

Deep Creek Lake Property Owners' Association, Inc.  
Marcellus Shale Position Paper

October 9, 2014

This paper is designed to support the Deep Creek Lake Property Owners' Association, Inc. (POA) Position Letter, same date, opposing shale gas recovery operations within the Deep Creek Watershed. In short, the POA respectfully requests the Board of County Commissioners amend the current Deep Creek Watershed Zoning Ordinance to prohibit vertical drilling and associated surface infrastructure within the watershed.

We understand that the Governor-tasked Safe Drilling initiative (SDI) has been addressing the broad range of risks/adverse impacts potentially associated with deep shale gas recovery if drilling/"fracking" were to proceed. The SDI final report will likely propose a shale gas regulatory regime which many would view as a "gold standard", controversy notwithstanding. We applaud the Commissioners' chartering of the Garrett County Shale Gas Advisory Committee (SGAC) and the tasking to identify possible local regulatory actions to complement or supplement state-proposed Best Management Practices (BMP's).

However, there are a number of considerations which have led us to the position that vertical drilling, and the associated surface infrastructure, should not be a "Permitted by Right Use" nor permitted at all, within the Deep Creek Watershed. This position reflects our fundamental commitment to supporting POA member interests in accordance with our mission, including the charge, *"to promote, preserve, and protect the quality of life, environment, recreational opportunities---on Deep Creek Lake and in its watershed"*. Additionally, this position reflects our obligation to consider the interests of the broader County and, in this case, to specifically address the implications of our position on projected economic benefits (e.g. County revenues, jobs, etc.). These dimensions of our thinking are elaborated briefly below.

We recognize that our position, in terms of the "bottom line", is aligned with the position recently taken by the Garrett County Board of Realtors (GCBR) in the context of commenting on the draft Deep Creek Watershed Management Plan. We have been in touch with Paul Durham, their Government Affairs Director, and note that his research on potential property value impacts is the most comprehensive work we've seen on that particular dimension of our deliberations.

We also recognize that the Deep Creek Watershed Management Plan Steering Committee adopted a provision consistent with this position at their September 8, 2014 meeting.

Motivating Concerns: As noted above, there is a broad range of potential risks/adverse impacts---as well as potential benefits---associated with deep shale gas recovery, and these are being addressed at both the state and local level. For our purposes here, however, we have focused on areas of risk/impact which are of particular (even if not unique) concern to POA members and others within the watershed:

- Preserving the rural character, scenic beauty, recreational opportunities, and the resulting quality of life in the face of significant “industrialization”.
- Sustaining the supportive natural environment, especially water resources and drinking water quality, in the face of significant scientific uncertainty and controversy about the risk mitigation effectiveness of the proposed BMP’s.
- Protecting property values against the perception as well as the reality of risk/adverse impact on the above positive, treasured attributes of the watershed.

Relevant and often-cited “industrialization” concerns include noise, odor, traffic congestion, and “viewshed” impact. These are simply inherent in the natural gas recovery process. Regarding water resources, protecting groundwater sources and well water against contamination are particular matters of continuing debate and concern, despite serious and appreciated attention as part of the state effort.

The GCBR research into potential impacts on property values identified a range of empirically-observed declines from 5% to 22%, generally within 0.9 mile of a wellhead. Such declines, noting an indicative average of 13%, would obviously be of concern to property owners. The supporting studies often cite perception of risks to drinking water and/or concerns about “industrialization” as the cause of decline---the so-called “stigma effect”. Perhaps as, or more important than these numbers per se, we offer two observations. First, these numbers were often derived for situations where drilling/recovery is “going well”; they do not account for the impact of a significant and/or well-publicized incident or event. (This was a topic during an 18 August SDI Advisory Commission discussion). Second, the analyzed situations apparently did not involve the arguably more fragile, vulnerable second home/retirement home market which accounts for much of the watershed property value.

Simply stated, these concerns motivate our position because—in the end—risk/impact mitigation is found principally by providing geographic separation. This separation cannot be adequately achieved through the proposed “item-by-item” BMP setbacks, but the watershed land use/zoning ordinance provides an appropriate and effective mechanism from a POA standpoint.

Broader Economic Considerations: Our recommended land use ordinance change, precluding drilling and associated surface infrastructure within the watershed, raises the question of what impact this might have on the ability of the County to fully realize projected economic benefits. Our self-perceived obligation to address this issue was noted above.

We have not attempted a comprehensive review of the potential economic upsides and downsides for the range of stakeholders including County government (fiscal impacts), local businesses, commercial companies, and individual property owners. This would ultimately be a matter for County staff attention, possibly supported by the SGAC and others.

However, it is instructive to do at least a *rough analysis of how precluding vertical drilling within the watershed would constrain the recovery of natural gas from the Marcellus Shale formation which underlies Garrett County*. As noted in the GCBR letter and as reflected in a GIS-based input to the watershed planning activity by Ms. Deborah Carpenter, the key driver is the fact that deep horizontal drilling /fracturing under the watershed surface (“laterals”) would NOT be precluded, preserving significant access to shale gas.

We’ve done a bit of our own analysis assuming a reasonably conservative 8,000 ft. reach for the horizontal laterals and considering constraints already in place or being proposed by the state (e.g., the current 2,000 ft. buffer around the lake perimeter and the proposed 300ft. setback from state parks and trails). The question addressed was what subsurface area would be denied beyond that already constrained by the current buffer or selected proposed setbacks. The answer is in acreage (~12,000) which can be expressed as a percentage of the total acreage in Garrett County (~422,000), the latter corresponding to 100% of potential recovery. The bottom line: only 2.8% of potential shale gas recovery would be denied with, roughly speaking, the same percentage impact on economic benefits like, severance tax revenues and jobs. (These are basically proportional to the volume of gas which is recoverable.)

To provide some calibration for what this result means, it may be useful to do some indicative calculations while understanding that almost any predictive number is uncertain and relatively wide ranges apply (e.g., the -5% to -22% range above). For example:

- County staff have developed a projection of annual severance tax revenues over a 20 year period (state-defined drilling scenarios) for a range of natural gas prices.\* (These revenues were calculated as 5.5% of the value of recovered gas, the current county mineral extraction rate.) A baseline case shows a revenue average of approximately \$6.4M per year. *The calculated 2.8% recovery “loss” would translate to an annual County revenue reduction of roughly \$179K on average.*
- Returning to the property value impact issue, one can calculate potential decline using the range identified and the nominal -13% figure within that range, and then translating this nominal into annual property tax revenue declines for the watershed. Use of a 2013 County analysis\*\* allows one to attribute \$26.7M of property tax revenues to District 18 as a surrogate for the full watershed. (This corresponds to the often-cited roughly 60% of total County property tax revenues.) *Application of the nominal 13% decline figure yields a reduction in annual County property tax revenue of \$3.46M. Further, application of the lower bound 5% decline figure yields a revenue decline of \$1.33M.*

Again, these simplified calculations are indicative only. For instance, natural gas prices are very difficult to forecast. *The message, however, is that economics alone seem to clearly justify protecting the watershed’s property value “engine” even if a modest loss in potential natural gas recovery benefits is incurred.* We note that County staff has begun to make similar estimates of economic impacts and tradeoffs from a County-wide perspective. The POA applauds this work.

A further point regarding the economic implications of the recommended ordinance change: none of the currently recorded mineral lease properties within the watershed would be denied the opportunity for royalties--they are all within the reach of the 8,000 ft. "laterals" discussed above.

Concluding Observations: The POA position on classifying Marcellus Shale drilling and associated surface infrastructure as a "Not Permitted" use within the watershed has been articulated here. The above discussions elaborate our concerns, our rationale for recommending adoption of a land use ordinance amendment in response to those concerns, and an analysis to convince ourselves, and others, that adoption of such an amendment would not be incompatible with legitimate County economic interests. In short, we are advocating what we see as a "win-win" position for all concerned.

#### Footnotes

\*"Marcellus Shale Tax Outlook", Logan Marks, Garrett County Department of Community Planning and Development, 2 September 2014.

\*\*"The Economic Importance of Deep Creek Lake", Garrett County Department of Economic Development, 4 April 2013.

[Note: Both sources are available on the Garrett County Shale Natural Gas website.]