

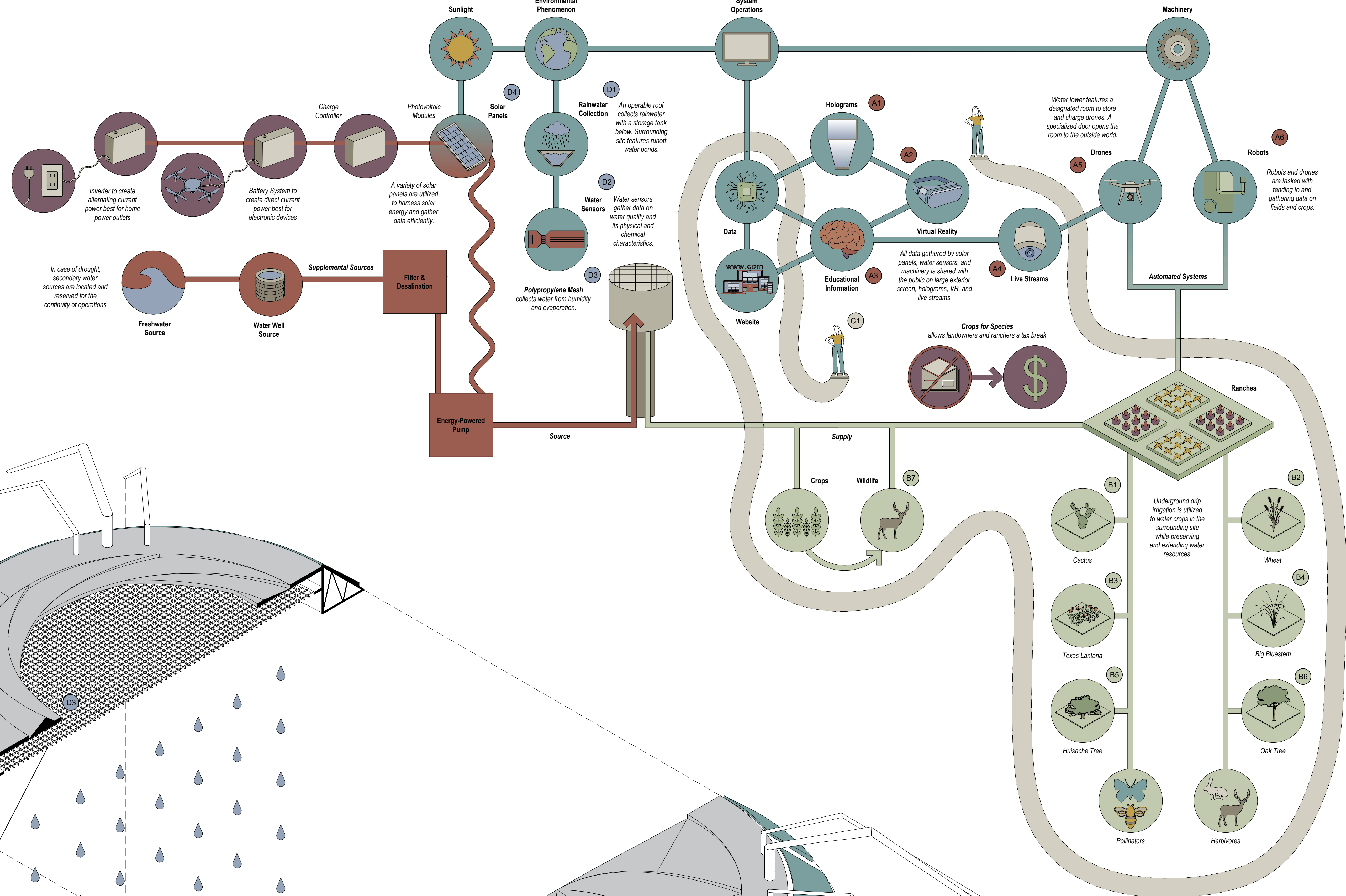
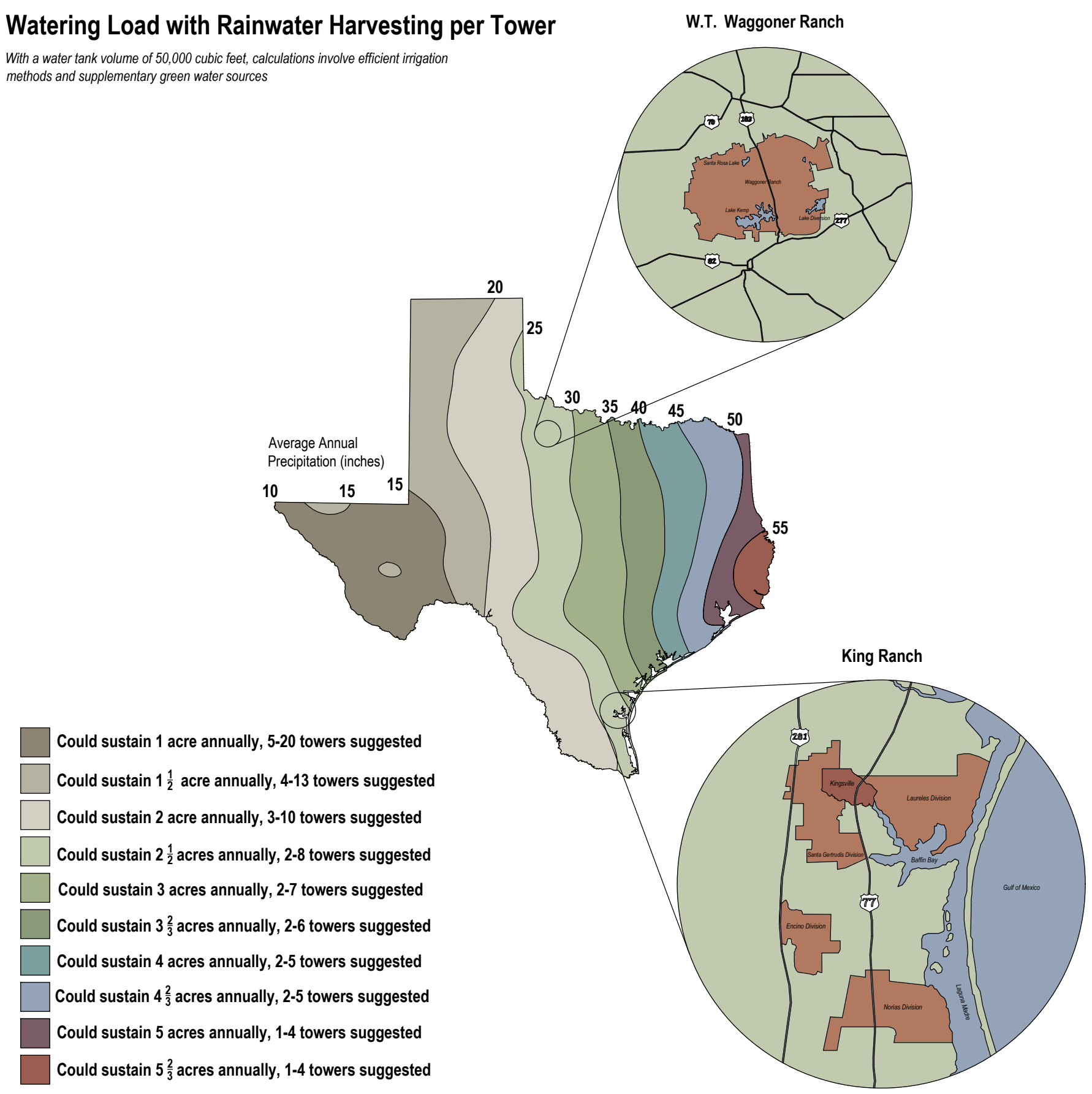
AquaLife

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In 2050, worsening drought, wildfires, and water scarcity threaten ranchlands, crops, livestock, and rural livelihoods. Our water tower responds to these challenges by harvesting rain and atmospheric moisture to support the surrounding landscape. The tower integrates three key functions: environmental monitoring, multispecies refuge, and playful infrastructure. As **active nodes for environmental monitoring**, an operable roof minimizes evaporation, while solar-powered pumps draw water from runoff sources. A living mesh of coral honeysuckle also acts as both habitat and a visual bioindicator of water levels. As a **species refuge**, the tower irrigates food plots planted with resilient species like oak, wheat, and lantana, supporting local wildlife including bees, deer, and cattle. Additionally, a living facade is incorporated to further provide refuge in our design. As **playful infrastructure**, an organic community path creates gathering spaces that surround the site. Along the path there are several experiences that bring the ranch community together. In our exhibition space, VR technology is used to offer insights into ecological interactions. The tower acts as a landmark, it supports ecosystems, monitors climate, and reconnects communities.

Watering Load with Rainwater Harvesting per Tower

100% in water tank volume of 10,000 cubic feet, calculations include efficient irrigation methods and supplementary green water sources



Operable Roof

Polypropylene Mesh

Water Tank

Solar Panels

Operable Roof

Operates by opening and closing to prevent water evaporation to conserve as much water as possible. Polypropylene mesh exists below to collect water from the humidity in the air.

