on November 17, 2016. The Placer County Board of Supervisors unanimously adopted Tahoe Basin Area Plan and Tahoe City Lodge project on December 6, 2016.

Mr. Lewandowski, Ascent Environmental said the Notice of Preparation that was released on June 3, 2015 for a 60-day public comment period and the draft environmental document was released on June 15, 2016 for its 60-day public comment period. In response to comments the final environmental document resulted in several changes including additional and expanded mitigation measures.

Proposed alternatives were vetted with the Regional Plan Implementation Committee prior to being included in the environmental document.

• Alternative 1: Proposed Area Plan and lodge
• Alternative 2: Area Plan with no substitute standards or map revisions/reduced scale lodge
• Alternative 3: Reduced intensity Area Plan/reduced height lodge
• Alternative 4: No Area Plan/no lodge

The environmental document found that the Area Plan and the Lodge would have no impact or less than significant impacts related to land use, biological resources, public services utilities, and recreation.

Impacts reduced to a less-than-significant level with mitigation:
• Cultural resources
• Traffic and circulation
• Air quality
• Noise
• Geology, soils, land capability, and coverage
• Hydrology and water quality
• Hazards, hazardous materials, and risk of upset
• Cumulative impacts

The Area Plan would also result in several beneficial effects related to a reduction in vehicle miles traveled, beneficial effects related to the distribution of population and housing by concentrating housing in already developed areas close to existing services and employment, light and glare that result from new and more stringent lighting standards, benefits for bicycle and pedestrian conditions as well as public recreational access. Beneficial effects related to water quality from the transfer of development out of sensitive lands and the redevelopment of town centers consistent with stormwater requirements.

There were a couple of significant and unavoidable impacts. Two impacts related to Transportation, primarily related to localized congestion within Tahoe City. All four proposed alternatives would contribute to a continued unacceptable level of service standard within Tahoe City between Grove Street and the Tahoe City Wye. In response to comments, the final environmental document includes a number of expanded and additional mitigation measures. The Area Plan would decrease greenhouse gas emissions by reducing sprawl, dependency on private automobiles, and the encourage redevelopment of town centers. The environmental review took a conservative approach and identified this as a significant and unavoidable impact which is related to some uncertainties. There is uncertainty with the magnitude of the greenhouse gas reductions that would be achieved with the implementation of the Area Plan and uncertainty with future greenhouse gas reduction standards that will be set by the State of California. The document included mitigation measure 12-1 for implementation of all feasible measures recommended by the Placer County Air Pollution Control District to reduce greenhouse gas emissions from new projects and retrofits. It is consistent with the Lake Tahoe Sustainability Action Plan and the California Air Resources Board's 2030 Scoping Plan. These impacts would occur under any alternative including the no project alternative. These impacts would still occur without the adoption of the Area Plan but the beneficial effects and the mitigation measures would not be in effect without adoption of the Area Plan.

The final document also included several new or enhanced mitigation measures; including five new Transportation Mitigation Measures that are intended to address level of service impacts. There are seven mitigation measures from the draft environmental review that were expanded in response to comments or were revised to provide additional clarity and specificity.

Ms. Maloney said in addition to the Final Placer County Tahoe Basin Area Plan and the Final Environmental Impact Report and Environmental Impact Statement within the staff summary there were a number of other documents included. There is a conformance checklist that included TRPA's, Chapter 13 requirements along with responses from both the County and TRPA staff on how the Area Plan meets those requirements. It also contains the motions, findings, and adopting ordinances for recommending adoption of the Area Plan and the technical corrections to the Code of Ordinances. The Threshold Indicators and Compliance Measures Tables were developed to supplement the required findings. An Area Plan conformance checklist was prepared and is included as Attachment G in the staff summary. TRPA has determined that the Area Plan was in conformance with the Regional Plan.

The Area Plan took the Regional Plan one step further in some areas. The Area Plan largely carries forward the height, density, and coverage allowances of the Regional Plan. However, it does reduce height allowances for the periphery of town centers which are considered transition areas where the height steps down. The Area Plan enhances lighting standards to prevent light pollution and promote dark skies. It would also add view corridor standards that require four story buildings within town centers on the lakeside of State Route 89 and 28 to maintain 35 percent of the site as an open view corridor to the Lake or increase existing view corridors by ten percent.

The secondary residential unit program that originally proposed parcels less than one acre but within one quarter mile of transit or mixed use was expanded to include all residential parcels less than one acre which resulted in ten additional parcel to the program. This was analyzed in the draft environmental impact report and environmental impact statement as part of another alternative so no additional environmental analysis was necessary. The units will require a deed restriction for affordability as well as a deed restriction to prohibit tourist and vacation uses or conversion to tourist accommodation units.

The conformance checklist still has a reference to the market-rate secondary residential unit which will be corrected before the document goes to the Governing Board.

The commercial floor area, tourist accommodation units conversion program ratio proposed in the Area Plan is consistent with the conversion ratio developed for TRPA's pilot program for conversion of the bonus units.

The Area Plan contains many mobility policies including adaptive traffic management for Highways 267 & 89, parking management strategies, wayfinding signage, transportation demand management plans, and emergency preparedness and evacuation plans.

Threshold gain includes water and air quality, soil conservation, scenic resources and recreation.

The Memorandum of Understanding will specify the extent to which the activities in the Area Plan are delegated or exempt from TRPA review. This will be brought forward within six months of the Governing Board's Finding of Conformance of the Area Plan. For the Code of Ordinances to be consistent with the adoption of this Area Plan, technical amendments will be required for Chapters 34, 36, and 38.

Presentation material can be viewed at:
http://www.trpa.org/wp-content/uploads/RPIC-Agenda-Item-No.-4-Placer-County-Area-Plan.pdf

Committee Comments & Questions

Mr. Yeates said there are two decisions to be made by the Governing Board; one is a legislative decision with all of the findings and conformance regarding the Area Plan. The Environmental Impact Statement was combined to include both the Area Plan and the Tahoe City Lodge, then there is a project decision on the approval to be made by the Board. That project will have its own findings. Where are the separate documents with the findings that would go with that quasi judicatory decision versus the legislative decision on the Area Plan.

Mr. Marshall said the Regional Plan Implementation jurisdiction has to do with Regional Plan amendments not with projects. The project findings will go to the Governing Board and the Board will hear both the Area Plan and Lodge project. All of the project findings and the draft permit, etc. will go to the Board as part of that package.

Ms. Aldean said Pat Davison, Contractors Association of Truckee Tahoe distributed a letter from the District Forest Supervisor in Placer County expressing concern about the affordable housing limitations. The compromise was that this would be revisited in four years. She asked if there was a clause that could be added to the deed restriction that would modify it if legislative action is taken by the Placer County Board of Supervisors and TRPA Governing Board to amend the rates that could be charged for these secondary units.

Mr. Marshall said in the standard deed restriction there is language that states it can only be removed with consent of TRPA. He suggested in subsequent years when they may want to amend the program then it can be addressed to amend or lift those deed restrictions at that time.

Ms. Aldean asked if language could be incorporated in those deed restrictions to make it automatic upon approval by both Placer County and TRPA Board's. If not, this may cause additional work for the owners of these secondary units to rerecord those deed restrictions.

Mr. Marshall said staff can address this. It may cause disputes in the future if there were automatic provision to what triggered that action.

Ms. Aldean said it would be upon adoption by the Governing Board of an amendment to that specific part of the Code of Ordinances that restricted it for affordable use.

Mr. Marshall said if you provide that kind of latitude there will be future disputes questioning if the Board took a particular action that triggered that. He said this may not be a unique issue and staff will research other jurisdictions to find language that may be suitable.

Mr. Sevison asked for clarification on what motions the Regional Plan Implementation Committee will be making and what the Governing Board will be responsible for.

Mr. Marshall said there are five motions listed on page 235 and 236 of the staff packet. Those are for the Area Plan and for certifying the Environmental Impact Statement for the Area Plan and the technical corrections to the Code of Ordinances. The project findings and approval of

the project will go directly to the Board without a recommendation from the Regional Plan Implementation Committee.

Mr. Shute asked if it was correct that these technical amendments apply to only Placer County and nowhere else in the basin.

Ms. Maloney said that is correct.

Public Comments & Questions

Ellie Waller, Tahoe Vista resident and member of the North Tahoe West Team said she was disappointed with the Placer County Planning Commission and Board of Supervisors for not addressing some of their questions. They did not address key issues in the presentations that were made to the Board of Supervisors and the consultant left a lot of responses for later discussion which has not happened. This is an Area Plan and there was more focus on 3.9 acres than 72 square miles. There is still not a definition to set criteria so they know that environmental analysis is being done at a level that it should be for a pilot program. The commercial floor area to tourist accommodation units conversion program was not analyzed sufficiently for water consumption, parking needs, vehicle miles traveled, and air quality. The Golf Course greens and clubhouse has not been analyzed and the doubling in size also has not been analyzed. In addition the Golf Course has had four years to do their BMPs. There was 26,000 square feet/58 units of commercial floor area assessed to the Hendrickson building. The Placer County staff report to their Board said that it was difficult to do; there was illegal construction done there. The adequacy of the environmental documentation was not sufficiently discussed at the Placer County level. It is unclear the that Lodge project is covering what should be the number of units whether it is mitigation or on the ground. The space is leased and the current applicant is not responsible for that employee status. The difference between the evaluation of the number of units versus what is there today, should be the Full Time Equivalent (FTE) because it is confusing in the documentation. The affordable housing needs to be addressed.

Pat Davison, Contractors Association of Truckee Tahoe said they are satisfied with the deed restriction limiting the use of those second units to what is in essence a locals only program. Their concern about the income based deed restriction was discussed with the Placer County Planning Commission and Board of Supervisors. The County has made the commitment to move forward in 2017 to work more on the housing issues. She suggested that TRPA make affordable housing a priority in 2017. The bonus unit language in the Code of Ordinances and housing element of the Regional Plan could use some consideration and discussion. She suggested inviting Stacy Caldwell with Tahoe Truckee Community foundation to give a presentation on the Regional Housing Study that was released in August 2016.

Ray Garland, resident of Tahoe City Highland Subdivision and President of the Highland Homeowners Association said those who attended their Labor Day weekend meeting were enthusiastic about the construction of the Tahoe City Lodge. Kila Development have been exemplary in their outreach to the community and responsiveness to concerns. The Hendrickson building is an eyesore and has a negative impact on visitors to Tahoe City. This is an important project to the revitalization of Tahoe City.

Steve Teshara, TRPA Advisory Planning Commission, Chair said the APC was very cognizant and thorough in reviewing the environmental document for this agenda item. It has taken five years with a lot of input and collaboration.

Jennifer Quashnick, Friends of the West Shore and Tahoe Area Sierra Club said they are concerned that not enough is being done about the traffic issue. Vehicle miles traveled effects water quality, air quality, and public health and safety. The League to Save Lake Tahoe's traffic expert submitted a letter stating the problems with how vehicle miles traveled was being assessed. The Threshold report shows that the vehicle miles traveled in North Lake Tahoe has gone up, while it has gone down in South Shore. When averaging the two together, it cancels out the impacts that are being seen in North Shore. The baseline has an impact on whether or not the assessment determines the vehicle miles traveled impact. The Tahoe Basin Area Plan is a good opportunity to look at additional measures that we should be doing instead of putting them off to the future. The recent Draft Findings and Recommendations Report on the TMDL specifies one of the problems that the Pollutant Load Reduction Model has overestimated the benefits of the water quality projects. There is no alternative plan in the Area Plan if the Pollutant Load Reduction Model has over predicted the benefits.

Ann Nichols said if a hard decision was made, they would have made secondary dwellings one quarter of a mile from transit stops not just transit. The Tahoe City Lodge project has captured the entire process. The reduced height was thrown out and we are now back to the 56-foot height as allowed in the Regional Plan. Placer County and Truckee have approved projects that allowed 686 employee housing only 227 have been built from projects approved in 2004. Since Placer County has not enforced their own approvals, the public has to fix it.

Judy Friedman, Tahoe City resident and small business owner said many residents of Tahoe City have been concerned about the economic health of their community. High quality lodging is lacking, the Tahoe City Lodge begins the process of revitalization that aligns with the vision of the community as articulated in numerous community meetings. The Lodge will replace a blighted property and provide an esthetically pleasing gateway in line with the communities character.

Cindy Gustafson, Tahoe City Public Utility District said this has been collaborative and comprising process. In 2011, the Tahoe City Public Utility District, Placer County, the Truckee Tahoe Airport District, the Resort Association worked together to acquire the Golf Course property. The goals were to provide economic redevelopment, revitalization, environmental restoration, and enhanced recreational opportunities. The Tahoe City PUD is in support of this Area Plan and Tahoe City Lodge project. Typically, the Tahoe City PUD doesn't weigh in on private development projects but in this case, they are partners. The deed restriction for the remaining 42 acres was approved by their partners along with findings of consistency.

Shannon Eckmeyer, League to Save Lake Tahoe said the League to Save Lake Tahoe supported this Area Plan and Tahoe City Lodge. The change in the town center modification for the Tahoe City not only gives opportunities for the Tahoe City Lodge and future projects. Placer County Board of Supervisors approved an updated plan for the Tahoe Area Regional Transit Plan in April. This is a tool that they are hoping other local jurisdictions will follow and it will make it easier for the League to try and bring funding into the Basin. The environmental review included mitigation measures for congestion management process and four year vehicle count that is now part of policy in the Area Plan and can be used as a model for other area plans. Mr. Tuma and his team have gone above and beyond with doing stream environmental zone restoration, a

bike plan, changing stations for employees, and bus passes for employees. The League raised concerns in 2014 about being able to track and see when coverage reduction was happening in stream environment zone restoration areas at an area plan level. This is the first Area Plan to incorporate the tracker for conformance review.

Steve Glazer, Westshore Nevada Realty said he is in favor of workforce housing and the public private partnership with Tahoe City Lodge. Today he is representing the property owners of 2980 North Lake Boulevard. They are requesting a long standing Placer County and TRPA mistake made in the Tahoe City Plan in the 1980s. That property was taken from commercial to single family residential. A document was sent to TRPA on August 5, 2016 that requests that this property be reinstated to allow for it highest and best use as other Tahoe City areas such as the Lake Forest zone which already allowed some commercial uses. This property is on the east end; corner of Lake Forest Road and Highway 28. On the west end there is UC Davis' Fish Hatchery that is zone multi-family and commercial recreational. He suggested that subject property to be considered for that usage. In review of the Environmental Impact Report and Environmental Impact Statement, section 10.3.4 describes State Route 28 between Tahoe City and Kings Beach includes Class II striped bike lanes. Their parcel has a bike path directly in front of it. There is also a boat ramp and other recreational opportunities that this property could viably support with multi-family and commercial use. They requested that this property be included in Placer County's review of non-conforming historical commercial properties along the Truckee River. His clients requested that TRPA will support this property when it comes before TRPA multi-zone use of recreational and commercial use that would include a low carbon foot print type of commercial use.

Aaron Rudnick, adjacent property owner to the proposed Tahoe City Lodge said it was disappointing that a lot of questions were not completely answered, if at all. Although, he agreed that the blight needs to go, his property is losing 12 parking spaces to this property and the easement (driveway) will be used by the developer for their purposes. He is also loosing over 12 parking spaces at his property near the new roundabouts and entrance to Tahoe City. Parking spaces are valued at $70,000 in comparable items.

<u>Committee Comments & Questions</u>

Mr. Shute asked staff to address Mr. Glazer's and Mr. Rudnick's comments.

Ms. Jacobsen, Placer County said the area that Mr. Glazer is referring to is a small site along State Route 28 and Lake Forest Road. It is contiguous to a mixed-use district, however, the site he is referring to has been zoned residential. Historical uses of the site appear that it has always been used as commercial. It currently has an office building on site. There has never been residential uses on the site but are in a residential district. In 2014, the plan that was released did include that site in the mixed-use district as a way to recognize that there was a non-conforming use. Placer County retooled the Area Plan in response to stakeholder input received. The focus was on land use and zoning changes within the town centers. It is outside of an existing commercial node which is being zoned as mixed-use. The County committed to looking at a future effort to address non-conforming uses.

Ms. Jacobsen, Placer County said Mr. Rudnick's property **(**Bechdolt building) boarders the Tahoe City Lodge project. There is an easement that the Tahoe City Lodge has rights to. Existing easement conditions has parking spaces. Those are being removed in the proposed project. Initially when the project came forward there were approximately three stalls in the easement

but in response to comments on the draft those have been eliminated and absorbed into the remainder of the project site. As part of the project approval, there is a requirement for a parking management plan.

Wyatt Ogilvy, Ogilvy Consultants said the subject easement is an ingress and egress easement that served the Tahoe City Lodge and Tahoe City Golf Course and was in place prior to the Rudnick's acquisition of the property.

Mr. Sevison suggested that the property that is now commercial that is being down zoned should be asterisked with a foot note so in the future may be a project that is compatible could be proposed.

Mr. Marshall said it has not been agenized that it may be an option for other people. If there is a concern, the committee can articulate it and it can be in the record.

Ms. Aldean said there are still plenty of people who pay market rate rents who cannot afford to purchase a home in the Tahoe Basin. In order to make this program viable, you need to acknowledge that the primary homeowners will want a reasonable return on their investment. There is a beneficial effect on the environment by keeping just one person from commuting into the Basin regardless of their income level.

Mr. Lawrence said his understanding of the property is that it is not being down zoned but is non-conforming zoning. He suggested a foot note that is not necessarily parcel specific but possibly acknowledging that Placer County might be taking a look at how to address non-conforming uses in the future. When this process started, he was concerned about this plan. He commended TRPA, Placer County, League to Save Lake Tahoe, and the Regional Plan Implementation Committee for working together. Although, there are still environmental improvements that need to be focused on, this plan went from something that was not acceptable to what it is today.

Mr. Shute agreed with Mr. Lawrence's comments and had similar concerns about the content of the plan and the lack of cooperation between the agencies. He is pleased that there was agreement for a deed restriction of the Golf Course property and the mitigation measures for traffic.

Mr. Sevison made a motion to recommend a finding of technical adequacy and a motion to recommend that the Governing Board certify the Placer County Tahoe Basin Area Plan and Tahoe City Lodge Project Final Environmental Impact Statement (State Clearinghouse No. 2014072039), and modified in the errata thereto, as provided in Attachment D.

Motion carried unanimously.

Mr. Sevison made a motion to recommend the findings required by Compact Articles IV and VII and Code of Ordinances Chapter 3, 4 and 13 for the Placer County Tahoe Basin Area Plan for adoption of the Placer County Tahoe Basin Area Plan, as provided in Attachment E.

Motion carried unanimously.

Mr. Sevison made a motion to recommend Governing Board adoption of Ordinance 2017-__, amending Ordinance 87-9, as previously amended, to amend TRPA's Regional Plan to

incorporate the Placer County Tahoe Basin Area Plan, as provided in Attachment F.

Motion carried unanimously.

Mr. Sevison made a motion to recommend Governing Board approval of the required findings, including a finding of no significant effect, for adoption of the technical amendments to TRPA Code of Ordinances Chapters 34, 36, and 38, as provided in Attachment H.

Motion carried unanimously.

Mr. Sevison made a motion to recommend Governing Board adoption of Ordinance 2017-__, mending Ordinance 87-9, as previously amended, to amend TRPA's Code of Ordinances Chapters 34, 36, and 38, as provided in Attachment I.

Motion carried unanimously.

VI. Item No. 5: Upcoming Topics

Mr. Hester said the Shoreline Planning Initiative will be coming to the Regional Plan Implementation Committee at a future date to be determined. The Development Rights Working Group will meet in February.

VII. COMMITTEE MEMBER REPORTS

None

VIII. PUBLIC COMMENT

None

IX. ADJOURNMENT

Chair Mr. Shute adjourned the meeting at 9:57 a.m.

Respectfully Submitted,

Marja Ambler

Marja Ambler
Clerk to the Board

The above meeting was taped in its entirety. Anyone wishing to listen to the tapes of the above mentioned meeting may call for an appointment at (775) 588-4547. In addition, written documents submitted at the meeting are available for review

TAHOE REGIONAL PLANNING AGENCY

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MEMORANDUM

Date: January 24, 2017

To: TRPA Regional Plan Implementation Committee

From: TRPA Staff

Subject: Shoreline Planning Concepts Regarding Water-Dependent Structures

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Requested Action: Provide endorsement and direction on Shoreline Plan preliminary policy proposals regarding boating facilities and piers developed by the Steering Committee.

Overview: In 2016, the Tahoe Regional Planning Agency (TRPA) launched a collaborative process to develop the Shoreline Plan to enhance recreation and protect the 72 miles of Lake Tahoe's shores. TRPA and partner agencies initiated planning by engaging the Consensus Building Institute (CBI), a third-party mediation firm; to convene stakeholders and develop a consensus based planning process. As part of this process, CBI and TRPA convened a Steering Committee to oversee the process. Committee membership includes:

Jennifer Lucchesi, California State Lands Commission
Robert Larson, Lahontan Regional Water Quality Control Board
Bob Hassett, Lake Tahoe Marina Association
Darcie-Goodman Collins, League to Save Lake Tahoe
Charlie Donohue, Nevada Division of State Lands
Jan Brisco, Tahoe Lakefront Owners' Association
Joanne Marchetta, Tahoe Regional Planning Agency

This fall, the Steering Committee began working on developing recommended proposals for consideration by the Regional Plan Implementation Committee (RPIC). At the November RPIC meeting, TRPA staff, along with Gina Bartlett, the Senior Mediator facilitating the planning process, and Dan Nickel, a shoreline planning consultant working on behalf of the Steering Committee, presented the proposed project Scope and recommendations related to Low Lake Level Adaptation.

The following topics were clarified at the meeting:

- Waterborne transit will be handled under a separate planning process, but will be kept in mind during the development of the Shoreline Plan so as not to foreclose future planning.
- The current focus of the Shoreline Plan is on Lake Tahoe; the Steering Committee will discuss planning for other lakes in the future.
- The impacts of boating on Lake Tahoe will be considered in the Shoreline Plan and environmental analysis.
- The Shoreline Plan includes a proactive public outreach element to ensure littoral property owners, the public, and major stakeholders are informed and engaged in the process.

RPIC voted to advance the proposed Scope and the Low Lake Level Adaptation preliminary recommendations on the phased approach, directing access toward marinas and public ramps. The Scope and Low Lake Level Adaptation Memos have been updated to reflect RPIC direction and posted on shorelineplan.org.

Since the November RPIC meeting, the Steering Committee held 4-days of working sessions and have identified preliminary policy proposals related to boating facilities, access, and piers. The preliminary policy proposals are the basis for progress towards a comprehensive set of agreements and are provided in the Boating Facilities Issues and Pier Issues Memos, provided as Attachments A and B, and will be the focus of discussion at the January RPIC meeting. The preliminary policy proposals endorsed by RPIC will be used to draft updated goals, policies, and code and the alternatives to be evaluated in the environmental analysis.

Next Steps: The following is an overview of next steps:

- Joint Fact Finding Committee: The Joint Fact Finding (JFF) Committee, a committee of technical experts, is meeting the afternoon of January 31st to discuss the Blue Boating Program and a proposal for estimating watercraft use and emissions associated with moorings. The JFF Committee will continue to meet throughout the remainder of the year to provide input on the methodology that will be used to analyze potential environmental impacts associated with the proposed Shoreline Plan and provide input on recommended mitigation to include in the Environmental Impact Statement (EIS).
- Steering Committee: The Steering Committee is scheduled to meet two days in February to make additional progress towards developing a comprehensive set of Shoreline Plan policy proposals for consideration by RPIC. The Steering Committee will continue to meet throughout the remainder of the year to provide guidance on and oversee the planning effort.
- Regional Plan Implementation Committee: RPIC will be asked to endorse and provide direction on a comprehensive set of Shoreline Plan policy proposals to be analyzed in the Shoreline Plan EIS, along with other alternatives to be evaluated.
- Permitting Agencies: TRPA is planning on hosting a workshop for shoreline permitting agencies to identify permit streamlining options.
- Environmental Review: TRPA and Ascent Environmental, the firm selected to prepare the environmental analysis, are planning on issuing a Notice of Preparation and starting the scoping process for the Shoreline Plan EIS in March. Scoping meetings will be held at the Advisory Planning Commission, Governing Board, and RPIC. RPIC will be asked to provide input on the Shoreline Plan EIS Alternatives.

Public Input: Public input from the workshops held on September 21, 2016, on the North Shore and November 3, 2016, on the South Shore are provided on shorelineplan.org. Public comments e-mailed to TRPA staff are also provided on shorelineplan.org.

Contact Information: If you have questions regarding this item, please contact Brandy McMahon, AICP, Principal Planner, at (775) 589-5274 or bmcmahon@trpa.org.

Attachments:

A. Boating Facilities Issues Memo
B. Pier Issues Memo

Attachment A

Boating Facilities Issues Memo

Lake Tahoe Shoreline Plan

02 Policy Topic: Boating Facilities

V7

Last Updated 1.19.2017

Brief Description

Boating facilities may be defined as developments and uses that support boat access to the water (including moorage), such as piers and slips, buoy fields, launch facilities, and ramps. Boating facilities may be comprised of a combination of structures (e.g. fixed-pile piers, floating docks, elevated gangways, boat launches, marine rails, etc.) used to facilitate boat access to the water and subsequent boat moorage. Moorage facilities may be utilized temporarily for transient moorage or may include longer term moorage during the entire boating season.

The following is an overview of topic areas associated with boating facilities necessary to inform policy considerations. These include multi-use structures, buoys and buoy fields, ramps, temporary structures, boat storage, and associated uses.

Per the 2008 inventory, there are 768 piers located along the shoreline of Lake Tahoe, approximately 43 piers of which are available for public use. Multi-use overwater structures, not including marinas, include joint- or community-use piers intended for use by more than one residence or a large number of people. Multi-use structures also include those designated to a single owner with multiple lakefront parcels with a deed restriction against further overwater structure development.

In addition to pier structures, boats may be moored to individual buoys or be located in a designated buoy field. The 2008 inventory (count completed in 2002), found 4,454 buoys on Lake Tahoe. This includes both permitted and unpermitted buoys. Between 2008 and 2010, the TRPA processed 3,431 permits, with an additional 981 buoy permits pending consideration when the court-ordered injunction on permitting went into place.

Demand for boat access to Lake Tahoe often exceeds availability. This demand results in pressure during the boating season on marinas for boat moorage and launching, for new or expanded public boat launch facilities, additional need to permit buoys, and for potential future facilities such as fueling stations, pump out locations, public restrooms, and maintenance facilities. This demand also results in year-round pressure on marinas to provide more boat storage. The current inventory of boating facilities identifies 11 fueling stations, all but one of which are on the California side. Per the TRPA Compact, demand for additional facilities would need to be addressed while also meeting resource protection standards.

Action Items

Action Item	Date	Name
Provide input on boating use assumptions for environmental review	Nov 2016-Feb 2017	JFF Committee
Provide input on boating study of impacts for environmental review	Done Fall 2016	JFF Committee
Review studies and assess boating impacts	Done 8/3/2016	JFF Committee
Identify Issues	Done June 2016	Steering Committee

Concepts Under Consideration

The Shoreline Steering Committee has developed these concepts under consideration as preliminary consensus and the basis for progress. The Steering Committee will incorporate feedback from the public and the TRPA Governing Board and Regional Plan Implementation Committee to refine these concepts and develop the final package of recommendations.

Overarching Principles

- Goal is to provide public access while meeting environmental protection standards.
- Create a measured approach of opportunities for boating facilities that has been dormant.
- Consistent with low lake level adaptation, allow buoys to be an adaptation technique.

Buoys

Single-use buoys

- Location
  - Buoys may be located up to 600 feet waterward from elevation 6,220 feet measured horizontally.
  - Buoys must be located 20 feet from adjacent property boundaries and at least 50 feet from all legally existing buoys
- Buoy allocation
  - Up to two buoys allowed per littoral parcel, as long as dimensional criteria such as setbacks are met. For constricted parcels which are unable to meet setback or spacing requirements, buoys may be allowed through cooperation with neighboring properties.
- Permitted and pending buoys
  - First call, invite all TRPA permittees, both approved and pending, to come in to TRPA to review their permits and rectify any outstanding permit conditions.
  - Second call, open up to new applications.
- Grandfather pre-1972 existing buoys
  - 3 buoys allowed (approximately 35 parcels) for littoral lots > 50 feet in width when showing valid permit from any agency or evidence of buoys before 1972.
  - Prior to 1972, non-littoral parcels would need to document approval from an agency.
- Buoys within cove environments with interfering projection lines
  - Cove environment allows only 1 buoy per littoral parcel if applicant is not eligible based on projection lines, unless otherwise agreed with neighboring properties.
  - Use same distance required for single-use buoys
  - Buoys must be located 50 feet from other buoys

Buoy fields (not including marinas)

- Provide for additional permanent anchors for low lake adaptation, either lakeward or laterally for legally established buoys. Applicants must consider plan for landward row, given that buoy blocks might be exposed when lake levels are low.
- Buoy fields should be designed in a grid using the same setback and spacing standards as for single-use buoys but may deviate from these

standards based on site specific conditions including neighboring uses and structures, State agency compliance, Coast Guard consultation, navigation, substrate including obstacles, and bathymetry.
- All commercial and tourist buoys shall be subject to the same setbacks and grid spacing as HOAs or other associational entities.

Enforcement

- Establish and implement a joint TRPA/State program of buoy compliance.
- Develop MOUs with the States and TRPA as a mechanism to facilitate enforcement.
- Recognize that 2008 funding may be available for future enforcement.

Overnight anchoring

- Watercraft moored overnight shall be moored to legally existing buoys, boatlifts, slips, berths, boat hoists or other watercraft storage facilities, except for the following:
    - Mooring of construction watercraft for purposes of and use during TRPA authorized construction activities,
    - Mooring of public service watercraft for health and safety purposes, or
    - Mooring of watercraft for occasional overnight camping purposes for up to 72 hours.

Under Discussion

Buoy Allocation

Policy Issues to Consider in the Shoreline Plan

Water Quality

A central question surrounding many policy issues under consideration is whether or not boat use negatively impacts water and air quality. There is a perception by many that boat use, specifically gas-powered motors, has a negative correlation to water and air quality. Understanding the direct and cumulative impacts from boat use may influence policy decisions in the Shoreline Plan. The environmental document will analyze the impacts of recommended policies in

the Shoreline Plan. As noted in the Scope memo, The Shoreline Plan will focus on structures (marinas, piers, buoys, and boat ramps) to support water-dependent recreation within the shoreline and effective resource management to ensure threshold attainment.

Multi-use Structures

As noted in the stakeholder interviews, it is not clear how much pressure there is for new private overwater structures. Some respondents noted that with no new permits being issued for many years, there will undoubtedly be pressure to rebuild or build new pier structures. In light of potential direct and indirect impacts to lake water quality and clarity from increased boat use as well as scenic impacts from new overwater structures, consideration may be given to further emphasis of private multi-use structures over single-use structures.

Buoys

Permitting

Similar to the demand discussed above for overwater moorage structures, buoys are also likely to be in future demand as more people desire to keep watercraft moored on the water during the boating season. Based on the stakeholder responses, applicants often do not have a clear understanding of how buoy permits are issued and what agencies are responsible for approval. There appears to be a strong desire for a simpler, streamlined permitting process which avoids needing permits from multiple jurisdictions.

Some existing buoys have received permits from agencies other than TRPA. Some parcels are known to have three buoys. In certain situations, some of these existing buoys may be considered grandfathered.

The demand for buoy access is also evident for non-littoral parcels which are part of homeowners associations (HOAs). Several HOAs have expressed concern regarding designating such buoy access within their buoy fields.

Location and Number

Applications for new buoys are likely in the future based on the perceived level of demand. Currently, TRPA code allows two buoys per residential parcel. Given the recent drought conditions and difficulty in boat access during low-lake conditions, siting new buoys and buoy fields may consider location in relation to habitat areas, water depths, scenic protection and navigation. The total

number of buoys is of concern as well as how such buoys are distributed to each parcel.

No-Wake Zone

The no-wake zone is an area close to shore which provides navigational safety for boaters and non-motorized watercraft and shoreline erosion protection from boat wakes. The no-wake zone currently measures 600 feet waterward from the water's edge. Public comments have recommended extending no-wake zones in certain areas with high levels of non-motorized activity.

Temporary Structures in Lieu of Dredging

Dredging, whether it is for new or maintenance purposes, has the potential to negatively impact water quality, water clarity, substrate, and distribution of aquatic invasive species. Optional consideration may be given to allow use of temporary overwater structures (e.g. floats) to be located in deeper water and therefore promote safe moorage, specifically during low water years. This topic is discussed in the memo on Low Lake Level Adaption.

Boat Storage

Many marinas are utilizing upland dry dock boat storage as an additional storage option to in-water boat moorage. This option may reduce the immediate environmental impact associated with in-water boat moorage while also increasing boat storage capacity and associated revenues. However, increased use of dry-dock storage facilities may lead to potential significant upland and cumulative impacts associated with increased boat use on the lake, impacts to scenic views, and increased impervious land cover.

Associated Uses (fueling / pump outs / maintenance)

Uses associated and necessary for boat use include a variety of potentially impactful activities, including fueling of watercraft, disposal of waste products, and maintenance. These activities are commonly conducted at local marinas or other specifically designated boating facilities, where established best management practices are commonly employed to ensure protection standards are followed. There may be future pressure to add more such facilities along the shoreline to accommodate increased demand. Only one fueling station (Zephyr Cove Marina) is located along the Nevada side.

One steering committee member inquired about the inventory of existing facilities, wondering what services are provided at each facility, specifically pump out and maintenance locations. Mapping has been provided, but this information may not be widely known.

Some concessionaires are renting personal watercraft from public pier locations or road side access points and may be fueling the watercraft over the water with portable fuel containers. Similarly, many owners of small motorized watercraft may also be filling their vessels via portable fuel containers on the beach front. Such activities likely result in minor fuel spills.

Construction Equipment Access

Contractors who need access to the water via ramps to load and offload barge equipment and building materials may be limited at times due to demand at public ramps and local marinas as well as low lake levels.

Mitigation

Increased boat use could result in negative effects on water clarity, water quality, and air quality in Lake Tahoe. Understanding effects from boat use is part of the Joint Fact Finding process. The likelihood that these negative effects would occur and the severity of the impacts will be evaluated in the Shoreline Plan EIS.

If negative impacts are directly or indirectly linked to boat use, mitigation could be considered to offset future boat use impacts.

Related Policy Issues

Aquatic Invasive Species

Under the current Aquatic Invasive Species (AIS) program, TRPA and partners track inspections, decontamination and launches from marinas. There are perceptions that lakeshore algae conditions are worsening. The current state of scientific knowledge regarding incidence, trends, and causation of algae and periphyton and any associations to boating or shoreline structures should be determined through the Joint Fact-Finding process.

Joint Fact-Finding

The Joint Fact Finding Committee has evaluated the questions listed below regarding boats on the Lake and assumptions tied to boating use. Currently, draft memos and meeting summaries are available at ShorelinePlan.org under Joint Fact Finding Committee meeting materials. Findings from the Joint Fact Finding Committee will be disclosed in the environmental review.

Watercraft

- What is the estimated number of boats moored on the lake?
- What is the best available science regarding water and air quality impacts from boat use?
- What is the best available science regarding the association of watercraft or shoreline structures to the incidence, trends or causation of algae conditions in the nearshore?
- What is the best available science regarding shoreline erosion associated with boat wakes?
- What is the proportion of different types of boats/engines and other watercraft and the inclusion of this information in modeling of boat emissions?
- Where are boat launch facilities / ramps located? (Need to differentiate between boat launches and boat ramps.)
- What is the estimated number of boats launching on the lake?
- Where are fueling stations located?
- How is fueling accomplished for watercraft that do not use a designated fueling station?

Shoreline Structures

The Joint Fact Finding Committee has evaluated these questions. The inventory is available via ShorelinePlan.org GIS mapping information

- What is the inventory, including location, of existing structures (piers, buoys, slips, boat lifts, etc.)?
- How many buoys are within and outside of buoy fields?

- Which structures are public or quasi-public?
- What is the best available science regarding adding overwater structure (even if only temporary) versus dredging.

Existing Data, Information and Science

Boating Information Collected from AIS Inspection Stations

Boating information has been and will be collected from AIS inspection stations. This information includes boat and motor details, storage location and motor usage.

Boat Use Monitoring

In 2014, the TRPA Boat Crew inventoried boating related structures such as boat lifts, boat houses and buoys to determine occupancy rates. Additional surveys were also conducted by the TRPA Boat Crew in 2015 and are being conducted by the TRPA Boat Crew in 2016.

Overwater Structure Inventory

An inventory of overwater structures was last conducted in 2008 as part of the EIS. Updated information is not likely to be needed since few structures have been built during this recent time period.

Buoy Inventory

Last full count conducted in 2006. Both the California State Lands Commission and Nevada Division of Wildlife participated in a count for the 2016 boating season. The 2016 buoy count reports are available for both states by visiting ShorelinePlan.org under materials / studies.

Noise

The last watercraft noise study was completed in 2013. This study found that out of 180 days of observation at 9 different sites, 12 noise exceedances occurred. The conclusion at that time considered, in general, noise impacts as not significant and recommended continued enforcement of the 600-foot no-wake

zone. Concerns continue with individual boats generating excessive noise (e.g. cigarette boats and exhaust cutouts). The status of the Basin's overall noise threshold had not changed since 2011.

Annual Shorezone Program Report (2010)

As part of the Adaptive Management System, this Report was prepared to report on the implementation of the 2008 Shorezone Program. The Report found that the first year of Shorezone Program implementation provided key knowledge in the following areas:

- Boating use was 13 to 20 percent below the projections in the Shorezone EIS. This was contributed to the broad economic downturn.
- Modeling showed boat engine emissions were significantly less than projected.
- Water sampling data showed hydrocarbons and bacteria are will within performance standards.
- Noise monitoring data supported increased enforcement and the need for additional monitoring.

The Report also provided an overview of boat use assumptions and how boating water and air emissions were analyzed in the EIS.

Boating Impacts Literature Review

A number of studies have been conducted regarding boating use on various water bodies and on Lake Tahoe. A summary of the studies is provided below.

Boating/Watercraft Use Surveys

Lake Oroville Boating Use Study (2004)

Recreation Study to support Federal Energy Regulatory Commission (FERC) relicensing and recreation planning. Based on adequacy of facilities to serve recreational needs and determine if capacity limits for boating were being exceeded. Surveyed boaters' perceptions of other boaters (social capacity). Ecological capacity was focused on shoreline erosion and sensitive shoreline vegetation. (refer to other studies for the FERC relicensing). Also looked at bald eagle territory disturbance. Conclusions did not identify major concerns, although cautioned against increasing capacity at certain high use areas.

Hagler Bailly Watercraft Use Study Lakes of Tahoe (1999)- Lake Tahoe

Study designed to measure watercraft use. Provided a baseline measure of recreational boating use and boater attitudes prior to implementation of the ban on two-stroke motors. Primary objectives were to measure watercraft and fuel usage, collect data on public opinion and to measure characteristics of the boating population.

2012 Northeast Recreational Boater Survey: A Socioeconomic and Spatial Characterization of Recreational Boating in Coastal and Ocean Waters of the Northeast United States (2012)

A partnership among industry, government, and nongovernmental organizations conducted a survey of marine recreational boaters from Maine, New Hampshire, Massachusetts, Rhode Island, Connecticut and New York during the 2012 boating season.

TRPA Survey of Boaters at Lake Tahoe-Franz (2002)

The primary purpose of the survey was to respond to the court in terms of litigation relative to the marina at Tahoe Keys. Specific areas of inquiry included but were not limited to: type of watercraft, number of days watercraft used, fuel types, types of motor, number of days, place of residence.

2007-2009 California Boater Survey-CA Coastal Commission, CA Dept of Boating & Waterways, Santa Monica Bay Restoration Foundation, Keep the Delta Clean Program (2011)

A statewide examination of boating habits, environmental awareness and overall outreach and education program evaluation. By providing a snapshot of recreational boaters and boating behaviors in the State of California, the study's findings allow the project partners to develop more effective and accurate boater outreach and education. The findings will also assist in developing new public education materials and targeting strategies to reduce potential sources of boat pollution. Lastly, this study will provide useful information for all boater education and boat-related pollution programs.

Recreational Boat Traffic Surveys of Broward County, Florida-Mote Marine Laboratory (2005)

The goal of the project was to characterize boating patterns in Broward County, Florida and provide information leading to the completion of the Broward County Boat Facility Siting Plan and Manatee Protection Plan (MPP).

Boating Clean and Green Survey-Public Research Institute, San Francisco State University

The purpose of this study was to provide information about boater practices that would be useful to the Boating Clean and Green Campaign in its efforts to: (1) develop and implement public education programs aimed at the reduction of oil and fuel related water pollution stemming from boat use; and (2) to assist local agencies and marinas in implementing programs to reduce boat-generated pollution, including the installation of pollution control services.

National Boating Usage Study Preliminary Survey Report-National Marine Safety Committee -Australia (2009)

The National Marine Safety Committee commissioned the National Recreational Boating Usage Study to collect information about recreational boating that can be used to provide an evidence base upon which to develop better marine safety policies and education programs. The study began recruiting in June 2008 and recruited recreational boaters from across Australia. Approximately 3800 individuals registered to take part in the study which includes a survey questionnaire and an online trip diary. This report presents the data collected from the preliminary survey. In total 2818 individuals completed the survey.

Carrying Capacity

Lake Ripley Watercraft Census & Recreational Carrying Capacity Analysis (2003) -Lake Ripley Management District -WI

The purpose of this study is to 1) quantify lake usage during the 2003 boating season, 2) develop a formula for estimating recreational carrying capacity under varying user conditions, and 3) evaluate Lake Ripley's carrying capacity status with respect to existing lake-use data. The study found that boating densities were between 141% and 171% of Lake Ripley's carrying capacity. This analysis suggests a high probability of user conflict and environmental degradation on Lake Ripley as a result of overcrowding on busy, mid-summer weekends and holidays.

Boating Carrying Capacity Review (Pinecrest Lake, CA):

The purpose of the review was to provide background data to help determine an appropriate number of moorings at Pinecrest Lake during development of the Pinecrest Lake Shoreline Management Plan.

Deep Creek Lake Boating and Commercial Use Carrying Capacity Study-Maryland Department of Natural Resources (2004)

This study was specifically conducted to determine: current/existing recreational boating lake uses; potential/projected future recreational boating uses; optimal recreational boating use carrying capacities, the ability of the lake to accommodate existing and future demands; and management options for controlling growth if boating commercial uses at the lake meet or exceed carrying capacity.

Techniques for Estimating Boating Carrying Capacity: A Literature Review (2005)-Catawba-Wateree Relicensing Coalition-North Carolina

This document will examine a variety of literature on recreational carrying capacity. Emphasis is placed on boating density methodology and other factors pertinent to lake carrying capacity estimation. The boating carrying capacity studies that were reviewed contained the following categories of analysis: use characteristics, usable lake area, boating density, lake use rate, and boaters' perceptions of crowding.

Economics

2012 Recreational Boating Economic Study-National Marine Manufacturers Association/Recreational Marine Research Center at Michigan State University

Provides overview of the total annual economic value of recreational boating including the number of recreational boating industry businesses, total jobs, and annual recreational boating industry businesses.

Statewide Minimum Shoreland Zoning-An Economic Analysis-Wisconsin Department of Natural Resources (2012)

The Analysis measured the environmental benefits of shoreland zoning changes related to coverage of impervious surfaces in the shoreland and increased vegetation protection measures. The analysis measured the environmental benefits by predicting impacts on phosphorus runoff and water clarity and monetizing the value of increased employment that comes from clearer water.

Water Quality

Lake Tahoe Motorized Watercraft Report-An Integration of Water Quality, Watercraft Use and Ecotoxicology Issues (1998) TRPA/UC Davis

A synthesis of the results of the Hagler Baily watercraft survey, water quality monitoring for fuel constituents, and emissions studies conducted in 1997 & 1998.

Investigation of Near Shore Turbidity at Lake Tahoe (2002) Lahontan/DRI

This study found the highest turbidity values in the nearshore adjacent to Tahoe Keys and other areas off South Lake Tahoe and Tahoe City. The study found a strong correlation between elevated turbidity near the shore and development on the shore.

Bioassessment of Tahoe Keys Marina, South Lake Tahoe, CA -California Department of Fish and Game (2004)

In July, 2000, CDFG was contracted by the Tahoe Keys Property Owner's Association to initiate an assessment of the biologicial condition in Tahoe Keys Marina as part of the NPDES permit requirements. The assessment was designed to measure water column chemistry and the benthic macroinvertebrate (BMI) communities at four areas within the Marina every two years. This report presents results from the BMI and water chemistry samples collected on July 22, 2004.

Effect of Motorized watercraft on summer nearshore turbidity at Lake Tahoe, California-Nevada -Alexander, Wigart (2013)

The Lake Tahoe clarity trend is dominated by a consistent long-term decline attributed to the influx of nutrients and fine inorganic particles. The South Lake Tahoe nearshore clarity can be affected by factors such as wind waves, streamflow, boating, and urban stormwater, and the turbidity in the nearshore is greater during the summer than during the winter. In this study we measured the summer nearshore turbidity from 2 piers in South Lake Tahoe and found the summer nearshore transparency to be influenced by wind, boating, and lake currents, but not streamflow or urban stormwater. During summer 2012 the average daily increase in turbidity of Lake Tahoe's southern nearshore was 1.19 NTU following high intensity boating and 0.10 NTU following low intensity boating. Wave action and turbulence from boating in Lake Tahoe's shallow nearshore are likely to suspend sediment and release nutrients; however, there are no restrictions for boat operation in Lake Tahoe's shallow nearshore.

Sedimentation of the Littoral Zone in Lake Tahoe-Osborne-USC (1985)

The assessment of the littoral zone of Lake Tahoe was conducted to determine the cumulative effects of structures constructed in the shorezone.

Fisheries

The Effect of Shorezone Structures and Associated Activities on the Spawning Success of Native Minnows-UC Davis (1996)

Recommended a non-degradation policy to gravel substrates in the shorezone as eggs can be disturbed from beaching boats and development of shorezone structures. Noted the importance of rock cribs for fish habitat. Found that spawning was not disturbed even during extremely busy conditions (Independence Day).

Lake Tahoe Fish Community Structure Investigations: Phase III Report-Utah State University, UC Davis (1991)

Shorezone Spawning in Lake Tahoe: The Effect of Shorezone Structures and Associated Activities on the Spawning Success of Native Minnows (1996)

Final Report: Littoral Structure and Its Effects on the Fish Community of Lake Tahoe (1989)

Air Quality

Nevada Air Quality Trend Report 2000-2010-Nevada Division of Environmental Protection

This Trend Report presents ambient air quality data collected by the State of Nevada and the California Air Resources Board. The primary purpose of NAPCP's ambient monitoring network is to determine current and projected concentrations of ambient air pollutants within the state, ensure current resource management strategies are working properly, and to develop new measures by which the ambient air quality standards will continue to be attained.

Keeping Tahoe Blue through Atmospheric Assessment: Aircraft and Boat Measurements of Air Quality and Meteorology near and on Lake Tahoe-CARB/UC Davis (2004)

During the summer and fall of 2002, aircraft measurements of meteorological and air quality variables were obtained over the western Sierra Nevada and the Lake Tahoe Basin. During the winter of 2003, similar measurements were made

close to the lake's surface using a small research vessel on the lake. The primary objective of these field efforts was to document the concentrations of nitrogen-containing species as well as other pollutants in the air over and upwind of the lake, as these species can deposit into the lake and act as nutrients that accelerate eutrophication. Based on a preliminary analysis of our data it appears that concentrations of nitrogen in the air above Lake Tahoe are affected by a number of sources, including in-basin emissions, local and distant forest fires, regional background pollution, and transport of pollutants from the Central Valley.

Noise

"Drowning in Noise" Noise Costs of Jet Skis in America- Noise Pollution Clearinghouse (2000)

This study uses a quantitative model that estimates the monetary value of the "disamenity" (lost enjoyment) that jet ski noise introduces into beach environments in America. Our results, expressed in dollars, are what beachgoers would pay to rid lake, bay, river and ocean beaches of jet ski noise — if there were an entity that would take their money and turn off the noise. We present two types of estimates: the "annoyance" cost of jet ski noise itself, and the effectiveness of possible strategies to reduce this cost.

Scenic

1993 Lake Tahoe Basin Scenic Resource Evaluation-TRPA

Thirty-seven recreation areas are included in this study. These include parks, beaches, picnic areas, and campgrounds. Also included are the public areas of the five alpine ski resorts in the basin. The bicycle portion of the study includes Class I and II bicycle paths that are separated from the major roadways, or Class II bicycle ways with clearly marked rights-of-way. These recreation areas are operated by various city, county, state, and federal agencies. They were selected primarily from the "Inventory of Recreation Resources in the Lake Tahoe Basin" conducted by the South Lake Tahoe Recreation Department and the Eldorado County C.E.T.A. All areas selected are either publicly owned and operated or publicly owned and operated by private concerns. The exceptions are the ski areas, most of which are generally privately owned and operated.

Miscellaneous

The Effects of Motorized Watercraft on Aquatic Ecosystems (2000)

Boats may interact with the aquatic environment by a variety of mechanisms, including emissions and exhaust, propeller contact, turbulence from the propulsion system, waves produced by movement, noise, and movement itself. In turn, each of these impacting mechanisms may have multiple effects on the aquatic ecosystem. Sediment resuspension, water pollution, disturbance of fish and wildlife, destruction of aquatic plants, and shoreline erosion are the major areas of concern and will be addressed in the following pages. Impacts of boats that primarily affect human use of lakes, such as crowding, safety, air quality, and noise will not be addressed specifically.

Lake Tahoe Nearshore Evaluation and Monitoring Framework-Desert Research Institute, UNR, UC Davis (2013)

Changes in nearshore conditions at Lake Tahoe have become evident to both visitors and residents of the Tahoe Basin, with increasing stakeholder interest in managing the factors that have contributed to apparent deterioration of the nearshore environment. This has led to joint implementation of a Nearshore Science Team (NeST) and the Nearshore Agency Working Group (NAWG), which together have contributed to a synthesis review of nearshore information and the development of a monitoring and evaluation plan that will track changes in nearshore conditions. A conceptual model is presented that conveys our contemporary understanding of the factors and activities that affect desired nearshore qualities. Results from review and analysis of historical data are provided, as well as an assessment on the adequacy of existing nearshore standards and associated indicators. The resulting nearshore monitoring framework will be used to guide development of an integrated effort that tracks the status and trends associated with nearshore conditions.

Overview of the Recreational Boating Industry's Aquatic Stewardship through Technology, Innovation and Education-National Marine Manufacturers Association

This study will provide an overview of the recreational boating industry's contributions to aquatic stewardship and environmental responsibility. It provides a thorough analysis of the boating industry's efforts to promote responsible recreation through the promotion of education and outreach programs, the development and marketing of new, environmentally friendly products and the

cooperative efforts of the industry to work in conjunction with state and federal government to institute policies that protect the environment.

Existing Codes

TRPA's code Chapter 84: Development Standards Lakeward of High Water addresses piers, boat ramps, mulit-use structures, buoys, and motorized watercraft.

Overwater Structures

Overwater structures include piers, floating docks, platforms and associated access ramps. These topics are covered under the following sections of Chapter 84, Development Standards Lakeward of High Water.

Section 84.5, Piers, includes location standards and limitations, dimensional requirements and construction material criteria.

Section 84.8, Floating Docks and Platforms, includes location standards and limitations, dimensional requirements and construction material criteria.

Boat Launches

The Regional Plan addresses boat launch facilities with the following policy:

> SZ-1.14 PRIVATE MARINAS SHALL BE ENCOURAGED TO PROVIDE PUBLIC BOAT LAUNCHING FACILITIES.
>
> > Boating access to Lake Tahoe would be increased under this strategy by encouraging all marina facilities to provide public launching facilities, where practical, and by providing incentives for those facilities which improve or provide such services.

Section 84.6 Boat Ramps includes location standards and limitations, dimensional requirements and construction material criteria.

Buoys

- TRPA is not permitting additional buoys at this time (including existing buoys which have been permitted/leased by other agencies with jurisdiction in Tahoe, but not by TRPA)

- Buoy permits issued during 2008-2010 utilized different standards (e.g. grandfathering of existing buoys) than are in effect now.

84.7 Mooring Buoys

This includes location standards and limitations and dimensional requirements. Design and construction criteria are to comply with existing State and federal recommendations.

Multi-use Facilities

Section 84.9, Multiple-use Facilities, includes additional development standards beyond those listed for piers, floating docks, boat launches and buoys above. These standards are intended to apply to such structures which are designed to serve individuals on a multiple- or commercial-use basis. Marinas have additional standards covered in Section 84.14.

Attachment B

Pier Issues Memo

Lake Tahoe Shoreline Plan

05 Policy Topic: Piers- Fish Habitat, Design, and Scenic Issues

V7

Last Updated 1.19.2017

Brief Description

There are 768 piers located along the shoreline of Lake Tahoe. Approximately 43 of those piers are available for public use. Private residents and the public use piers for a wide variety of recreation purposes, including boating access, fishing, dining, walking, swimming, and viewing Lake Tahoe. Prior planning efforts looked to cap and meter the number of new piers at 110 by accepting up to five new private pier applications per year over the next 20 years plus up to 10 total new public piers. However, at this time, the Tahoe Regional Planning Agency (TRPA) cannot permit additional piers until the Shoreline Plan is adopted. Both TRPA and the Lahontan Regional Water Quality Control Board have a prohibition on new piers within fish spawning habitat. The following is an overview of **fish habitat, design, and scenic standards for piers** to inform policy considerations.

Action Items

Action Item	Date	Name
Definitions needed for: Pier	Jan 2017	TRPA Staff
Consult with Coast Guard regarding navigational safety / length	Dec 2016	Liz Kingsland (NDSL) and Jan Brisco
Identify Issues	Done June 2016	Steering Committee members

Concepts Under Consideration

The Shoreline Steering Committee has developed these concepts under consideration as preliminary consensus and the basis for progress. The Steering Committee will incorporate feedback from the public and the TRPA Governing Board and Regional Plan Implementation Committee to refine these concepts and develop the final package of recommendations.

Overarching Principles

- Goal is to provide fair and reasonable access while meeting environmental protection standards.
- Incentivize multi-use piers while considering opportunities for single-use piers.
- Recognize and meet scenic standards.

Pierhead Line

- TRPA will digitize the waterward edge of the pierhead line for all areas around the Lake as depicted on existing hardcopy maps.

Multi-Use Piers

- Provide incentives for development of multi-use piers in lieu of single-use piers.
- For all littoral parcels served with a multi-use pier, pier development potential must be retired through deed restriction for all but the pier-developed parcel. This would apply to both adjacent and non-adjacent parcels regardless of the number of owners.
- Design standards should be consistent with other multi-use piers. [Note, the Shoreline Steering Committee is still developing recommended design standards and the incentive process.]

Single-Use Piers

Pier design standards

- All private littoral parcels that meet the minimum lot size for a private residence, do not have an existing pier, are not served or eligible to be served by a homeowner's association pier [this provision related to HOAs needs to be revisited by the Steering Committee], and are not otherwise deed restricted for a pier would be eligible for consideration for a new private pier, regardless of the length of littoral frontage. The minimum lot size requirement does not apply to homeowners association and public piers. Each parcel with clear private ownership to high water (as that is defined in each state) meeting the eligibility requirements would be eligible for no more than one pier.
- Length: new or existing piers may extend to elevation 6,219 feet or the pierhead line, whichever is more limiting. If an applicant needs additional pier length for functionality, TRPA standards would allow up to an

additional 15 feet waterward of the pier headline if the drop in substrate within the additional 15 feet is a minimum of 6 inches (minimum of 3 percent).

- Orientation: piers should be constructed perpendicular to the shoreline.
- Width: maximum width equals 10 feet.
- Visual mass limited to 220 square feet for the pier, which includes catwalks up to 3 feet wide and 30 feet in length. The 220 square feet would not include visual mass of boat lift, but additional visual mass of boat lift with boat would still need to be mitigated.
- Location – A new pier should be located at least 40 feet from any other pier, measured from the pier head. Side setbacks for new piers should be at least 20 feet for new piers and 5 feet for existing piers.
- Catwalks up to 3' in width and boatlifts are allowed.

Eligibility restrictions

- Littoral parcel: Must be a littoral parcel to be allowed a new pier (Definition of a littoral parcel is a parcel which has fee ownership to high water (6,229 feet))
- Deed restrictions: Stays the same as 2008. Parcels that are deed restricted from having a pier are not eligible for a new pier.
- Stream mouth protection zones: Stays the same as 2008. Structures cannot be located in stream mouth protection zones.
- Shorezone Preservation Areas: Stays the same as 2008. Lakefront properties included in Shorezone Preservation Areas (SPAs) are not eligible to build new structures within the Shorezone. Exceptions, subject to environmental review, possible for all public lands.
- Fish spawning habitat: 2015 updated fish habitat maps using best available data will be adopted as part of the Shoreline Plan. Based on scientific input, the ban on new construction within fish habitat is not scientifically supported and should be lifted. Mitigation in spawning habitat will be required consistent with the environmental thresholds.
- Public drinking water intakes: within ¼ mile of water intakes, water purveyors will be notified and consulted on project conditions.

Under Discussion

Scenic Units in Non-attainment

Multi-use Piers

Public Piers

Policy Issues to Consider in the Shoreline Plan

Fish Habitat

Code not Current with Existing Science

The Lake Tahoe fish studies describe the distribution of fish communities in Lake Tahoe, as well as their interactions with littoral structures and habitat features. These studies, as well as more recent research from other areas could be used to help determine how and why to prioritize species, communities, features, or processes for protection. Current mapping of fish habitat differentiates between 1) littoral fish habitat for foraging and refuge from predators and 2) spawning habitat for littoral species, such as Lahontan redside minnows and Lahontan speckled dace. As noted by the Joint Fact-Finding sub-committee on fish habitat, the existing prohibitions of new structures in all fish habitat may not align with current scientific studies regarding fish distribution and habitats.

Fish Habitat Management Tools

Using fish habitat protection priorities, evaluate fish habitat mapping and how best to use that mapping to guide location of structures, construction timing, and mitigation. Data collected by Fish and Wildlife agencies might effectively inform management decisions.

Environmental Impacts

There is a need to address the demand for additional piers, which provide private and public access opportunities, while meeting environmental protection standards. There is a potential or perceived conflict between protecting the public trust resources and providing recreational access to the shoreline with structures such as private piers.

Define Fish Habitat and Priorities for Protection [1]

Specific fish habitat protection priorities still need to be defined. Such priorities would help focus protection measures for the protection of species, communities, habitat features, and/or processes (i.e. littoral drift).

[1] See Joint Fact Finding discussion.

Fish Habitat Mitigation

One steering committee member questioned the effectiveness of past fish habitat mitigation. Currently, mitigation occurs on a project-by-project basis. Mitigation banking provides an alternative approach that would provide more concentrated, contiguous habitat enhancement.

Pier Design

Definition and Inventory

The definition of an "existing" pier should be clarified to understand how many piers exist today and the desired or maximum build out. Many structures with old components that cross the high water line have been claimed to be "existing" piers and may qualify as such under the existing code definition. Owners of existing rock jetties have suggested that jetties be considered piers to qualify their application for pier improvements.

The definition of a pier might differentiate between a structure used for moorage and a structure used for other uses, such as viewing platforms or structures designed to alter localized littoral drift or to protect a beach from wave action.

Demand for New Piers

Stakeholder interviews indicate that many interviewees doubt that many new piers would be built if the piers policy changed to allow for new construction. Others suggest that a demand for private piers and buoys exists given the many years of restrictions on construction and that significantly more development will occur on the shoreline of Lake Tahoe if the ban is lifted.

Safety and Access

Several committee members emphasized that new pier design should accommodate safety, including navigational safety and safety for anyone who is out on the water, including swimmers. Other access issues that may affect pier design are being addressed by the Steering Committee.

General Design Considerations

Options to manage pier design may include considerations such as location, construction type, construction time period, quotas, and category of structure (single- versus multi-use structures). The appropriate maximum and minimum length of the pier may depend on location around the lake. For example, in some bays where projected property boundary lines converge, new single-use piers may not be possible on each parcel, especially if extended to

accommodate for low lake levels. In these areas, joint-use piers may be the only feasible option for shoreline access.

Scenic

Scenic Issues

Stakeholder interviews identified that piers can detract from the scenic value of Lake Tahoe. One steering committee member noted that piers can elicit conflicts among neighbors. Another steering committee member suggested that the design of piers, such as the use of floating piers, could be used to minimize visual impacts, if potential littoral drift issues are addressed.

Permitting

Ordinances related to scenic resources and views can be complicated to implement and may add time and cost to a potential project. In some cases, such as coves, different permitting agencies have different projection lines because they are measured from different locations. Coordination among permitting authorities was also noted as an important consideration in the stakeholder interviews.

Scenic Mitigation

New visible structures in the shorezone create scenic impacts. The mitigation necessary to implement an applicant's preferred design may be difficult to locate within a shoreline scenic unit, which may prohibit the construction of that design. Vegetation screening is generally proposed to mitigate for scenic impacts. However, drought and vegetation mortality can make mitigation success unpredictable and not entirely controllable. In order to facilitate mitigation opportunities and mitigation success, some have suggested developing a mitigation fee/bank as an alternative.

Related Policy Issues

Piers and Low Lake Level Adaptation

Issues related to low lake levels are addressed under a separate memo: Low Lake Level Adaption.

Joint Fact-Finding

The Joint Fact Finding Committee has evaluated the questions listed below. Currently, draft memos and meeting summaries are available at ShorelinePlan.org under Joint Fact Finding Committee meeting materials. Findings from the Joint Fact Finding Committee will be disclosed in the environmental review. The inventory is available via ShorelinePlan.org GIS mapping information.

- What is the inventory, including location, of existing structures (piers, slips, buoys, etc.)?
- Pier Maps: Do we need to update the existing pier map to show complete polygons?
- What structures have been approved and by which agencies?
- How many piers are public or quasi-public and where are they located?
- What is the best available science regarding the environmental impacts of shoreline structures?

The Joint Fact-Finding sub-committee on fish habitat has summarized their review of pier and buoy impacts, finding that such structure placement has limited overall impacts on native fish populations and any such impacts can be mitigated (Byron et al. 1989; Beauchamp et al. 1991, 1994). Where suitable habitat exists, spawning has been observed in the immediate spatial vicinity of piers and buoys (Allen & Reuter 1996). Empirical observations suggest that boating activity associated with piers and buoys does not appear to impact spawning activity or egg viability (Allen & Reuter 1996). The sub-committee has therefore recommended allowing for new structures along with an adaptive management framework supported by integrated science-based monitoring that emphasizes no net loss of spawning habitat.

Existing Data, Information & Science

Fish Habitat

Consistent with the policies of the TRPA Regional Plan Shorezone Subelement and standards in the 1987 TRPA Code of Ordinances, several studies were conducted to evaluate the effects of shoreline structures on the fish community of Lake Tahoe. The Joint Fact Finding Committee confirmed with participation of Dr. Brent Allen and Dr. Sudeep Chandra academics that these studies still stand. Key findings of these studies are described below:

Byron, E., B. Allen, W. Wurtsbaugh, and Wayne and K. Kuzis 1989. Final Report: Littoral Structures and Its Effects on the Fish Community of Lake Tahoe.

Key Findings: With the exception of kokanee salmon and mountain whitefish, fish densities are highest in littoral (shallow water) habitats in the summer, and fish tend to move offshore in the winter. Lahontan redsides comprise the majority of the summer littoral fish biomass. Densities of most littoral fish species are highest amongst habitats with boulders and steep slopes. Gravel and small cobble substrates, particularly near creek mouths, are used by spawning kokanee salmon, and these habitats are rare in Lake Tahoe. Piling piers and solid bulkhead structures showed no statistically significant effects on littoral fish densities. Rock crib structures, however, were associated with high densities of Lahontan redside and rainbow trout. This relationship is thought to be a result of local attraction rather than increased production.

Beauchamp, D., W.Wurtsbaugh, B. Allen, P. Budy, R. Richards, and J. Reuter. 1991. Lake Tahoe Fish Community Structure Investigations: Phase III Report.

Key Findings: This study found that piers (pile and rock crib) either had neutral or positive effects on densities of littoral zone fishes, depending on their configuration. It found that pile piers had no significant effect on densities of any of the fish species or on the overall species composition. The density of Lahontan redsides and rainbow trout was significantly higher near rock-crib piers. The type of substrate underlying piers was a more important determinant of fish density than the piers themselves, with more complex substrates containing more fish. Despite this trend, the study found that the highest densities of sub-yearling fish occur over sandy substrates. Boat traffic in marinas and near piers caused fish schools to retreat to cover, but they usually returned to normal activity patterns within 30 seconds.

Allen, B. and J. Reuter. 1996. The Effect of Shorezone Structures and Associated Activities on the Spawning Success of Native Minnows.

Key Findings: This study confirmed that Lahontan redsides and Lahontan speckled dace spawned in gravel substrates. Spawning occurred in very shallow (<20 cm) water in the summer. Spawning behavior was not affected by boat activity. Direct disturbance in spawning areas resulted in temporary behavior change, but did not affect overall spawning activity. Egg survival was not impacted by moderate shoreline activity, but survival did decline with heavy shoreline disturbance. The conclusions from this study recommended prohibiting

the construction of new structures where existing gravel substrate would be rendered unusable by spawning fish, as well as a mitigation where gravel substrate is impacted.

Fish Habitat Mapping

In 2015, TRPA commissioned Spatial Informatics Group (SIG) to prepare the "Use of Remotely Sensed Imagery to Map and Quantify the Extent and Distribution of Lake Tahoe's Nearshore Substrates and Fish Habitats" Report ("2015 Fish Habitat Report").The 2015 map provides improved accuracy and precision relative to the 1984 "Spawning habitat" and "Feeding and/or Escape Cover Habitat" maps.

Scenic

TRPA adopted threshold standards for Scenic Resources, including numerical standards for shoreline units. The Lake's 72-mile shoreline is segmented into 33 individual "shoreline travel units," each representing a portion of the shoreline (of varying length) that exhibits similar visual character. The scenic ratings are based on the 1982 Lake Tahoe Basin Scenic Resource Inventory Report. Shoreline travel unit ratings reflect scenic conditions looking toward the shore from the surface of Lake Tahoe at 300 feet offshore. The following aspects are considered and rated for shoreline travel units:

1. Man-made features along the shoreline
2. General landscape views within the shoreline unit
3. Variety of scenery within the shoreline unit

TRPA monitors and reports on the status of both attainment and non-attainment scenic areas every four years in a Threshold Evaluation Report. The 2011 Threshold Evaluation Report is available at: www.trpa.org/regional-plan/threshold-evaluation. The Final 2015 Threshold Evaluation Report is being presented for acceptance by the TRPA Governing Board at its December 2016 Board meeting.

Existing Codes

The TRPA Code of Ordinances, Section 84.5: Piers, provides the following standards for piers:

Location Standards

1. Density (one pier per littoral parcel)
2. Location (prohibition within 200 feet of stream inlets)

3. Prohibition on development within prime fish habitat
4. Length (elevation 6,219 feet or pierhead line)
5. Setbacks (5 feet for existing and 20 feet for new)
6. Density, length, and setback waivers for Multiple-Use Piers

Design and Construction Standards

1. Width (maximum 10 feet)
2. Height (6,232 elevation; in limited situations 6,234 elevation)
3. Pier construction standards to facilitate water circulation
4. Prohibition on superstructures
5. Prohibition on fueling stations in residential areas
6. Width waivers for Multiple-Use Piers

Scenic

The TRPA Code of Ordinances, Chapter 66: Scenic Quality includes the regulations and required findings for ensuring that a project will not result in a decrease of the 1982 shoreline travel route rating. To demonstrate compliance, TRPA requires that all applications for shoreline development, including piers, include a scenic assessment and comply with the following:

1. No net increase in visual mass.
2. Projects which propose an increase in visual mass must employ either of the following methods of scenic mitigation:
    a. Each square foot of additional visible mass shall be mitigated on a 1:1 basis in shoreline travel units in attainment with scenic thresholds and on a 1:1.5 basis in shoreline travel units not in attainment with scenic thresholds. Notwithstanding the foregoing, each square foot of visible mass from an additional boat lift shall be mitigated on a 1:1.5 basis. Mitigation of visible mass shall occur first in the shorezone of the project area until all feasible mitigation opportunities are exhausted. Mitigation shall then occur in the shoreland portion of the project area as necessary to satisfy all required mitigation.
    b. If there are not opportunities for onsite mitigation of visual mass impacts in the shorezone or shoreland of the parcel or project area, applicants may consult with a TRPA shorezone planner and mitigation options will be addressed on a case-by-case basis.