Non-Agenda Item

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City of Lodi, California
City Council: Regular Meeting
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SaveLodi.us

Because Lodi is home to a peaker plant–one of the *most* polluting types of power plants there is–we must immediately stop cutting down and trimming trees–not just at Lodi Lake–because trees eat the polluting toxins so we don't have to.

I. Danger of Living Near Peaker Plant
   A. "Burning fossil fuels at power plants creates emissions of sulfur dioxide (SO2), nitrogen oxides (NOX), particulate matter (PM), carbon dioxide (CO2), mercury (Hg), and other pollutants. NOX and SO2 emissions contribute to the formation of ground-level ozone and fine PM, which can lead to respiratory and cardiovascular problems, and exposure to mercury can increase the possibility of health issues ranging from cancer to immune system damage" ("Power Plants and Neighboring Communities").
   B. "[P]eaker plants emit hazardous pollutants like sulfur dioxide (SO2), nitrogen dioxide (NOX) and particulate matter (PM2.5) that increase risks for cancer, heart disease, asthma, birth defects and damage to the brain and nervous system" ("Peaker Plants: A Primer, 2022").
   C. "In the brain, long-term exposure to PM2.5, SO2, and NOx can lead to cognitive declines, changes in brain structure, and an increased risk of Alzheimer's disease. In the nervous system, these pollutants are linked to neurodevelopmental disorders and deaths from Parkinson's disease. Particles can travel to the central nervous system. In the cardiovascular system, exposure is linked to a higher mortality from coronary artery disease, heart attacks, strokes, and blood clots. In the respiratory system, it can cause shortness of breath, coughing and wheezing, asthma, lung cancer, and chronic obstructive pulmonary disease (COPD). In the renal system, long-term exposure to these pollutants is associated with a greater likelihood of chronic kidney disease. … In the endocrine system, PM2.5 is an endocrine disruptor, contributing to increased development of metabolic diseases such as obesity and diabetes, which in turn are risk factors for cardiovascular disease. In the reproductive system, small particle pollution exposure is linked to diminished fertility, miscarriages, premature birth, low birth rate, and respiratory diseases" (Clean Energy Group, 2022).

II. Importance of Trees

A. “The vegetation plays an important positive role in atmospheric purification and air pollutants reduction” (Park, 2011).

B. “Besides its direct impacts on the spread of disease, deforestation can cause polluting emissions and the loss of ecosystem functions that filter toxins from air, soils and water” (Taylor, 1997).

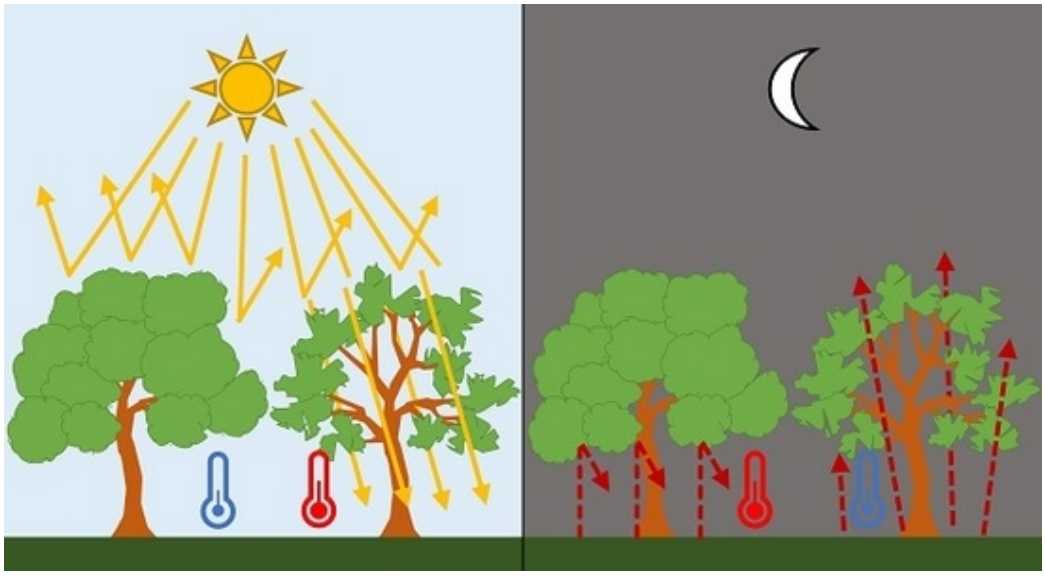
C. “It would be much healthier to take a break and reflect in a beautiful natural environment that…allows us to expand our cognitive capacities even with complex emotional states that produce calm and serenity, promote greater relaxation, regularize our heartbeat, and modulate blood pressure” (Mencagli & Nieri, 2019).

D. “For patients who had undergone major surgery, those who had rooms with windows facing outdoor green space had significantly shorter recovery periods compared with those in rooms with windows overlooking urban landscapes. In fact, the former required fewer analgesics to manage postoperative pain” (Mencagli & Nieri, 2019).

E. “This affinity for the natural world is fundamental to our health. Contact with nature is as vital to our well-being as regular exercise and a healthy diet” (Qing, 2018).

F. “Research has shown that time in natural spaces strengthens neighborhood ties, reduces crime, stimulates social interactions among children, strengthens family connections and decreases domestic violence, assists new immigrants cope with transition, and is cost effective for health benefits” (Qing, 2018).

Why might the City of Lodi be removing trees that have little risk–if not *no* risk–of falling? Perhaps because trees lower our energy bills, decreasing their potential to profit off as much use of the peaker plant as possible, literally putting less money in their pockets, keeping it in ours.



III. How Trees Lower Your Energy Bill

A. “Daytime near-surface air temperature declined with increasing height and canopy density providing significant cooling benefits. However, this trend was reversed at night when tall trees with dense canopies restricted longwave radiative cooling and trapped warm air beneath their crowns” (Wujeska-Klaus & Pfautsch, 2020).

B. “Transpiration is a process which regulates temperature by cooling the air surrounding the leaf, whereas the canopy reflects solar radiation and provides shading by blocking light transmission through the crown and thus prevents solar radiation from reaching surfaces beneath” (Wujeska-Klaus & Pfautsch, 2020).

C. “Trees lower the air temperature through evapotranspiration, thereby enhancing the outdoor microclimate and reducing the indoor climate's energy demands…the presence of trees could reduce wind speed in the urban environment” (Dong et al., 2023).

What can you do to protect yourself?

- Use as little energy as possible, to put as little money in their pockets as possible.
- Eat as many fresh organic fruits and vegetables as possible; avoid completely (or eat as little as possible) meat, especially red meat (livestock).
- Any property you own densely forest as much as possible.

Photos taken February 11, 2023, when Lodi Lake Park was closed “due to high wind advisory.”

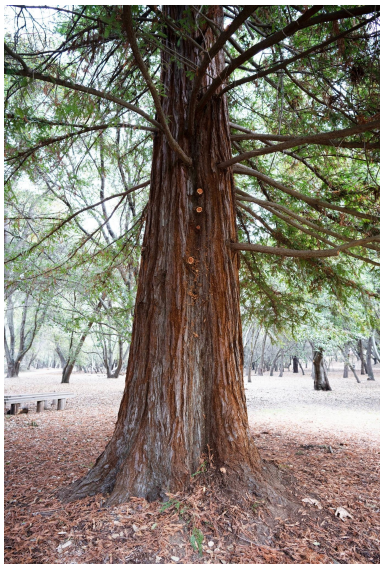
Replacing trees like oaks with maples, as can be seen in this image, is harmful to wildlife.

Photo taken at my apartment, February 17, 2023, a mere 6 days after I documented the state of Lodi Lake, which a City of Lodi / Public Works employee noticed me doing.

At the point this photo was taken there were only 3 trees, but I would like to note for public record there were 5.

Photo taken December 17, 2023, of the trees that they “replaced” the cypresses with.

Photos taken December 17, 2023.



Photos taken today, January 3, 2024, near my parents' place.

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