

Peaks to reservoirs: A journey through the Treasure Valley's agricultural systems

AT A GLANCE

The Treasure Valley Regenerative Ag Tour provided an immersive, field-based learning experience linking water systems, soil health and integrated crop-livestock systems across southwest Idaho.

The Situation

Agricultural sustainability in Idaho requires understanding how water, soil, crops and livestock interact across landscapes. While regenerative agriculture, nutrient recycling and water quality are widely discussed, opportunities to observe these connections in real-world settings remain limited. Agricultural professionals often lack experiential learning that integrates:

- Irrigation infrastructure and watershed dynamics
- Water quality and nutrient movement
- On-farm regenerative and organic practices
- Integration of crop and livestock systems

Without this system's perspective, it is challenging to translate knowledge into practical decision-making and effective Extension programming.

Our Response

A Regenerative Agriculture Tour was organized as a post-conference tour by the Waste to Worth Conference committee in April 2025, delivering a full day educational experience across the Treasure Valley. Participants followed a landscape scale journey connecting upstream water systems to downstream agricultural production.



Participants learned how sustainable practices at Peaceful Belly Farm support healthy, wholesome food production in Idaho.

Irrigation and water systems: At Lucky Peak State Park, participants learned from Dan Murdock of the Natural Resources Conservation Service about irrigation flow, infrastructure and the origin of the New York Canal system. At Lake Lowell, discussions focused on water quality and irrigation return flows.

Regenerative and organic systems: At McIntyre Pastures, participants explored pasture-based livestock systems, nutrient cycling and regenerative grazing, while at Peaceful Belly Farm, they examined organic production and vermicomposting systems that convert waste into soil fertility inputs.

Crop systems and waste utilization: At Gooding Farms, a fifth generation hop operation, participants learned about specialty crop production, nutrient management

and the use of agricultural by-products as livestock feed.

Throughout the tour, participants engaged directly with producers, researchers and agency professionals, gaining practical insights into applying regenerative principles across Idaho's diverse agricultural systems.

Program Outcomes

- **Systems-level understanding:** Improved understanding of how water moves from reservoirs through canal systems to farms and back into the environment, linking irrigation infrastructure with agricultural production.
- **Knowledge of regenerative practices:** Increased understanding of soil health, nutrient cycling, waste utilization and organic production systems.
- **Enhanced Extension programming capacity:** Real-world examples and case studies to strengthen field days, soil health workshops, IPM education and Integrated Crop-Livestock Systems (ICLS) programming.
- **Adoption potential:** Actionable strategies for nutrient recycling, livestock integration, organic amendments and innovative composting systems.
- **Cross-disciplinary collaboration:** Stronger connections among NRCS specialists, Extension educators, producers and agricultural professionals.

Collectively, these experiences strengthened understanding of the relationships among water management, soil health, regenerative agriculture and crop-livestock integration.

Participants identified three aspects of the tour as especially valuable:

1. Observing real-world agricultural systems in operation.
2. Learning directly from producers and technical professionals.
3. Gaining practical knowledge that could be applied in their own work.

Impact and evaluation: Of the 134 Waste to Worth Conference attendees, 80 participated in one of the three technical tours and 50 completed the post-tour evaluation. Across all technical tours, participants rated the information gained as highly relevant to their work, with an average relevance rating of 4.2 out of five. Feedback consistently highlighted the value of experiential learning, producer interaction and practical knowledge applicable to Extension and agricultural advisory roles.

Cooperators and Co-Sponsors

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