

Save Helvetia 13260 N.W. Bishop Road Hillsboro, Oregon 97124

www.SaveHelvetia.org

27 February 2023

RE: Senate Bill 4

Concern about the clause: "the Governor will...identify land adjacent to current urban growth boundaries (UGBs)"

Honorable Members of the Joint Subcommittee on Semiconductors:

Your Task Force has recommended three sites in North Washington County for semiconductor manufacturing sites. These sites happen to be large blocks of Foundation Agricultural lands (agricultural lands within three miles of a UGB per the Oregon Department of Agriculture) that have been successfully farmed since the 1850's.

The State of Oregon's goal to achieve carbon neutrality before 2040 (as stated by the Oregon Global Warming Commission established by Governor Brown's Executive Order 20-04) will not be achieved with semiconductor manufacturing. Every block of Foundation Agricultural land you pave over for tech, you reduce the ability of the second largest industry in Oregon to continue its long-term contribution to reducing Oregon's carbon dioxide.

Thanks to the sustainable farming practices of the farmers in these areas, they consistently reduce the amount of carbon dioxide with zero use of energy to water crops. They have been doing this for the past 150 years by harnessing natural rainfall (called "rain fed agriculture") conserving soil nutrients, and preserving our natural resources.

As you consider the best location for semiconductor manufacturing sites, please

- Select land that is already within a UGB or
- Decentralize the over-reliance of Tech in Washington County by seeking land elsewhere in Oregon
- Do not pave over the farmland that is essential to the state-wide goal of carbon sequestration

Respectfully,

Allen Amabisca, B.A. Botany, B.A. Finance Save Helvetia Board Member

Attachment:

"Washington County farmers - LEADERS in Sustainable Farming and Carbon Sequestration"

Washington County Farmers: Leaders in Sustainable Farming Practices Using Rain Fed Agriculture for 150 years!

State of Oregon's Goal: Achieve carbon neutrality before 2040

- Gov. Brown's climate change Executive Order 20-04
- Calls for actions and investments to increase sequestration in natural and working lands
- Goal: to achieve carbon neutrality before 2040, establishing Oregon as a national leader in climate mitigation

What is Carbon Sequestration?

- Carbon sequestration is the process of capturing and storing atmospheric carbon dioxide
- It is one method of reducing the amount of carbon dioxide in the atmosphere with the goal of reducing global climate change

Rain fed agriculture in Washington County - successful carbon sequestration for over 150 years!

- Extensive underground network of sub-surface irrigation: channels rain efficiently (P.2)
- Contour farming: reduces soil erosion and increases crop yields (P.2)
- Cover crops: enhance moisture retention and productivity of soils (P.2)
- All contribute to conserving soil nutrients 150 years of improvement in productivity

Advantages of rain fed agriculture in Washington County over irrigated farming

- Zero use of energy for watering crops
- Preserves natural resources; No withdrawal of water from streams, rivers and lakes
- No investment needed for installation and maintenance of expensive irrigation equipment
- Channeling of rainfall via sub-surface infrastructure (called "tiling") replenishes streams and ground water

\$300 million a year from Washington County farms

- Washington County farmers produce a bounty of high-value clover, grass seed, wheat, nursery stock and hazelnuts sustainably
- These products are sold throughout the U.S. and the global markets, bringing more than \$300 million of valuable traded-sector income to Washington County annually.

Washington County farmers are LEADERS in carbon sequestration and soil enhancement



Wheat crop growing in Helvetia, OR

Washington County farmers are LEADERS in carbon sequestration and soil enhancement



Contour farming (Groveland Drive) reduces soil erosion and increases crop yields = **CARBON SEQUESTRATION**



Cover crops (Helvetia Road) enhance moisture retention and productivity of soils = CARBON SEQUESTRATION







Washington County farmers are highly skilled in maximizing productivity using rain fed agriculture. They have invested in subsurface infrastructure for 150 years to improve the quality of the soils: original "tiling" and modern tubing (middle left). Extensive network of sub-surface irrigation across all parcels uses NO energy to water crops and reduces waterlogging of crop roots (above). The result? After 150 years, the world-class Class 1 and 2 soils of Washington County are rich in nutrients and achieve optimum productivity (left).

