

# From the Desk of the Mayor....



December 20, 2017

## Lake Mitchell – Do Nothing Alternative

To Do Nothing is another alternative for Lake Mitchell. To Do Nothing will cost nothing.....or will it? There has been much talk recently regarding the high cost for potential Lake Mitchell restoration plans that have been laid out for us by FYRA Engineering. The costs are likely to reach the tens of millions of dollars over the next decade. How much may be available from outside funding sources is also currently unknown, but will be a focus of the next push. Today, nothing is guaranteed.

The question we all need to ask ourselves is, "What would Mitchell be like without it's lake, and what can be expected to happen if no action is taken at Lake Mitchell?"

Water Quality – Water quality conditions have worsened over the years, hence the reason for this project. Phosphorous concentrations and algae blooms were particularly high in 2015-2017, and the lake may have reached a tipping point with respect to internal phosphorous loading. These conditions will continue and likely worsen unless nutrient loads, both from the watershed and from the bottom of the lake are not addressed. It has been determined that almost 53% of the lake's algae problems are coming from the 351,000 acres in the watershed that feeds into our Lake. The other 47% is coming from the lake sediment itself (internal loading) according to recent studies. This 47% has mostly come from 90 years of runoff from the watershed into our lake. To focus on one and to ignore the other is only fixing our lake half-way. Algae blooms can be expected to continue and potentially worsen in terms of frequency, duration, odor, etc. Toxic blue-green algae may also become more prevalent in the algae blooms, especially during the heavy recreation season when temperatures are high. With blue-green algae comes greater risks to public health and can result in lake closure to the public, as well as concerns for residents with dogs and small children that could consume lake water.

Mass balance modeling of lake Mitchell confirms that if historical weather patterns and loading conditions repeat, increased phosphorous concentrations can be expected. The attached graph shows the projected 365-day rolling average phosphorous concentration from present to 2030. Although actual concentrations will vary due to unpredictable weather patterns, the long-term trends in water quality are certain to degrade, and may be much worse than the projections if conditions from 2015-2017 persist. The graph projects that phosphorous concentrations at the current level of 350 parts per billion will likely increase to 500 parts per billion by 2030.....a 43% increase in phosphorous nutrient loading. Our goal needs to be in the 60-80 Parts per billion range as noted by the green line on the chart!

Quality of Living - The quality of living in Mitchell and for lake users would continue to diminish (related to lake use and the impact of the lake on community) without action. The use of the lake would continue to be limited and with reduced value. The lake would continue to underperform in terms of what positive impact it could have on the community with reduced recreation benefits and the economic value that comes with recreation such as outsiders spending money in Mitchell while visiting the lake. Imagine a lake where swimming is not allowed and beaches are closed. Picture a lake where boating activities are limited to no water contact because of high toxin levels and health risks. Imagine a lake where fishing is no longer recommended and a lake with more frequent fish kills that causes strong odors and a high cost for clean up. Imagine a lake where walking paths and bike paths are not being used because of high algae odor during the recreational season. Imagine a lake that can no longer be considered usable as Mitchell's secondary water source. The Environmental Protection Administration (EPA) has already declared Lake Mitchell as an "impaired" lake. Without action, the impairment label is going nowhere.

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*Outside expectations*

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Marketing Value - When Mitchell conducted its extensive community Marketing / Research study with Amperage, one important research conclusion was that Mitchell needs to use the unique characteristics of our lake as a method to attract work force development to our community. The research concluded that “quality of life” ranked as one of the highest criteria that people look for in consideration of moving to a community. Imagine Mitchell without its lake!

Property Values - Property values of homes around the lake are likely to be significantly reduced with diminished water quality if the community lacks willingness to support improvements. This dynamic has been well-documented across the country when comparing value of homes near lakes with varying water qualities.

With a continued lack of action, the costs to improve water quality in the lake will escalate even further for future generations to burden, reducing the chance that any future generations will begin the effort. Lake Mitchell needs to be promoted as a true priority and destination for both locals and visitors. We need to restore our lake and market it as the quality of life asset that it should be. To continue with bandaid approaches and half-way fixes is a very poor choice. To Do Nothing will prove to be catastrophic for future generations.

## Mayor Toomey

