

Chair Senator Dembrow, Vice-Chair Senator Thomsen and Members of the Senate Committee on Education. I am writing in support of SB 404 and SB404-2.

I write this as a retired university professor who has taught courses focused on sustainability and environmental toxics for the last 45 years. I also garden with organic practices to raise a substantial portion of my vegetable intake.

Thank you for creating and supporting this legislation that provides much needed support for organic agricultural practices here in Oregon. Providing support for moving our agricultural economy toward a more complete implementation of organic practices is incredibly important for a significant number of reasons: 1) freedom from toxics will be more healthy for both agricultural people and for general consumers; 2) toxic materials will no longer be impacting the vital processes of the soil food-web; 3) organic agricultural practices will likely enable soils to support agriculture during the near term future impacts of climate change; 4) higher organic content of soil increases water retention, an important offset from likely more frequent droughts from climate change; 5) organic agricultural practices will increase the organic (carbon) content of agricultural soils, which will provide an extremely important contribution to much need carbon dioxide sequestration; and 6) increased organic content of soil will enable the soil to be worked more easily, reducing the energy needs for agriculture and carbon dioxide output from agriculture. These are all vital consequences of moving toward organic agriculture.

"Modern" American agricultural practices unfortunately have been a significant contributor to atmospheric carbon dioxide, and they have also reduced the capacity of the impacted soils to hold vital nutrients in the soil. This lack of nutrient retention unfortunately results in eutrophication of our nation's waters, toxic algae blooms, and dead zones at the mouths of our rivers. Finally, remember that current use of fertilizers results in more carbon dioxide being generated in order to accomplish the production of the tons of fertilizer used in "modern" operations.

Senate bill 404 and 404-2 will provide vital and needed support for organic agriculture here in Oregon. I support all of the important, thoughtful, and beneficial features of this legislation.

Thanks again for your vital work,
Trygve Steen, Ph.D.