Ecosystem Services Market Consortium (ESMC)/Ecosystem Services Market Research Consortium (ESMRC) is a non-profit public-private partnership that is transforming decarbonization along the agricultural supply chain through collective action. Our 60+ member organizations spanning the agricultural supply and value chains have collaboratively invested, tested, and launched Eco-Harvest, a harmonized, standardized ecosystem services market for agricultural supply chains. This voluntary market program is an accredited end-to-end digitized solution to decarbonize agriculture and to meet additional natural resource needs of corporates who are making significant investments and operational changes to achieve standards-based, reportable outcomes documenting their progress annually. Eco-Harvest incentivizes, quantifies, and verifies (through independent third-party experts) carbon, greenhouse gas (GHG) and water outcomes annually, paying farmers from the sale of Scope 3 outcomes to corporates.

To better understand the demand for ecosystem services markets in the western United States, ESMC published the 2023 report ‘ESMC Market Demand Analysis for the Western Range Region’ which is summarized below. The Western Range region encompasses most of the southwest U.S., totaling 677,000 square miles and is characterized by an arid and semi-arid climate. Native vegetation consists mainly of grasses and shrubs that are often described as rangeland and much of the region is used for cattle grazing. The report describes demand for ecosystem services markets in this region from both regulatory and non-regulatory perspectives.

For regulatory factors, most states in this region have little to no framework in place for regulating GHG emissions reductions, with the notable exception of California. Many regulatory actions, such as executive orders and bills, were initiated in recent years, signaling potential upcoming regulatory shifts. Voluntary carbon market action has gained traction in recent years, including in this region. For example, Colorado is considering market-based incentives for GHG reductions, but this initiative is still in the early stages. Currently, the regulatory demand for carbon credits is low, but this could change as states push harder for emissions reductions.

Water quality trading is presently limited due to challenges such as measuring non-point source outcomes and point source polluters’ risk aversion. Currently, three states in the Western Range have designed rules or policies for water quality trading programs: Colorado, Idaho, and Oregon. Specific trading projects have also occurred in Arizona, California, Nevada, New Mexico, Utah, and Wyoming. Groundwater overdraft and surface water depletion have led to an increased focus on irrigation diversions. While outright regulation on total water use is minimal, market incentives are gaining traction in water-scarce regions, with programs initiated in areas like the Colorado River Basin.

Presently, there is no regulatory standard for biodiversity targets. However, many states have been influenced by biodiversity regulation by the federal 30 x 30 initiative, which aims to conserve 30% of a state’s land and waters by 2030. The initiative’s future impact remains a gray area, especially regarding its potential incentives and the possible designation of new conservation areas.
Non-regulatory factors influencing demand for ecosystem services markets in the Western Range were also explored in this report, with an emphasis on corporate engagement. Of the 45 organizations surveyed in this report, 57% have set GHG reduction targets. However, water quality and biodiversity commitments are less consistent. The findings reveal that these companies prefer projects local to their operations and often follow established verification protocols. A notable trend is the hesitancy to work with third parties, preferring direct stakeholder engagement instead.

Seven key findings from the report are described below.

1. The policy landscape is dynamic at both the state and federal level, where policies are rapidly evolving, with particular emphasis on water conservation.
2. Carbon sequestration on natural & working lands is a great opportunity for ESMC to gain traction as state regulations are in the early stages.
3. Much of the land in the Western Range is owned by state and federal agencies, who could potentially represent significant buyers of ecosystem services benefits if entities are able to create an adequate supply.
4. There is ambiguity surrounding biodiversity, and there needs to be a clearer definition to drive targets and stimulate demand.
5. Corporate commitments to environmental initiatives are variable in this region, making it hard to gauge demand for third-party ecosystem services.
6. Corporate transparency is low for internal project evaluation methods, making it difficult to align.
7. Companies want to determine the location of sustainability projects, which is a critical consideration for ESMC in project setup to ensure alignment.

This report and associated findings will help guide ESMC’s strategy to build ecosystem services market programming in the Western Range.