Agricultural lands in the Gorge: Shaping Gorge Commission actions for climate change resilience and mitigation

Part II: Identifying actions

November 18th | Time: 6:00 – 8:00 PM

Participants: Brian Hukari, Andony Melathopoulos, Ashley Thompson, Daniel Spatz, Heather Hendrixon, Jim Morgan, Kathryn Rifenburg, Ken Baily, Lisa Perry, Roger Nichols, Stephanie Payne, Tova Tillinghast, Yesenia Oates, Alice Williamson, James Mantone, Shannon Cappellazzi, Thomas Lumpkin
Commissioners and staff: Rodger Nichols, Jim Morgan, Ashley Thompson, Bryce Guske, Jessica Olson, Lisa Naas Cook

DRAFT MEETING NOTES

Recap of meeting Part I

- Farms in the NSA are experiencing a wide range of climate change impacts to crop production, worker safety, water systems, soils, and much more. Larger socio-economic forces amplify these effects, particularly for smaller or newer farms and for crops like pears with narrow profit margins.
- Producers are taking many actions to protect and improve water and soils.
- Agriculture can contribute to the protection and enhancement of the full suite of resources the Commission protects.
- Producers recommend the Commission focus on alleviating barriers and costs where possible and helping deliver incentives for the efforts we want to see. One tangible outcome is that conservation districts on both sides of the river are interested in convening with Commission staff, others, to coordinate landowner support.

Presentations

Bees of the Gorge and Climate Change - *Andony Melathopoulos, OSU Extension*

- Slides attached in email and posted on website.
  Key points:
- There are 630 varieties of bees in the state of Oregon
- Bumble bees are (esp. at higher elevation) most vulnerable to climate change
- Most bees in the NSA are connected to desert conditions, spring blooms. Glacial history has a lot to do with these biodiversity hotspots in desert systems.
- Oak fragments/scabs are critical and very rich in native plant communities (great for bees)
- Bee Friendly Certified Crops are one option for maintaining bee habitat
- There are 260 plants identified in the gorge that are good for restoration and are being investigated for climate resilience

- NRCS offers annual funding for different conservation options for the agricultural community based on BMPs for bees. EQIP applications are due Friday, but will be available one more year. You can apply any time and contact Carly Heron (541) 352-1037 carly.heron@usda.gov or Emily Huth (541) 298-8559 emily.huth@usda.gov.

Pesticide Stewardship Partnerships - *Kathryn Rifenburg Oregon Dept of Agriculture*

- Slides attached in email and posted on website.
  Key points:
- Pesticides are a stressor on freshwater ecosystems, along with climate change
- Pesticide Stewardship Partnership, began in 1999 to address water quality concerns, funded by ODA and DEQ, (OHA, OSHA are also part of the Pesticide Management Team)
- 11 sites are evaluated for 134 compounds and degradants and then outreach with farms about results; modeling and waste collection program
- The PCP program is especially helpful to educate farmers about pesticides
- Gorge Commission staff shared that they are working to monitor stream temperature and flow information, especially in tributary streams that support cold water refuge in the Columbia River. EPA has included temperature in the new TMDLs.

Soil Health - *Shannon Cappellazzi, formerly of Soil Health Institute*

- Slides attached in email and posted on website.
- 'Soil Health' is getting the soil back to his function, getting organisms to eat and sustain health
- Increasing soil carbon, reduces the rate of climate change, by fixing carbon from the atmosphere and storing carbon in the soil which decreases the need for fertilizers
- "It's not the cow; it's the how" Well managed grazing systems have the healthiest soils
- Soil health increases biodiversity, The Soil Foodweb (microbes > plants > herbivores > carnivores) Increasing soil carbon helps cycle nutrients and hold more water, while reducing need for fertilizers.
- Four principles of soil health: maximize living roots, keeping soil covered, minimize disturbance, support biodiversity, (integrate livestock, and learn your context/site)

Commission's Climate Change Actions and the Management Plan

Staff provided an abbreviated presentation on the Management Plan and Commission role

Breakout group conversations on potential climate change actions for the Commission:

- **Soil carbon**
  - Key takeaways: There is a lot of interest and experimentation going on with cover crops, compost and mulch to add carbon.
  - What can the Commission do? On our website, could put a list of ag related resources. For folks moving into the area, we could provide resources and

points of contact. Emphasize conservation districts to landowners, OSU and WSU. Field tours with examples of carbon storage; real world examples.
    - Commission can incentivize carbon enhancement practices. Focus on encouraging first, rather than regulating.
- **Water quality and quantity**
    - Key takeaway: Current permitting costs and timelines are real barriers to implementing projects funded by small grants.
- **Emerging permitting needs**
    - Key takeaways: Costs can add up for agricultural projects requiring review. Cultural clearances especially take time and/or money. The Commission is interested in alleviating some of the burdensome steps and costs – we know there is often a bottleneck for cultural survey work.
    - The staff does not bring agricultural expertise to permitting work. In Klickitat County, the Commission connects landowners with Underwood Conservation District for technical and financial resources. Sharing resources with landowners can improve the process.

Wrap up and next steps

What did we not address that you would like to discuss or learn about?

- Yesenia Sanchez Oats and Dan Spatz shared a bit about their new program at the Columbia Gorge Community College. See more in the Resources document.
- Tom Lumpkin asked how we are thinking about the oak damage and mortality that he's observed after recent heat and fires. He also suggested agricultural fire breaks will be important. Staff shared some resources we have found about the relative resilience oak systems are expected to show in the face of climate change, although they are imperiled by fragmentation habitat loss. We also shared the East Cascades Oak Partnership as a forum for learning, researching, and taking actions to benefit oaks, people, and wildlife.

How will we incorporate your ideas and feedback?

- Staff will share meeting notes and key takeaways with the Commission to consider
    - Commission meetings are the second Tuesday of each month
- We'll incorporate ideas from these meetings as we draft the Climate Change Action Plan for public and Commission input, hopefully early spring.