

ATTACHMENT B – **Pitkin County Policy and/or Code Modification Table**

11.29.18

TABLE 1 Policy and/or Code Modifications	Comments
<b><i>#1 Roads (Mitigation Approach)</i></b>	
<p>A. <u>Action</u>: Revise Road Impact Fee methodology to address construction impacts of axel weight and vehicle miles traveled, based on data in RPI analysis. <u>Impacts</u>: Incentivizes waste reduction and offsets true cost of construction impacts to roads;</p>	<p>P&amp;Z and BOCC support revision of Road Impact Fee methodology to address construction impacts of axel weight and vehicle miles traveled. As a component of the fee methodology, they recommend exploration of a reduction in landfill fees as an incentive for construction waste diversion.</p>
<b><i>#2 Land Use Code (Limitation Approach)</i></b>	
<p>A. <u>Action</u>: Eliminate floor area exemption for below-grade space: <u>Impacts</u>: Extends County Road lifespan by reducing hauling-truck weight impacts; and reduces vehicle miles travelled, traffic and air quality impacts; In some cases, may result in a smaller home and less energy consumption;</p>	<p>P&amp;Z does not support elimination of the existing below-grade space floor area exemption based on their observation that: below-grade space tends to require less energy than above-grade space; and below-grade space that doesn't daylight results in less visual impact than above-grade space; and that if an on-line dirt-swap site is established, there may be less impact on the landfill resulting from excavated material. BOCC supports exploration of a sliding scale provision, where below grade space only counts as floor area when house size reaches a to-be-determined threshold, at which energy consumption increases exponentially, with size.</p>
<p>B. <u>Action</u>: Modify site design requirements to address solar orientation; <u>Impacts</u>: Results in more energy efficient design and less energy consumption;</p>	<p>P&amp;Z and BOCC support modification to site design requirements (for house, driveways and pools, as examples,) to facilitate solar orientation that takes advantage of solar orientation to the greatest extent possible to reduce the need for excess energy for snowmelt, etc.</p>
<p>C. <u>Action</u>: Accommodate on-site renewable energy mitigation outside of activity envelope. <u>Impacts</u>: Incentivizes use of renewable energy on sites where location within activity envelope is not possible or ideal; Also may allow for a free-standing solar array where it may not be accommodated within building envelope;</p>	<p>P&amp;Z and BOCC support exploration of a Code revision to accommodate on-site renewable energy mitigation outside of activity envelopes when location within activity envelope is not possible.</p>

<p>D. <u>Action</u>: Allow neighborhood-level solar farms as a special review use; <u>Impacts</u>: Provides off-site option for renewable energy source for sites that can't accommodate on-site mitigation;</p>	<p>P&amp;Z and BOCC support a code amendment to provide specific standards for <i>neighborhood-scale</i> solar farms as a special review use for sites that can't accommodate on-site mitigation (as opposed to a more industrial scale solar farm that might be located in an outlying area.)</p>
<p>E. <u>Action</u>: Reduce maximum floor area County- wide to 10,750 sq. ft. <u>Impacts</u>: Reduces overall ecological footprint, reduces energy consumption and greenhouse gas emissions; increases County road lifespan;</p>	<p>P&amp;Z supports exploration of a maximum floor area reduction. As part of the methodology to determine to what extent the maximum floor area should be reduced, they recommend that Staff provide data regarding the number of existing or in-process homes that are between 9,000 and 11,000 s.f. today; and consider the fiscal impact to the County in terms of the potential reduction in building permit fees and property taxes that could result from homes coming in at a reduced size. BOCC requests additional data and more public outreach to a broad cross-section of the Community to determine to what extent any change may be warranted.</p>
<p><b>Policy and/or Code Modifications (<u>Land Use Code, Cont.</u>)</b></p>	<p><b>Comments</b></p>
<p>F. <u>Action</u>: Revise TDR provisions to incorporate a sliding scale (exponentially increasing number of tdrs required as house size increases,) as follows:</p> <ul style="list-style-type: none"> <li>• 5750 is GM exempt (status quo)</li> <li>• 8250= 1 TDR required</li> <li>• 10,750=3 TDRs required (If max house size is reduced to 10,750 sq. ft., stop here.)</li> <li>• 13,250=5 TDRs required</li> <li>• 15,000=7 TDRs required</li> </ul> <p><u>Impacts</u>: Disincentivizes larger, more energy consumptive homes; Offsets impacts associated with larger homes by preserving "sending sites" in other portions of the County; and maintains TDR program;</p>	<p>P&amp;Z supports the concept of a sliding scale for TDRs, exponentially increasing the number of TDRs required as house size increases, though they don't necessarily support the specific numbers identified in the concept provided by Staff. To maintain a functioning TDR program, ensure that there continues to be a balance between TDR supply and demand. The BOCC does not support this as an effective approach to addressing house size or energy consumption. Given more data, BOCC may support an increase in the ratio between house size and energy mitigation required.</p>

<p>G. <b>Action:</b> Reduce the growth management exempt floor area from 5,750 to 4,500 sq. ft.; <b>Impacts:</b> Reduces overall house size to address rural character, reduces energy consumption, construction waste, and associated impacts to roads; Allows for the continued use of TDRs to achieve a (lowered) maximum house size;</p>	<p>P&amp;Z does not support reduction in the gm exempt floor area from 5750 to 4500 sf because, (based on the fact that one could still buy TDRs to increase house size,) they don't believe it's an effective way to achieve community objectives of maintaining rural character, reducing energy consumption or waste and impacts to roads. <b>BOCC requests more data to determine the value of this action; including data regarding energy consumption of "smaller" homes, and data regarding the number of homes at or below 5750 square feet of floor area, that are actually 9750 sq.ft. when the 4000 sq.ft. of exempt sub-grade floor area is included in the overall floor area calculation;</b></p>
<p>H. <b>Action:</b> As an alternative to <i>Action</i> items E, F and G, above, reduce growth management exempt floor area from 5,750 to 3,750 square feet with allowance for use of a TDR(s) for an additional 1,500 square feet, to a maximum floor area of 5,250 square feet. Allow use of an additional TDR for the addition of another 1,000 square feet for homes that will use 100% renewable energy sources for a maximum floor area of 6,250 square feet. <b>Impacts:</b> Incentivizes use of renewables; Reduces overall ecological footprint, including but not limited to energy consumption and greenhouse gas emissions; addresses rural character;</p>	<p>P&amp;Z does not support the reduction in gm exempt floor area from 5750 to 3750 sf, in part because the data presented by August Hasz indicated that a significant up-tick in energy consumption doesn't occur until house size reaches the 7,200 sf size. They did support the concept of providing one TDR at a value of 1,000 s.f. as an incentive for homes that use 100% renewable energy sources. <b>BOCC does not support this proposed action.</b></p>
<p><b>Policy and/or Code Modifications (<u>Land Use Code, Cont.</u>)</b></p>	<p><b>Comments</b></p>
<p>I. <b>Action:</b> Develop alternatives for use of TDRs for something other than additional floor area. <b>Impacts:</b> Continues to use the TDR program to achieve Community objectives, but changes emphasis to uses that have less overall impact;</p>	<p>P&amp;Z supports exploration of alternatives for use of TDRs for something other than additional floor area. One Planning Commissioner recommended requiring use of a TDR instead of REMP fee payment to offset energy consumption related to development of residential pools. <b>BOCC will review this proposed action at a future worksession.</b></p>

<p>J. <u>Action:</u> Revise TDR system to sliding scale that increases square footage allowance per TDR for donor sites that are in environmentally sensitive or scenic areas to protect rural character; <u>Impacts:</u> Emphasizes the importance of environmentally sensitive or scenic areas as a component of rural character;</p>	<p>While staff believes this would be a difficult concept to implement; P&amp;Z recommends exploring a revision to the TDR system to develop a sliding scale that increases square footage allowance per TDR for donor sites that are in environmentally sensitive or scenic areas to protect rural character. BOCC will review this proposed action at a future worksession.</p>
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Policy and/or Code Modifications	Comments
<p><b>#1 REMP (Mitigation Approach)</b></p>	
<p>The BOCC has reviewed and generally supported the following proposed actions relating to the REMP. Based upon the outcome of the November 29, 2018 BOCC Worksession regarding the use of a “Netzero” approach to reducing greenhouse gas emissions, these proposed actions may be revised.</p>	
<p>A. <u>Action:</u> Adjust Renewable Energy Mitigation Program (REMP) fees to offset 100% of the energy use associated with snowmelt. To accomplish this objective, REMP fees would need to be doubled from the current \$34.00/ft<sup>2</sup> to \$68.00/ft<sup>2</sup>. <u>Impact:</u> Disincentivizes use of energy for exterior uses; Addresses the true cost of offset/mitigation for the energy consumption impact;</p>	<p>P&amp;Z supports an increase in REMP fees from \$34/ft<sup>2</sup> to \$68.81/ft<sup>2</sup> to offset energy consumption associated with snowmelt.</p>
<p>B. <u>Action:</u> Increase REMP fees associated with residential square footage above 5,750 sq.ft. to address correlated increase in energy usage – Currently, \$1.00/ft<sup>2</sup> is paid for houses exceeding 5,750 square feet. Research has been completed to provide a kBtu/ft<sup>2</sup>/year interior energy usage multiplier for houses exceeding 5750 ft<sup>2</sup>. This multiplier is applied to the ft<sup>2</sup> that exceeds 5000 and the recommended formula is as follows:  House size: 5,750; first 5,000 is exempt; remaining 750 x \$60.75 = \$45,559.03  (\$60.75 is derived from the cost of purchasing enough photovoltaic to offset 100% of the energy usage. This is the basic philosophy behind the REMP calculations and the math is quite complex to explain but is available upon request.) <u>Impact:</u> Disincentives larger homes based on data indication that energy use increases with size of home; and more closely relates true cost of energy with offset/mitigation.</p>	<p>P&amp;Z supports an increase in REMP fees charged for homes above 5,750 sq. ft., but recommends a maximum fee of \$60/ft<sup>2</sup>, and a tiered approach that increases rates incrementally, as house size increases; → Staff recommends the following revised rate structure, with house size increments coinciding with TDR increments of 2,500 ft<sup>2</sup>: \$45.45/ft<sup>2</sup> for 5,750-8,250 ft<sup>2</sup> home; \$60/ft<sup>2</sup> for 8,250 ft<sup>2</sup> home and above.</p>

Policy and/or Code Modifications (REMP, Cont.)	Comments
<p>C. <u>Action:</u> Implement limitations on exterior energy usage to address correlated increase in energy usage associated with snowmelt, pools and spas.</p> <p>Currently snowmelt systems are limited to a maximum property square footage of 6000 ft<sup>2</sup> for all decks, patios, roofs and driveways. No limitations exist for pool and spa size. Recommendations could be made to reduce the allowable maximum snowmelt amount and to set some reasonable limitations on pool and spa size.</p> <p><u>Impact:</u> May result in a more thorough analysis of the need for exterior energy usage in association with siting of development relative to solar access, etc.; Reduces the need for offset/mitigation;</p>	<ul style="list-style-type: none"> <li>• P&amp;Z does not support a reduction in the maximum 6,000 ft<sup>2</sup> property square footage for all decks, patios, roofs and driveways that may be snow-melted.</li> <li>• P&amp;Z does not support limitations for pool or spa size;</li> <li>• Note: Staff continues to recommend limitations on pool and spa size to reduce, rather than just offset energy consumption associated with both. Building permits for pool development associated with residences is currently on the rise, with roughly one in five new house permits including development of a pool.</li> </ul>
<p>D. <u>Action:</u> Require REMF offset for Electric Heat Tape systems.</p> <p><u>Impacts:</u> Encourages a more thorough look at design solutions; captures cost of offset/mitigation;</p>	<ul style="list-style-type: none"> <li>• P&amp;Z supports charging a REMF fee to offset Electric Heat Tape systems.</li> <li>• P&amp;Z also supports exempting a certain amount of wattage from REMF fee charges to accommodate safety considerations, (above doorways, as an example.)</li> <li>• Staff recommends charging a fee of \$4.434/watt; (or \$30.38/linear foot); and exempting 1,050,100 watts, which at 7 watts/ft<sup>2</sup> would be equal to an exemption for 14350-linear feet of heat tape.</li> </ul>

Policy and/or Code Modifications (REMP, Cont.)	Comments
<p>E. <u>Action:</u> Consider the following addition to the REMP to reduce energy consumption and improve systems efficiency:</p> <ul style="list-style-type: none"> <li>○ Charge a REMP fee for, or limit excessive energy usage for winter construction and jobsite temp heating.</li> <li>○ Require onsite REMP/Solar offset review by CORE to encourage additional efficiency at install.</li> <li>○ Require annual onsite mitigation system testing and inspection to demonstrate functionality for the full offset period.</li> <li>○ Allow offsite mitigation with a contract that CORE is a party to and can legally require maintenance for the full offset period</li> </ul> <p><u>Impacts:</u> Disincentivizes excessive energy usage; Ensures that mitigation systems remain functional</p>	<p>P&amp; Z recommends the following with respect to proposed additions to REMP:</p> <ul style="list-style-type: none"> <li>● Explore winter construction fee;</li> <li>● Require solar offset review by CORE at install;</li> <li>● Require testing &amp; inspection of onsite mitigation to demonstrate functionality for full offset period; Explore technology to efficiently implement;</li> <li>● Allow offsite mitigation with CORE contract to ensure maintenance of system(s).</li> </ul>
<p>F. <u>Action:</u> Encourage on-site renewable energy systems over off-site mitigation solutions by charging more REMP fees for off-site mitigation and less for on-site mitigation;</p> <p><u>Impact:</u> Incentivizes more energy efficient home design and limits footprint of development;</p>	<p>P&amp;Z supports this action, but is unsure if reducing REMP fees is the right incentive;</p>
<p><b>#2 Energy Code (Limitation Approach)</b></p>	
<p><b>The BOCC has reviewed and generally supported the following proposed actions relating to the Energy Code addendum. Specific Code amendments will be reviewed for adoption at a regularly scheduled meeting and first reading on December 5, 2018.</b></p>	
<p>A. <u>Action:</u> Require existing residential stock to comply with 2015 Energy Code as adopted with Local amendments, by removing the exemption for remodels and existing buildings.</p> <p><u>Impact:</u> Reduces energy consumption and greenhouse gas emissions associated with all residential building;</p>	<p>P&amp;Z supports this action.</p>
<p>B. <u>Action:</u> Implement additional energy efficiency requirements to reduce consumption:</p> <ul style="list-style-type: none"> <li>○ Mandate continuous exterior insulation on houses greater than 5000 ft<sup>2</sup> or 15% glazing (window/door) area.</li> <li>○ Mandate better U-Values for glazing in houses greater than 5000 ft<sup>2</sup> or 15% glazing area.</li> </ul> <p><u>Impact:</u> Reduces energy consumption and greenhouse gas emissions;</p>	<p>P&amp;Z supports implementation of these additional energy efficiency requirements;</p>

Policy and/or Code Modifications	Comments
<b><u>#3. Landfill (Limitation Approach)</u></b>	
<b>The BOCC has reviewed and generally supported the following proposed actions relating to the Landfill. County Staff anticipates developing a draft ordinance(s) addressing implementation for consideration by the BOCC within the next year.</b>	
<p>A. <u>Action:</u> At demolition permit application, require submittal of a deconstruction/construction waste plan; requiring a minimum of 50% of waste to be deconstructed materials; Require a demolition audit and submittal of Landfill receipts to confirm follow-through. (Define deconstruction and demolition.)</p> <p><u>Impact:</u> Requires up-front design consideration, as opposed to dealing with waste as an after-thought, reinforcing the need to reduce, re-use, recycle to reduce ecological footprint; Extends life of landfill and need to transfer waste out of the valley;</p>	<p>P&amp;Z supports this action but 50% may not be the right #. They recommend:</p> <ul style="list-style-type: none"> <li>• Incentivizing construction and demolition waste streams (not just demolition).</li> <li>• Developing achievable standards.</li> <li>• Considering a tiered approach over X # of years.... Start with 20 % and get up to 50% by 2020?</li> <li>• Ensuring that Landfill is able to deal with the waste appropriately.</li> </ul> <p>→ Staff will inform the Landfill Director about this recommendation and coordinate on the practical implications of implementation.</p>
<p>B. <u>Action:</u> Develop on-line Dirt and Material Swap site to accommodate recycling/redistribution of materials;</p> <p><u>Impacts:</u> Extends life of landfill and need to transfer waste out of the valley; results in construction cost savings; may extend County road lifespan;</p>	<p>P&amp;Z supports this action.</p>