2026 Request for Proposals (RFP) for Technology

The Washington Tree Fruit Research Commission (WTFRC) is seeking proposals for technology. Technology projects for apples or across different crops (apples, cherries, pears, stone fruit) are encouraged. Of special interest are proposals addressing methods assessing labor utilization or for the reduction of manual labor needs in orchards. Please refer to the current Technology Roadmap for more detailed background: https://treefruitresearch.org/about-us/technology-roadmap/

Please note that while some priorities may not explicitly ask for organic options, we expect **organic practices to be considered in all proposed work when appropriate**. Furthermore, proposals should include an **industry outreach component** if the project outcomes are expected to directly translate into management changes. Given the importance of maintaining profitable and sustainable tree fruit companies, **economic considerations must be integrated into project designs**.

1. Partial or full automation of:
   o Harvest for apple, pear, stonefruit, and cherry.
      ▪ Broad collaboration (multistate, private/public) to automate cherry harvest.
   o Pruning – Cutting selected branches on a tree to achieve desired crop load.
   o Thinning – Removal of fruit from the tree- manual, physiological.
   o Spraying – Adoption of precision crop protection application methods (needs to include efficacy data).
2. Plant health and irrigation monitoring with automated sensors.
3. Non-destructive crop stress modeling.
4. Smart Orchard Project – Assess available tools to help growers gauge potential suitability.
5. Accurate crop estimation (yield, size profile) / real time fruit growth measurement.
6. Cost-effective high-density growing systems or manipulation of existing systems for efficient automation.
7. Timeline for pruning based on physiology to develop roadmap for pruning robots.
8. Economic analysis: For available and novel technologies (how to make the economics work), focus on Key Performance Indicators (KPI's)

Detailed instructions for preproposal submissions may be found at: https://treefruitresearch.org/proposal-process-instructions-and-documents/pre-proposal/instructions/

Preproposals should be submitted by **September 19th, 2025**, to: submit@treefruitresearch.com

For general information about the funding process please consult the Proposal, Review, and Funding Process Description Document: https://treefruitresearch.org/proposal-process-instructions-and-documents/proposal-review-and-funding-processes/

We encourage **novel ideas** beyond the listed priorities. For projects outside the 2026 Request for Proposals (RFP) priorities, please **contact Ines Hanrahan** (hanrahan@treefruitresearch.com) for a discussion before submitting a pre-proposal. WTFRC staff are also available at any time to discuss your ideas, provide feedback, and offer guidance to help you craft a successful proposal.