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Coverage Working Group Meeting #5

MEETING SUMMARY for January 27, 2015

Meeting Attendees (estimated total of 18 persons):

- **Working Group:** Kevin Prior, California Tahoe Conservancy (CTC); Dan Siegel, CA Attorney General Office; Charles Donohue, NV Division of State Lands (NDSL), Elyse Randles, NDSL; Steve Buelna, Placer County; Eva Krause, Washoe County; Kara Thiel, Feldman McLaughlin Thiel LLP; and Shannon Eckmeyer, League to Save Lake Tahoe.
- **TRPA Staff:** Joanne Marchetta, John Marshall, John Hester, Brandy McMahon, Jennifer Cannon, Lucia Maloney, and Kim Hern.
- **Other Attendees:** Steve Teshara, Bob Twiss, and Jack Landy.

Meeting Goal: Develop an Excess Coverage Mitigation Program recommendation for reforming the Excess Coverage Mitigation program.

Meeting Outcomes:

Working Group Recommendation for How the Fee is Spent:

1. The Coverage Working Group Participants agreed to Option #2 for the Water Quality Projects Alternative. At a minimum, half of the funds shall be dedicated to existing coverage removal and the remaining funds shall be used on Environmental Improvement Projects (EIP) or non-EIP projects proposed by the CTC or NDSL (Tahoe land bank) and approved by the Executive Director that result in Soil and Water Quality Threshold gain. This alternative would give land banks the ability to use the ECM funds for existing coverage restoration, water quality projects, Stream Environment Zone (SEZ) restoration/ enhancement, or sensitive land acquisition. *Intent: Implement projects that have the greatest environmental benefit to the primary thresholds affected by excess coverage.*
2. The requirement prohibiting ECM funds from being used for local TMDL obligations must remain with this recommendation. Prohibit ECM fees from being used to fund projects that are gaining TMDL credit or are required mitigation through other programs. ECM fees can fund stormwater projects, but they must be in addition to what jurisdictions are doing to meet TMDL requirements. *Intent: ensure ECM fees do not fund projects that are already required.*
3. The ECM funds should be eligible for the use of acquiring fee title or conservation easement of properties located on Land Capability 1a and 1c (at a minimum) to retire potential coverage. *Intent: incentivize environmentally sensitive land acquisition.*
4. Support was offered for removing the ratio requirement for the existing coverage removal portion of the ECM funds. Revised MOU language or other land bank authorities should be added or recognized to incentivize and/or encourage the use of funds for acquisition and restoration of coverage on SEZs and other environmentally sensitive lands. *Intent: maintain a*

clear nexus to coverage restoration and promote coverage removal in more environmentally sensitive areas.

5. Land banks shall provide sufficient reporting on how the funded projects result in threshold gain for soil (SEZ) and water thresholds, using existing EIP performance measures and reporting. For ECM projects, land banks will report:
 - a. Square foot and land capability of coverage restored,
 - b. Acres of land acquired including environmentally sensitive land acreage,
 - c. Acres of SEZs restored (includes restoring SEZs that are degraded but do not have coverage),
 - d. Estimated pollutant and stormwater load reduction from stormwater projects, and
 - e. Soil Conservation and Water Quality Threshold gains.

Working Group Recommendation for Updating the ECM Fee:

1. The coverage working group agreed to index the ECM Fee using the Annual Percentage Growth Rate method devised for the Lake Tahoe Region. *Intent: streamline and simplify the fee update process.*
2. The working group approved of annual fee updates but left the decision for when to re-calculate the percentage annually or every four years at the discretion of TRPA staff. *Intent: streamline and simplify the fee update process.*
3. The working group supported keeping the ECM fee at today's rate (not re-setting the ECM fee) and left the decision to NDSL's discretion on whether to maintain different NV ECM fees or average the NV ECM Fee to \$18. *Intent: simplify the fee and avoid controversy.*

Meeting Summary:

Introduction, Meeting Format Presentation:

TRPA staff recapped progress made during the previous Coverage Working Group Meetings held on August 20th, 2014 and October 4, 2014. The first half of the meeting was dedicated to how the ECM fee is spent; the second half was dedicated to updating the fee; and throughout the meeting public comment periods occurred.

ECM Program Options for How the Fee is Spent Presentation:

TRPA staff recommended moving forward with Option 2. This option (2) requires that the land banks dedicate at a minimum, half of the funds to existing coverage removal using a ratio (described in Option 1) but allows for the remaining funds to be dedicated to EIP or other proposed projects that are focused on Soil Conservation and Water Quality Threshold gains. The ratio incentivizes existing coverage removal from environmentally sensitive lands by reducing the amount of environmentally sensitive land that must be mitigated, compared to non-sensitive land (For each 10 sq. ft. of ECM fee paid, 1 sq. ft. of existing coverage from sensitive land or 2 sq. ft. of existing coverage from non-sensitive land must be restored at a minimum). The presentation is provided as Attachment A.¹

¹ For additional information, please see the staff memo at: http://www.trpa.org/wp-content/uploads/Coverage_WG_Memo_with-Attachments.pdf.

Working Group Recommendation for How the ECM Fee is Spent:

The Coverage Working Group Participants unanimously agreed to Option #2 at a high level. However, one participant suggested that the requirement prohibiting ECM funds from being used for local TMDL obligations remain with the Option #2 recommendation (this was discussed at the previous meeting and is included with this recommendation). Lastly, the ECM funds should be eligible for the use of acquiring fee title of properties located on Land Capability 1a and 1c (at a minimum) to retire potential coverage. Support was offered for removing the ratio requirement for the existing coverage removal portion of the ECM funds. Revised MOU language or other land bank authorities should be added or recognized that incentivizes or encourages the use of funds for acquisition and restoration of coverage on SEZs and other environmentally sensitive lands.

Working Group Discussion of How the Fee is Spent:

- **Ratio:** The working group discussed possible ratios. One participant preferred a ratio of 1:10 for SEZ, 2:10 for Sensitive, and 3:10 for High Capability Lands. The participant wanted to create additional incentives for SEZ restoration. However, the working group members discussed the challenges for how these ratios might function in practice. It was pointed out that there is a scarcity of covered SEZ areas on the NV side of the Tahoe Region (approximately 71 acres while there is over 500 acres on the CA side). Precluding potential coverage retirement on 1a land capability lands would have prevented the restoration from occurring at Incline Lake. Consequently, it is important to include other sensitive land restoration uses for the ECM funds (non-SEZ) since there is value with acquiring and conserving environmentally sensitive lands.
- **Reporting:** A working group participant pointed out that the counties do not currently provide the square feet details when distributing the ECM funds to TRPA. They suggested that TRPA modify the process administratively to ensure that they receive the square feet details along with information on the collected ECM fee amount. Another participant noted that TRPA does not currently provide reporting on the Land Capability Class where the excess coverage is located. TRPA staff confirmed that this is correct but pointed out that with both options for how the fee is spent; the land capability class where the excess coverage is located would not be needed. Rather, the land capability class where the mitigation occurs (using ECM funds) would be needed.
- **Land Bank Concerns:**
 - NDSL participants commented that the land banks would like to be able to use funds to acquire fee title of property on Land Capability 1a and 1c (at a minimum) to retire potential coverage. The Working Group participants agreed with NDSL's suggestion for the use of funds.
 - Concern was expressed that the ratios would be another obligation rather than just a funding source for the future. In addition, the land banks would likely have issues with gaining permission for use of the funds (this might delay the process). Another participant pointed out that this would be a reporting obligation, not a funding obligation. TRPA staff noted that the land banks are required to purchase land at fair market value; consequently the purchase of over-priced, highly inflated land purchases would be unlikely.
- **Incentives for On-Site Restoration:** A working group participant pointed out the need to provide incentives for on-site restoration and supported that this remain on the table. TRPA staff pointed

out that the details for this recommendation have not been formulated – the 75% on-site restoration requirement is an example, not a fully formed recommendation. Another participant pointed out that this incentive could result in fewer ECM funds and noted that it is debatable whether this would be more beneficial in comparison to a larger water quality project. Another participant pointed out that the on-site restoration incentive has the benefit of being a more direct mitigation to the source of the impact. The working group participants generally agreed with this topic conceptually but pointed out that this is a separate coverage policy topic that should be considered for future updates.

- Fee Connection: One participant mentioned that the ECM fees should be set at an adequate level to match the cost of retiring existing coverage in SEZs and that the fees should be flexible.
- Option 2 Refinement: The working group agreed that at least half of the ECM funds should be dedicated to existing coverage removal and the remaining funds shall be used on EIP Projects or other proposed projects with the approval of the Executive Director. In addition, revised MOU language should be included that encourages the use of funds for acquisition and restoration of coverage on SEZs and other environmentally sensitive lands.

Excess Coverage Mitigation (ECM) Fee Update Presentation:

TRPA staff presented the history of the ECM Fee, including regulatory requirements and a brief history of fee updates from the initial ECM fee establishment to the current fee schedule of today. At the October 2014 coverage working group meeting, the working group recommended the use of a mechanism for regular fee updates (every 4-5 years) and supported the establishment of a simplified fee update method. Staff presented background research on existing indices, including the Consumer Price Index (CPI) and the S&P/Case-Shiller Home Price Index; and pointed out that both indices were determined to not accurately reflect non-metropolitan, local conditions of the Tahoe Region. Staff summarized key challenges (e.g. low transaction counts and challenges with county-level metrics), as well as opportunities (e.g. median Single Family residential sales values are available, CA/NV should be considered separately), for computing a region-specific index. Staff considered several equations, ranging from simple to complex, and determined that the Annual Percentage Growth Rate (APGR) was recommended for the purposes of ECM fee updates. The presentation is provided as Attachment B.

Working Group Discussion for Updating the ECM Fee:

- Index the Fee:
 - Several participants agreed that an index makes sense. Several participants were supportive of not having to go through Governing Board approval for ECM fee updates; especially since this process has encountered challenges, resulting in no fee updates.
 - One participant asked whether commercial sale transactions were included in the index formula. Though a participant questioned whether it was reasonable to think commercial property purchase sales are rising higher than residential property sales. In addition, there might be fewer commercial sale transactions in comparison to residential sale transactions. A participant suggested the inclusion of commercial properties in the index. However, another participant pointed out that ultimately all of this is excess coverage and the lake doesn't care if the property is commercial or residential. This participant was okay with only including residential, if commercial data is not easily available. TRPA staff clarified that the basis for the index, Single Family home sales in the Tahoe Region, does not include

commercial property sales. The data on commercial property sales was not offered by the assessor's offices.

- Expert Review: It was suggested that TRPA have an appraiser (or other credentialed third party economist) verify and review the Annual Percentage Growth Rate (APGR) approach to ensure it is a valid approach with a strong rationale. The group agreed with this suggestion.

- Regularity of Index Fee Update:
 - A participant suggested that an annual fee update may be more palatable than every 5 years; 1.3% increase better perceived than 6.5%, which could make jaws drop. The working group was in general agreement with this suggestion.
 - One participant pointed out that the ECM fee could be reduced in the time of a recession. In addition, it was suggested to refer to this as a fee adjustment not a fee increase.
 - Another participant asked about TRPA's fee reset schedule. Staff responded that the fee schedule currently is not updated at a regular interval.
 - TRPA staff noted that the index offers a middle ground for how the fee could be updated.
 - Another participant suggested that the APGR need not be re-calculated annually and noted that it would be feasible to apply the percent index annually but only update the APGR calculation needed to derive the index percentage every 4 -5 years. The working group was in general agreement with this suggestion. A land bank participant noted that it might be challenging to continually track constant fee percent changes and this result in issues related to a lack of certainty with the cost of development.

- Reset the Fee: The Working Group discussed the option of making the ECM fee uniform across each state. The ECM fee in California would remain at \$8.50. However, a uniform ECM fee would impact Nevada since the fee ranges from \$12 to \$25 depending on the Hydrologically Related Area (HRA). An average ECM fee for Nevada would be \$18.
 - One working group member asked if we are caving to political will if we do not reset the fee.
 - Many participants suggested that staff clarify that the ECM fee reset is not feasible (due to difficulties with gaining an accurate appraisal effective at informing needed fee updates) and suggested that the ECM Fee Index be presented as a feasible alternative for their consideration.
 - TRPA staff discussed the political reality of adopting a fee update. Today, politically we cannot get there and it is not helpful to re-ignite the state versus local division.
 - One participant suggested that we could retro-actively calculate the fee update based on the index method, to account for adjustments if the fee was re-set in 2012. Other participants pointed out that from 2007 to 2012, the median Single Family home sales were lower than in recent years; consequently based on the market costs, raising the fee during those years would have been an unlikely scenario.
 - Several participants were in support of remaining at the current fee amount and with not resetting.
 - NDSL would like time to absorb whether the ECM fee for NV should be averaged to a flat \$18. The \$18 fee update would increase the fee in the Marlette HRA and South Stateline HRA. The working group participants supported having NDSL decide on whether to average the fee or keep it the same.

Working Group Recommendation for Updating the ECM Fee:

The Coverage Working Group Participants unanimously agreed to index the fee using the Annual Percentage Growth Rate method devised for the Tahoe Region. The working group approved of updating the fee annually but left the decision for when to re-calculate the percentage annually or every four years at the discretion of TRPA staff. In addition, the working group was in support of keeping the ECM fee at today's rate (not re-setting the ECM fee) and left the decision to NDSL's discretion on whether to average the NV ECM Fee to \$18.



Action Items:

- NDSL staff will provide a recommendation on whether to average the ECM fee to \$18 or to keep the ECM fee to today's rate. They will consult with local jurisdictions impacted by this fee change.
- NDSL and CTC staff will review authorities of land banks regarding existing language that directs the land banks to prioritize environmentally sensitive coverage restoration over non-sensitive land restoration.
- TRPA staff will review how best to approach the calculations for updating the fee. Staff will offer a recommendation on whether to update the percentage annually or every four years. In addition, staff will finish up calculating the index for the CA side of the Tahoe Region and will determine when the sales data is released from the previous year to devise a feasible fee update schedule.
- TRPA staff will offer recommendations on MOU modifications for how to include incentives for focusing on existing coverage removal in SEZs and environmentally sensitive lands (in regards to option 2 for how the fee is spent).
- TRPA staff will follow-up on the request to have a credentialed third party expert (perhaps an economist) review the proposed APGR approach to ensure that the rationale and approach are solid and fully recommended.

Next Steps: TRPA staff and other participants will address action items to help finalize the final Coverage Working Group recommendation. The final recommendation will be sent electronically for final Coverage Working Group review. Then, the MOU amendments (possibly code amendments too) will be drafted and finalized. The necessarily environmental review/documentation and other supportive documentation will be prepared. Lastly, the amendments will be presented for Advisory Planning Commission, Regional Plan Implementation Committee, and Governing Board consideration.







Contact Information: If you have any questions, please contact Jennifer Cannon, Associate Planner, at 775.589.5297 or jcannon@trpa.org; or Lucia Maloney, Associate Planner, at 775.589.5324 or lmaloney@trpa.org.



Attachment A

Overview of the Excess Coverage Mitigation Program & Recommendation Development for Spending the Fee


Coverage Working Group Meeting #5
January 27, 2015



     

Background

- Governing Board priority project (2014): address Excess Coverage Mitigation Program
- First two Working Group meetings identified characteristics of ideal ECM Program & reviewed alternatives



Photo credit: CTC



 **Meeting Format** 

Today's Working Group meeting goal:
Develop ECM Program recommendation

Schedule:

- 1st half focuses on How the ECM Fee is spent (1 to 2:30 PM)
- 2nd half focuses on Updating the ECM Fee (2:30 to 4 PM)




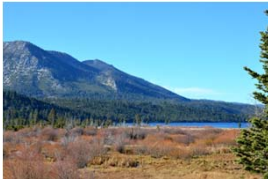
 **Issues** 


Overall:

- ECM fee paid by applicants redeveloping over-covered legacy development
- NV has fewer private parcels with covered SEZs than CA

How the ECM Fee is Spent:


- Lack of existing coverage removal particularly in sensitive lands
- Difficulty fulfilling existing sq. ft. requirement





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ECM Program Purpose




45 YEARS OF PROGRESS
TAHOE REGIONAL PLANNING AGENCY

Support Soil Conservation & Water Quality Threshold gains


Soil Conservation Threshold

Indicator Reporting Category	Standard	Type of Standard	Indicator
Impervious Cover	Impervious cover shall comply with the <i>Land-Capability Classification of the Lake Tahoe Basin, California-Nevada, A Guide For Planning</i> , Bailey, 1974. <ul style="list-style-type: none"> Land Capability 1a (1% allowable coverage) Land Capability 1b (1% allowable coverage) Land Capability 1c (1% allowable coverage) Land Capability 2 (1% allowable coverage) Land Capability 3 (5% allowable coverage) Land Capability 4 (20% allowable coverage) Land Capability 5 (25% allowable coverage) Land Capability 6 (30% allowable coverage) Land Capability 7 (30% allowable coverage) 	Management (with Numerical Targets)	Percent of Impervious Cover within Each Land Capability District (%)
Stream Environment Zone	Preserve existing naturally functioning SEZ lands in their natural hydrologic condition, restore all disturbed SEZ lands in undeveloped, un-subdivided lands, and restore 25 % of the SEZ lands that have been identified as disturbed, developed or subdivided, to attain a 5 % total increase in the area of naturally functioning SEZ lands.	Numerical	Stream Restoration Acres in the Urban and Rural Areas (also expressed as percent of stream environment zone acres restored within the urban and rural context)



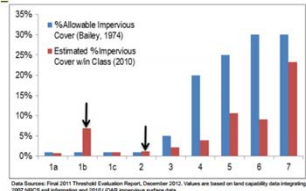
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Ideal ECM Program




45 YEARS OF PROGRESS
TAHOE REGIONAL PLANNING AGENCY

1. Encourages coverage removal particularly in over-covered areas
2. Mitigation reflects Water Quality impacts of excess coverage
3. Promotes achievable provisions for land banks
4. Sustainable fee structure
5. Simple, feasible, and non-controversial
6. Incentivizes env. beneficial redevelopment




■ %Allowable Impervious Cover (Bailey, 1974)
 ■ Estimated %Impervious Cover with Class (2010)
Data Sources: Final 2011 Threshold Evaluation Report, December 2012. Values are based on land capability data integrating 2007 LRMIS and information and 2010 LGEM impervious surface data.




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How the Fee is Spent Preferred Alternative



Preferred alternative, though with modifications.




Alternative	How Fee is Spent
1A: Land Bank Ratio	Ratio
1B: Applicant Ratio	Same as current
1C: Land Bank & Applicant Ratios	Ratio
2: Regional Excess Coverage Fee	
3: Focus on Existing Sensitive Land Coverage	Restore existing coverage
4: Water Quality Projects	Acquisition, restoration & water quality projects




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Water Quality Alternative (4)



Use funds for acquisition, restoration, & water quality projects


- Expands fee use for SEZ restoration/acquisition & Water quality improvement
- Continue the direct distribution of ECM funds to the land banks.






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WQ Alternative (4) Refinement



- Eligible projects must result in Soil & Water Quality Threshold gains
- Report on the:
 - Area of land capability of coverage restored
 - Acres of land acquired
 - Acres of SEZs restored
 - Soil & WQ threshold gains



Snow Creek SEZ and Wetland restoration (after). Photo credit: CTC and CDW





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Minimum Coverage Removal Development



Develop minimum coverage removal options

- Replace the existing sq. ft. requirement
- Explore use of a ratio

Goals:



- Ensure accountability
- Maintain nexus to ECM
- Restore existing coverage



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Motel Coverage Removal and land restoration (before and after). Photo credit: CTC

Option 1, Ratio

Ratio for all funds:

- For each 10 sq. ft. of ECM fee paid, 1 sq. ft. of existing coverage from sensitive land must be restored at a minimum.
- For each 10 sq. ft. of ECM fee paid, 2 sq. ft. of existing coverage from non-sensitive land must be restored at a minimum.






Option 1 Evaluation

Pros:


- Incentivizes the restoration of existing coverage in environmentally sensitive lands
- Fiscally feasible requirement
- Mitigates WQ impacts
- Accelerates restoration of sensitive lands
- Promotes existing coverage removal



Cons: ratio adds complexity & less sustainable (cost changes)


 **Option 2, Ratio & Projects** 

At least half of the ECM funds are dedicated to the existing coverage ratio and remaining funds may be dedicated to EIP Projects

- Ratio same as Option 1
- Land banks may dedicate the remaining portion to EIP projects (Soil & WQ Threshold targeted) or propose a new Soil & WQ targeted project




 **Option 2, EIP Project Example, WQ** 




Before

Burgandy Hill Land Coverage Restoration (near Incline)

- 2.75 acres of env. Sensitive land restored
- WQ Threshold
- NDSL




After





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Option 2, EIP Project Example, Soil




45 YEARS OF PROGRESS
TAHOE REGIONAL PLANNING AGENCY


Lower Blackwood Cr. Restoration (N. Tahoma)

- 2 acres of SEZ restored
- 1240 ft. stream habitat restored or enhanced
- Thresholds: WQ, Soil, Recreation, Fisheries, Vegetation
- CTC




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Option 2 Evaluation




45 YEARS OF PROGRESS
TAHOE REGIONAL PLANNING AGENCY



- Pros:
 - Incentivizes the restoration of existing coverage in environmentally sensitive lands
 - Accelerate restoration of sensitive lands, mitigates WQ impacts
 - Potential for broad environmental benefits
 - Fiscally Feasible & achievable
 - Low controversy
 - Greater flexibility
- Cons: same as option 1 (ratio not as simple)

 **Staff Recommended Option** 

Option 2 is recommended:

- Increased flexibility
- Broader environmental benefits
- Greater benefits/opportunities





 **Meeting Outcome** 

Objective: Develop an Excess Coverage Mitigation Program recommendation on How the Fee is Spent for review and consideration at public hearings.

Task:
Develop a recommendation for How the ECM Fee is Spent today.




- Identify preferred option for minimum coverage removal
- Refine & finalize recommendation

Attachment B



ECM Fee Update Presentation


Coverage Transfer Working Group Meeting #5
January 27, 2015



Current Code


30.6.1.C.2 Excess Land Coverage Mitigation Fee

[...] The Mitigation Fee Land Coverage Cost Factor(s) shall be established by TRPA staff by January 1 of each year based on a certified real estate appraiser's estimate of the land bank's cost to acquire and restore land coverage under this program. The appraiser shall use the methodology established in the Uniform Standards of Appraisal Practice. The excess land coverage fee shall be calculated according to the schedule provided in the Rules of Procedure in subsection 10.8.5.



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Fee History



1987 - \$5.00 per sq. ft. in CA and NV


2001 - \$6.50 per sq. ft. in CA and
\$12.00 per sq. ft. in NV

2006/2007 - Current Fee Schedule →

2009 - Appraisal Completed; No
agreed-upon update


Current ECM Fee Schedule

HRA	Current ECM Fee
South Stateline, CA	\$8.50
Agate Bay, CA	\$8.50
Tahoe City, CA	\$8.50
Upper Truckee, CA	\$8.50
Emerald Bay, CA	\$8.50
McKinney Bay, CA	\$8.50
South Stateline, NV	\$15.00
Cave Rock, NV	\$25.00
Marlette, NV	\$12.00
Incline, NV	\$20.00
Agate Bay, NV	\$18.00




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Working Group Guidance




- Update should occur regularly (4-5 years);
- Mechanism for updates;
- Appraisals and GB approval problematic



→ desire to simplify update process




 **Working Group Guidance** 

- Assess methods for regular fee updates.




 **Fee Update Method:** 
WG Recommended Objectives

- Streamline and Simplify the Fee Update process;
- Establish a sustainable fee structure;
- Provide for Regular Fee Updates Reflecting Market Conditions for ECM Land Purchases;
- Update Method must be Reasonable and Defensible.




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Existing Indices



1. Consumer Price Index (CPI)
2. S&P/Case-Shiller Home Price Index


Neither metric accurately reflects non-metropolitan, rural realities; especially a uniquely complex region such as Tahoe.






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Key Challenges / Opportunities



1. Available county-level metrics include valley geographies;
2. Low transaction counts: Outliers can skew metrics and difficult to generate statistically valid trends;

1. Median Values preferable to Mean/Average Values;
2. Factor to compute growth rates of local, residential home sales;
3. Dependent on available data;
4. Consider CA and NV separately;
5. Must be grounded in reasonable economic theory.

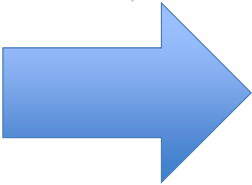






Key Challenges / Opportunities

1. Available county-level metrics include valley geographies;
2. Low transaction counts: Outliers can skew metrics and difficult to generate statistically valid trends;

1. Median Values preferable to Mean/Average Values;
2. Factor to compute growth rates of local, residential home sales;
3. Dependent on available data;
4. Consider CA and NV separately;
5. Must be grounded in reasonable economic theory.









Growth Rate Equation

	Equation	Pros	Cons	Recommended
Annual Percentage Growth Rate (APGR)	$\frac{LN(Future\ Year) - LN(Base\ Year)}{(\#\ years\ in\ period)}$	<ul style="list-style-type: none"> • Adequately Simple • Computes Percentage Growth Rate 	<ul style="list-style-type: none"> • Natural Log Functions difficult to explain to non-technical audiences 	Yes
Simplified Annual Growth Rate	$\frac{(Future\ Year) - (Base\ Year)}{(\#\ years\ in\ period)}$	<ul style="list-style-type: none"> • Most simple • High-level estimates computed quickly 	<ul style="list-style-type: none"> • Oversimplifies averages • Relies too heavily on base year and future year end-points 	No
Simplified Annual Percentage Growth Rate	$\frac{\left[\frac{(Future\ Year) - (Base\ Year)}{2} \right]}{(\#\ years\ in\ period)}$	<ul style="list-style-type: none"> • Preferred to Simplified Annual Growth Rate as it relies less on the Base Year • Decreased likelihood of oversimplifying or skewing averages 	<ul style="list-style-type: none"> • Oversimplifies averages • Relies too heavily on base year and future year end-points 	No
Average Annual Growth Rate (AAGR)	$\frac{[(Annual\ \% \ change\ in\ Median\ Sale\ \$Year\ 1\ to\ Year\ 2) + (Annual\ \% \ change\ in\ Median\ Sale\ \$Year\ 2\ to\ Year\ 3) + (CONTINUE\ FOR\ ALL\ YEARS)]}{(\#\ years\ in\ period)}$	<ul style="list-style-type: none"> • Moderately simple 	<ul style="list-style-type: none"> • If percent changes are very high or very low, can skew the average over the period 	No
Compound Annual Growth Rate	$\frac{[(Future\ Year)/(Base\ Year)]^{(1/(\#\ years\ in\ period))}}$	<ul style="list-style-type: none"> • Good for generally computing investment rate of return over a period 	<ul style="list-style-type: none"> • Not appropriate for project objectives 	No




Growth Rate Equation




	Equation	Pros	Cons	Recommended
Annual Percentage Growth Rate (APGR)	$\frac{LN(Future\ Year) - LN(Base\ Year)}{(\#\ years\ in\ period)}$	<ul style="list-style-type: none"> Adequately Simple Computes Percentage Growth Rate 	<ul style="list-style-type: none"> Natural Log Functions difficult to explain to non-technical audiences 	Yes

As compared with other considered equations, the APGR:

- Best meets objectives;
- Decreases likelihood of skewed or oversimplified resultant growth rate;
- Very good at computing *percentage* growth rate; required to increase fee by specific % over time.
- Grounded in economic theory → reasonable and defensible.





Example Growth Index: Nevada



Annual Single-Family Residential Sales Statistics, Nevada Counties

Year	Washoe County		Douglas County	
	# Sales	Median Sales Price	# Sales	Median Sales Price
2003	228	\$769,500.00	142	\$585,000.00
2004	236	\$849,000.00	196	\$665,000.00
2005	252	\$1,020,000.00	155	\$825,000.00
2006	132	\$1,075,000.00	102	\$870,000.00
2007	144	\$1,200,000.00	85	\$1,000,000.00
2008	94	\$1,075,000.00	77	\$600,000.00
2009	106	\$900,000.00	86	\$500,000.00
2010	125	\$775,000.00	92	\$555,000.00
2011	101	\$760,000.00	94	\$553,000.00
2012	153	\$750,000.00	121	\$474,900.00
2013	223	\$907,500.00	142	\$632,500.00





Example Growth Index: Nevada

- APGR was computed for each county, from 2003 to 2013 (10-year period)
- Total # Sales within each county was aggregated
- Nevada 10-yr APGR computed using a weighted average of individual county APGR

County	# Sales over 10-year period	10-year APGR (2003-2013)
Washoe	1,794	1.6%
Douglas	1,292	0.8%
Nevada Total	3,086	1.3%






Photo Credit: CTC





Example Growth Index: Nevada


County	# Sales over 10-year period	10-year APGR (2003-2013)
Nevada Total	3,086	1.3%


↓

County	5-year Update Percentage
Example:	1.3% APGR * 5 years = 6.5%
Nevada Total	

↓

County	5-year Update \$ Amount	Update Difference
Example:	1.065 * \$18.00 = \$19.17	\$1.17
Nevada Total		


 **LAKE TAHOE**
imagine. plan. achieve.





Fee Update:

Key Issues for Working Group Consideration

Index the Fee
vs.
Reset the Fee



 **LAKE TAHOE**
imagine. plan. achieve.






Fee Update:

Key Issues for Working Group Consideration

Index the Fee

- Data: Use of 10-yr trending county residential home sales data
- Method: Use of APGR
- Update Period for APGR and Fee: annual, 5-year
- TRPA Code: Maintain Intent Fee Update
 - Ensure the fee is sufficient to cover the land bank’s cost to acquire and restore land coverage under this program



Fee Update:

Key Issues for Working Group Consideration

Reset the Fee

- Fee reset feasibility
- Method: Appraiser-based, other






Photo credit: CTC

Discussion of Approach








Photo credit: Jennifer Cannon

Index the Fee
vs.
Reset the Fee



Decision Points: Index the Fee

1. Data: Use of 10-yr trending county residential home sales data
2. Method:
 1. Use of APGR
 2. weighted average for state-level index
3. Update Period:
 1. APGR Update: annual, 5-year, other
 2. Fee Update: annual, 5-year, other



Decision Points: Reset the Fee

1. Fee reset feasibility
2. Uniform for each state
3. Method:
 1. Appraiser-based
 2. Other method