League of Women Voters of Pullman Observer Report

Name of Agency: Whitman County Planning Commission Date: 9/10/2025

Observer Reporting: Chambers-Fox Shelley Length of Meeting: 2 hours 3 minutes

Members Present: Dave Gibney (Chair Pullman), Bill Myers (Colfax), David McKeirnan (Pullman), Dean

Kinzer (Pullman), Weston Kane (LaCrosse), Tammy Southern (Garfield), Julian Mathews (Pullman), Brian

Davies (vice chair), Chris Melhus (Rosalia).

Members Absent: none

Others Present (e.g., media, public): Staff: Alan Thomson, Whitman County Planner, Grace DiBiasi (Assistant Planner), Brandon Johnson, Public Works, Mark Storey, Denis Tracy (District Attorney) on Zoom, David Werner (Clerk), County Commissioners: Chad Whetzel, Art Swannack, Tom Handy Public On Zoom Tyler R. Steelhead America, Ashley Hartman, Alan Anderson., Corey Mitzimberg, Eric Slusher, Kimberly Howard, Adam Capage-Renewable NW.

Public audience: Ken Duft, Carol Black, Mark Weber, Nicole Frazier, others

Business pertaining to League Positions or Topics of Interest: Include in this section 1) issues discussed that relate to League priorities or positions. Do you recommend local league action? If so, please refer to the Leaque position that supports your suggestion. 2) links to further information available on an issue, if available.

Approved Local Developments 🚧



- A proposed quarry operation near **Shawnee Rock**, approximately 3/4 mile north of Colfax of SR 195, was approved.
- A permit was issued for Verizon and Vertical Bridge to extend a 35-foot cell tower to 50 feet next to the water tower on Airport Road.

Update on Wind Ordinance Legal Issues

Denis Tracy provided an update on legal issues regarding the wind ordinance.

Legal Principles

- County Authority: County government acts with its general regulatory powers to ensure the residents' health, safety, and welfare.
- Property Rights: Property owners have the right to use their property as they see fit within the limits of the county's zoning code.
- Setback Formulation: Noise, either audible or inaudible, can be used to formulate a set back

- requirement.
- **Commissioners' Discretion:** It is within the commissioners' discretion to determine what **weight to give to various evidence**, with peer-reviewed evidence being considered more credible.
- Natural Landmarks: The commissioners can give special protection to natural landmarks like Kamiak Butte, Steptoe Butte, or Palouse Falls. The view from these features is considered important to the County's value as a destination.
- Imposing New Setbacks: If a new number for wind turbine setbacks is to be imposed, it should be supported by specific articulable facts.

Meeting Protocol and Presentation Introduction

- **Public Questions:** Chair Dave Gibney announced **limited time for questions** from the public due to the planned presentations.
- **Presenters:** The joint presentation was given by:
 - Dr. Christopher Ollson, PhD (Environmental Health Sciences)
 - Dr. Robert McCunney, MD (Internal Medicine and Occupational and Environmental Medicine)

Siting Criteria for Wind Turbines: Expert Presentation Findings

General Principles

- Siting criteria for sound, shadow flicker, and safety should be based on **experience**, **science**, **and engineering principles**.
- There are over **150 peer-reviewed scientific and engineering research articles** and government publications available.
- The presenters advised looking at the **preponderance of evidence** rather than a single paper and using **pay-to-play journals with caution**.
- Findings from State utilities' hearings on wind turbine projects may be useful.
- Wind Turbines are not new: there are >75,000 turbines in the US, >1,800 in Washington state, and 58 in Whitman County.

Sound

- **Technology Trend:** Turbine height has increased (e.g., from 350 ft to 700 ft), but **sound output has typically remained the same or quieter**.
- **Common Complaint:** The most common complaint is **annoyance/quality of life**, with noise impacting **sleep** being the most important factor.
- **Sound Types Generated:** Wind turbines generate high frequency, low frequency (like bass of rock music), and **infrasound**.
- **Discredited Theories:** Be aware of **self-published theories** not based on data, such as **Vibroacoustic disease** and **Wind turbine Syndrome**.
- Suggested Setback Method: Use a setback multiplier on the total height of the turbine to features

(property lines, homes, roads) to future-proof the ordinance for larger turbines.

Sound Levels and Health:

- Typical turbine sound is 105 dBA.
- The suggested setback should allow **no more than 45-50 dBA** at a non-participating dwelling.
- o Washington Administrative Code (WAC) specifies a maximum of 50 dBA or less at non-participating homes.
- Studies (e.g., Health Canada) found **no consequential effects on sleep** under this standard.
- Ellenbogen concluded modern wind turbines do not risk sleep when developed with reasonable restrictions.
- o Infrasound (<20 Hz) and low frequency (20 200 Hz) noise is well below a level that would impact health or sleep.
- Most turbine sound is between 125 to 2000 Hz.
- Driving on a road produces more infrasound than a wind turbine.
- Conclusion: The Washington sound standard of 45 to 50 dBA Leq (average of 10 minutes measurement) at non-participating residences is recommended to protect health, safety, and welfare.

Shadow Flicker



- Nature of Effect: Shadow flicker is an indoor phenomenon only.
- **Health Impact:** It is **not a health concern**; it has not been shown to cause seizures, disorientation, nausea, or headaches, as turbines do not rotate fast enough to induce seizures.
- Annoyance and Recommendation: It can be annoying, so the recommendation is no more than 30 **hours** of shadow flicker on a home **per year** (the usual US standard).
- Setback for Mitigation: This is achievable with a setback of 2.1× tip height (e.g., 1,365 ft for a 650 ft turbine).

Physical Safety Concerns 1



Setback Recommendations:

- Neighboring nonparticipating property lines: 1.1× tip height.
- Neighboring nonparticipating home: **2**-**3**× **tip height**.
- State Parks: 2.1× tip height.
- o Interstate, roads, and highways: 1.1× tip height.
- o Incorporated municipalities: typically 1 mile.
- Ice Throw: Ice is typically thrown within the tip height circle. The Washington State standard uses tip height +100 ft. Many turbines have ice protection devices.
- **Blade Throw:** Blade failure rate is low (1:10,000 blades fail per year). Debris travelling beyond 1.1× tip height had low kinetic energy and was unlikely to cause injury.

Other Concerns:

- Wind turbines do not shed fiberglass during operations.
- There is **no evidence** that operating wind turbines impact **agricultural soils**.
- Fire Safety: Fires can be caused by mechanical failure or lightning. All turbines have fire protection systems.
 - Suggested Response Protocol: Develop a fire response protocol that sets a perimeter, allows the turbine to burn out, and only extinguishes ground spot fires.

Questions and Answers

Commissioner Q&A

- Study Size: The largest study reviewed looked at 1,300 people; some were smaller, focused on sensitive individuals.
- Vibroacoustic Disease: Presenters maintain there is no such thing as Vibroacoustic disease in this
 context, noting that some negative reports stemmed from turbines sited too close and later
 corrected.
- Firefighter Safety: Fire is not without risk. The County could require fire suppression systems or require the company to write an emergency response plan and fire fighter training.
- Noise Standard for Whitman County: Washington allows 45 to 50 dBA; the presenters suggested considering 45 dBA.

Public Q&A and Comment

- **Presenter Compensation:** The presenters have received compensation from wind energy companies, counties, and states in the past, but this specific presentation was **pro bono**.
- Invitation Validity: Ken Duft questioned the presentation's inclusion, claiming Alan Thomson (who extended the invitation) acted without Planning Commission approval. Chair Dave Gibney clarified that organizing presentations is Alan's job and that he and Alan had discussed and agreed to the presentation.
- **Study Types:** Carol Black asked about the nature of the cited studies; the presenters confirmed they were **field studies** of people in their homes near wind farms.
- Larger Turbines: Larger turbines allow a 200-megawatt wind farm to place **fewer turbines** because they produce more electricity.

<u>Public Meetings of Interest to League:</u> Were there any public meetings announced that you think League members may be interested in attending and/or becoming involved with that relate to League positions?

<u>Process & Protocol:</u> (Observations about participants and procedures of the meeting) *e.g., Did the members appear to have done their "homework"? Were members courteous to each other and the public? Was access to materials for certain agenda items available to you?*

Members are courteous to each other and the public. The presenters' CVs were provided before the meeting. The presentation materials were displayed on Zoom while being discussed.

Your additional comments/opinions:

Reminders ©

A LWV Observer is impartial, silent, and respectful. It is, however, acceptable to ask questions for clarification

following the meeting.

Remember to wear your awesome ID Badge!

Please attach any materials, or links to such, received at the meeting that you feel are important to your report. Please submit your report to the LWV Observer Chair within one week of the meeting. rogerc63@outlook.com