CONVENE: 6:00 p.m.

PRESENT: Mayor Debbie Sullivan and Councilmembers Peter Agabi, Michael Althauser, Joan Cathey, Leatta Dahlhoff, Angela Jefferson, Charlie Schneider, and Eileen Swarthout.

Staff: City Administrator John Doan, City Attorney Karen Kirkpatrick, Communications Manager Ann Cook, and Sustainability Coordinator Alyssa Jones Wood.

CARBON SEQUESTRATION WHITE PAPER UPDATE:

Coordinator Jones Wood reported the Carbon Sequestration White Paper is a component of the Interlocal Agreement Work Plan for the Thurston Climate Mitigation Plan. The white paper was presented to the Climate Action Steering Committee in February. She introduced Senior Planner Allison Osterberg with Thurston Regional Planning Council (TRPC), who authored the white paper.

Ms. Osterberg said she worked with the City of Tumwater and the cities of Lacey and Olympia and Thurston County to develop the Climate Mitigation Plan in 2020. Carbon sequestration was part of the overall plan as a climate mitigation strategy.

Carbon sequestration is a process occurring naturally where carbon dioxide is removed from the atmosphere and stored elsewhere, either through natural or artificial processes. Naturally, carbon dioxide is removed from the atmosphere, converted to carbon, and stored in soil, water, and vegetation.

The Intergovernmental Panel on Climate Change (IPCC) is the United Nations body for assessing science related to climate change. The IPCC has completed modeling to address climate change and reduce emissions. Modeling pathways dictate some type of carbon removal process as necessary to meet the international climate targets established by the IPCC.

The concept of carbon stock is when carbon is stored, such as in trees, rocks, or other materials. Storage of carbon stock is typically measured as tons of carbon. Another concept is carbon flux, which is representative of change and the way carbon moves from the atmosphere into vegetation or from vegetation to the soil or from the soil to the atmosphere.

Carbon flux is measured as metric tons of carbon dioxide equivalent per year. The term can often be confusing as many contend that older larger trees sequester more carbon while others contend younger trees sequester more carbon. Both statements can be correct as older larger trees store much more carbon while younger trees are drawing more carbon from the atmosphere. Both concepts are important in maintaining a bank of carbon that is not released in the atmosphere and contributing to emissions.

Carbon sequestration occurs through biological sequestration or geological carbon sequestration by storing carbon dioxide in underground geologic formations, or rocks. Typically, carbon dioxide is captured from an industrial source, such as steel or cement production, or an energy-related source, such as a power plant or natural gas processing facility and injected into porous rocks for long-term storage.

The Thurston Climate Mitigation Plan focuses on biological (terrestrial) sequestration. An action is included in the plan focused on blue carbon as a priority identified by the Squaxin Island Tribe. However, the plan primarily focuses on options for terrestrial sequestration. Although terrestrial sequestration includes trees and vegetation, it also include agriculture or regenerative agriculture processes as identified in the plan, such as different types of agricultural practices to increase the amount of carbon withdrawn from the atmosphere into the soil through cover cropping or other practices. Native prairies also contribute to carbon sequestration through underground deep root systems of prairie plants. Prairie ecosystems do not sequester carbon at same rate of evergreen forests; however, prairies serve as an important potential source of carbon sequestration in the region.

The Thurston Climate Mitigation Plan specifically focuses on three types of carbon sequestration of regenerative agriculture, reforestation and planting, and prairie preservation and restoration. The plan includes strategies and actions tied to the strategies focused on the three types of sequestration. Assumptions in the plan use sequestration to offset countywide emissions rather than purchasing offsets for emissions outside of the county.

Plan partners completed a wedge analysis documenting emissions reflecting an increase over time. Targets were established to decrease countywide emissions by 45% by 2030 and 85% by 2050. Throughout the planning process, a number of state policies were adopted on energy use and transportation as ways to reduce emissions significantly in addition to local efforts. Combined state and local actions would be sufficient to meet the region's 2030 goal but would fall short of the 2050 goal. Sequestration helps to close the gap. Overall, sequestration would account for 10% of the overall emission reductions to meet the 2050 target. The figures are estimates, which speaks to the importance of using carbon sequestration in lieu of reducing more emissions because behaviors and activities will continue releasing emissions into the atmosphere. The plan offsets those emissions by increasing carbon sequestration in the region. The carbon sequestration target is 380,000 metric tons of carbon dioxide equivalents by 2050 by increasing soil carbon through agricultural practices and forestation and reforestation. The target is a rough estimation and does not include other factors that have since become part of the conversation. The plan does not include an estimate of carbon sequestration and carbon stock provided by existing trees and land cover. The plan also lacks an estimation

of carbon sequestration value by restoring prairie ecosystems or the value of urban trees other than a general estimate of overall conditions or impacts from the changes to land use, such as loss of forestland or conversion of forestland to development.

At the end of the planning process, questions remained on understanding how much carbon does land in Thurston County currently sequester or the county's baseline for existing carbon sequestration. The baseline is an important measure to gauge whether future activities are contributing or reducing sequestration. Additionally, it was important to identify how much more carbon could be sequestrated in the future based on certain practices. It was also important to identify those practices and whether the target is doable or feasible.

Following additional work to determine baseline sequestration for Thurston County, different methodologies were used to include the ICLEI LEARN tool using aerial images at different times to measure change in land use type over time. Basic estimates are factored on emission factors of different land use types. The tool was used to measure sequestration of forests and trees generating an estimate of 926,800 metric tons of carbon dioxide equivalent per year. The tool was not able to identify other types of land uses in Thurston County to factor within the sequestration baseline, such as agriculture uses and prairie areas. Other tools are available to provide more complete land use analysis, which is a future option for consideration.

In rural parts of the county, carbon sequestration represents the bulk of countywide carbon sequestration because most forested land is located in rural Thurston County. Trees within urban areas account for a smaller proportion of the overall baseline. Based on the analysis of emissions, carbon sequestration offsets only one-third of countywide emissions of the overall carbon emissions of 3 million metric tons each year. To cover the gap by 2050, trees and forests need to be sequestering an additional 375,000 metric tons of carbon dioxide equivalent each year, representing a 40% increase.

A number of different tools and literature were reviewed for estimates of strategies to increase carbon sequestration. Some tools were identified for increasing regenerated agriculture when possible, increasing reforestation on lands, increasing prairie preservation, and other actions not included in the plan or not prioritized as actions. Those actions include extending timber harvests on timberlands, avoiding conversion of forests to retain carbon sequestration, and tidal wetland restoration. The studies revealed that by combining those types of activities the outcome would result in an increase in carbon sequestration along with the actions within the Thurston Climate Mitigation Plan. Despite an ambitious process with the additional actions at a higher level, the county would continue to fall short of the sequestration target for 2050.

The White Paper outlines 30 different actions local jurisdictions can consider moving forward on. Some options include technical assistance, regulatory approaches, financial incentives, and some data needs.

One action is supporting rural forest conservation and incentive programs. Ms. Osterberg reminded the Council that the Thurston Climate Mitigation Plan is a shared responsibility to achieve the emissions target. All jurisdictions involved in the Thurston Climate Mitigation Plan have agreed that the way to achieve the 2050 target is through mutual actions for carbon sequestration. Possible actions moving forward considers state actions supporting carbon sequestration policies, such as the management of state forests and the feasibility of different regional incentive programs to conserve and increase rural forest management strategies.

A second option is focusing on alignment of existing programs for sequestration goals. All jurisdictions are nearing the periodic update of comprehensive plans. Considering the role of carbon sequestration during the update should be highlighted along with including policies supporting carbon sequestration. For Tumwater, it speaks to continuing the City's work on completing and implementing the Habitat Conservation Plan, which includes prairie preservation, conservation, and restoration recognizing the co-benefit of climate mitigation. Another long-term option is revisiting the carbon sequestration target in the Thurston Climate Mitigation Plan and identifying a new target based on new information to establish a target that is reasonable and feasible to achieve.

Another action is filling some data gaps. Preliminary estimates focused on baseline sequestration for trees; however, questions remain for other types of land uses. Protocols are available that would help identify a fuller picture of carbon sequestration across all land uses. Filling in gaps of information on prairies, which are unique in the region, is another important action.

Success will also be dependent upon support from community stakeholders by continuing to build relationships with community partners and tracking state and federal actions.

Some questions moving forward include the type of actions the community wants to take locally and regionally to achieve carbon sequestration targets and the role carbon sequestration plays in achieving those targets, such as adjusting assumptions or re-establishing targets based on current information. As new programs and information is released, it will be important to identify the role of carbon sequestration in the overall climate strategy for the region. Another question is the role of different carbon sequestration strategies and how much should be focused on forested areas, prairies, and different types of technologies. It is also important to identify

the long-term costs relative to the benefits of different strategies.

Other work underway in the state is work by the Department of Natural Resources to review carbon sequestration in its land management practices. DNR also launched a new carbon project that includes identification of lands sequestering higher levels of carbon to set-aside and manage for carbon sequestration available as carbon credits to generate funds for state lands.

The Washington State Conservation Commission sponsors a program supporting voluntary stewardship programs across the state and expanding the Sustainable Farms and Fields Program, which provide guidance on using regenerative agriculture practices in concert with climate mitigation efforts.

Washington's cap-and-invest program under the Climate Commitment Act sets a limit, or cap, on overall carbon emissions in the state and requires businesses to obtain allowances equal to their covered greenhouse gas emissions. Carbon offsets can be purchased by major polluters and emitters in the state as part of the climate market system. The only downside of the program are those projects that offset carbon emissions in Thurston County purchased by other entities from other regions benefit from the offset rather than Thurston County. Different carbon market systems could affect the county's ability to use local ecosystems to meet regional carbon emissions targets over the long-term.

Within the Thurston County region, forests and trees sequester approximately 927,000 metric tons of carbon dioxide equivalents each year; however, more information is required to ascertain an accurate baseline. Targets in the Thurston Climate Mitigation Plan are ambitious and difficult to achieve with fewer pathways. However, 2050 is in the future and new technologies and information could assist in aligning with the targets.

A number of options for partners in the region are available to move forward on carbon sequestration. It is important to consider the long-term outcome and although it is critical to initiate actions today, it will not be solved in the short-term but by sustained efforts.

Councilmember Dahlhoff noted that the county and rural communities are smaller versus urban communities that have twice the population as well as twice the budget. She asked about the option of jurisdictions buying credits from other sources. Ms. Osterberg agreed there is economic disparity between rural Thurston County and the cities. Rural forested areas serve as a resource for the entire county and it is important not to consider those resources as only county areas versus city areas. The Thurston Climate Mitigation Plan is based on a regional goal around emissions. Emissions may be higher in urban areas whereas there are more opportunities for

sequestration in the rural areas. It is important that all components are considered jointly.

Councilmember Althauser asked about the architecture of the systems for memorializing progress each jurisdiction achieves. For example, prairie land is a large issue in terms of providing sequestration in addition to old growth trees. Should the City preserve some prairie habitat for the pocket gopher in perpetuity, he questioned how that action would be memorialized to ensure the City achieves its targets. Another example is the City's efforts for updating regulations on removing trees, which will result in fewer trees removed Citywide. He asked how the City's progress on different policies would be memorialized to ensure it is reflected in the City's progress to meet emission targets. Ms. Osterberg replied that the questions are difficult as there are different choices each jurisdiction will make as to how detailed progress will be tracked and by what category. Although it is important to measure the progress of any policy changes, the effort would be expensive. The learning tool could document outcome but at a larger landscape scale that is not specific to any type of change in codes. Each jurisdiction will need to determine the level of reporting on outcomes.

Councilmember Cathey commented that the effort is both encouraging and discouraging as decades are no longer available to save the planet. Every action makes a huge difference. Every large tree removed is detrimental to the climate and sequestration. Although the City may be unable track all accomplishments, the City has a moral obligation to take more action on climate change because the City has declared climate as an emergency by updating the tree preservation ordinance and working with Thurston County and other jurisdictions. Climate today is an emergency and it is important to acknowledge the situation as an emergency. The City of Tumwater could take measures that are more specific and stronger, but the City continues to fall short. Climate emergency requires a conversation on the steps necessary to address the climate crisis.

City Administrator Doan thanked Ms. Osterberg for providing the update. As Councilmember Cathey has often pointed out, big trees are removed and replaced with "sticks." There likely is an opportunity as highlighted in the presentation of contending with challenges caused by the mandate of Growth Management to accommodate growth and housing. One potential opportunity is the preservation of rural forests to leverage tree loss in urban areas. Mid-aged forests could become permanent forests. Other options are prairies and gopher mitigation. The City's Habitat Conservation Plan speaks to preserving 1,500 acres of permanently preserved prairie. The City has struggled with the Legislature to secure investment funds for the initial purchase of land. Recent legislation for sequestration funding could be a potential way to help initiate a purchasing program. A small investment of several million dollars could seed the program, which could be replicated each year resulting in the conservation of 1,500 acres of permanently

preserved prairie.

The Council shared their respective opinions on actions to address climate change.

Councilmember Swarthout said her service on the Climate Mitigation Steering Committee has been an interesting experience as the topic has many moving parts in terms of ways the region will address climate goals. The committee plans to review the Growth Management Act with jurisdictions adding climate goals within the update of comprehensive plans. Approximately 73% of rural forested areas are privately owned in Thurston County, which represents another challenge.

Councilmember Dahlhoff questioned the purpose of urban areas conserving trees if urban areas are rated low in terms of carbon sequestration. Ms. Osterberg offered that the comprehensive plan update affords an opportunity for the City to consider how to balance different priorities. As part of reviewing other communities, staff completed some case studies and identified some urban tree planting programs. Generally, trees in urban areas are valuable for many reasons. Carbon sequestration is one reason but not likely the major reason. The health of the community is the largest reason for cooling, stormwater management, for providing sense of place, and for community aesthetics. It is important to recognize carbon sequestration might be a goal but it should be considered in balance with other goals.

Mayor Sullivan asked how the health of forests factor as poor forest health increase the risk of wildfire and disease. Ms. Osterberg responded that climate change has contributed to forest health risks. The learning tool is capable of measuring risk, as well as by other types of assessments through the U.S. Forest Service to assess the health of forestlands. It is important to continue monitoring at some level over the long term.

MAYOR/CITY ADMINISTRATOR'S REPORT:

COUNCIL FACEBOOK PAGE:

City Administrator Doan said the discussion is a follow-up to the conversation during the Council's retreat last year. The issue is whether the Council is interested in an individual Facebook page understanding that there are tradeoffs and issues. He outlined different types of Facebook pages ranging from personal, campaign/political, or a City-sponsored Facebook page. The challenge of a City Facebook page is that the page is subject to the Public Records Act, which requires the City to archive the records and to have the ability to search the information.

Manager Cook shared examples of experiences by other city councils with

respect to social media choices.

Personal Facebook pages cannot be accessed using City devices. If a Councilmember receives a question or comment about City business on their personal page, the information must be forwarded to the City to avoid conducting City business through a personal page.

Manager Cook shared information on a city in Pierce County. A councilmember had a personal Facebook page for providing information to constituents. However, the city received a public records request and since the Facebook page was personal the city did not archive the page. Because the information constituted public information, the court ruled that the content was not created by an elected official and therefore the communication was not considered a public record. She encouraged the Council to consider whether the position as an elected official requires the post, whether the communication is an official City page, and whether the elected official is conducting City business. If the post consists of disseminating information already within the public realm, there should be no issues; however, discussions on Council business or matters before the Council would constitute conducting business.

Another Facebook page could be a campaign page, which requires adherence to the Public Disclosure Commission election guidelines.

An official or City-sponsored Facebook is managed by the elected official, which requires adherence to the City's social media policy and ethic guidelines and other state laws. The account would be archived for compliance with records retention and the official would be limited in friending or liking other pages to avoid conflicts with the Open Public Meetings Act by creating chain conversations that might constitute a quorum. The City page cannot be used for comments, links, or content that endorses a measure or another candidate.

Manager Cook shared another example of inappropriate communications by a city official in response to questions from constituents.

The Council declined the option of the City providing an individual City-sponsored Facebook page.

City Administrator Doan inquired as to whether there is any interest in changing the City's regular meeting to start at 6 p.m. rather than 7 p.m. The Council agreed to retain the current meeting time of 7 p.m.

Councilmember Cathey acknowledged June as Annual Pride Month and encouraged the City's annual tradition of flying the rainbow Pride flag at City Hall.

ADJOURNMENT: **With there being no further business, Mayor Sullivan adjourned the meeting at 7:34 p.m.**

Prepared by Valerie L. Gow, Recording Secretary/President
Puget Sound Meeting Services, psmsoly@earthlink.net