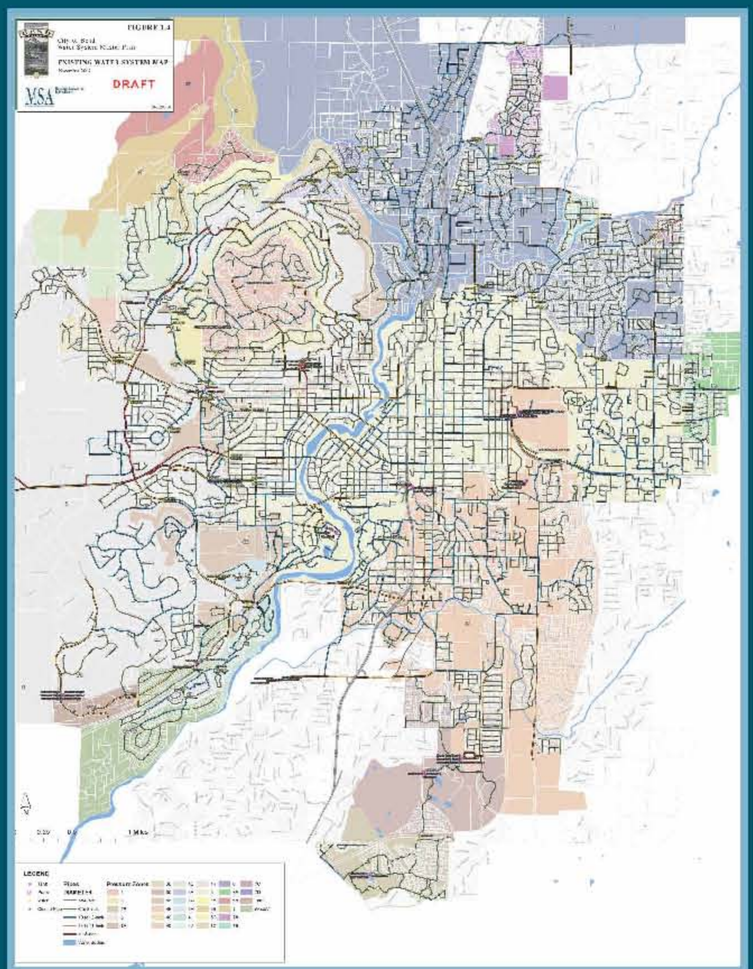

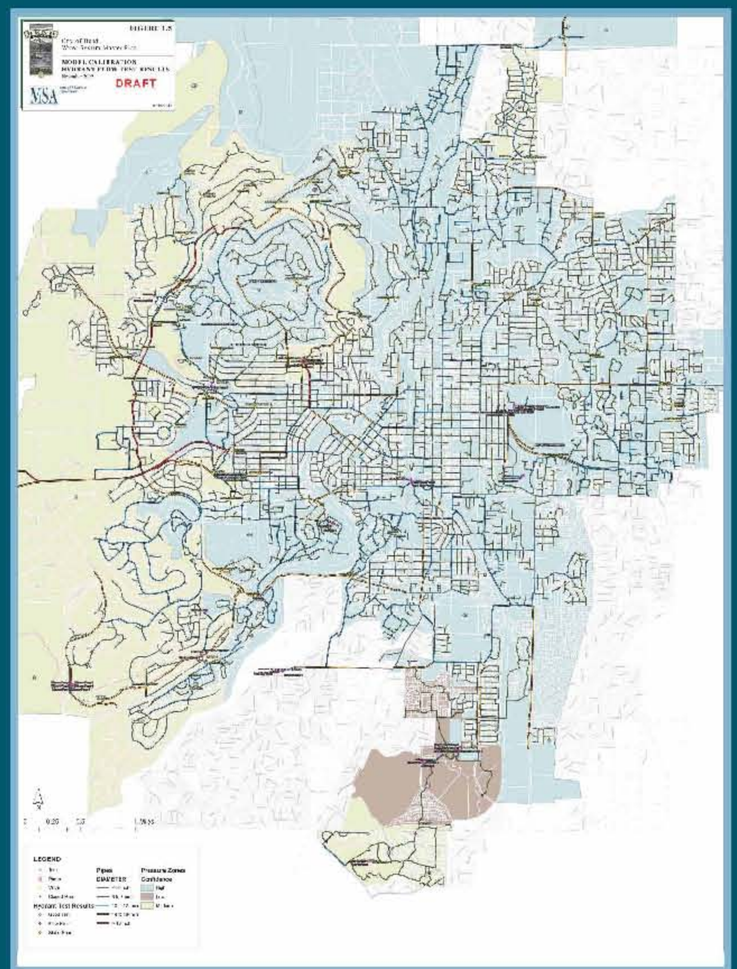

CITY OF BEND WATER MASTER PLANNING AND HYDRAULIC ANALYSIS

Murray, Smith & Associates, Inc. (MSA) provides ongoing water system engineering to the City of Bend and recently completed the City's water master plan update. The update takes a fresh look at the City's water system and provides the necessary information and guidance for sound stewardship of the system for the next 25 years. The plan evaluated existing water system facilities and recommended improvements to piping, pump stations, groundwater wells, storage reservoirs and pressure reducing stations. The project included planning for integration of the former Juniper Utility Company water system into the City's water system and coordination with other private water companies currently serving customers within and around the City's urban growth boundary (UGB). As an extension of this work, MSA is developing an optimized, extended period simulation (EPS) hydraulic model of the City system. Work included developing a high-value approach for implementing supply and storage that minimizes transmission costs by focusing new supply where water is needed most and significantly reduces additional storage needs by allocating more emergency storage as groundwater, saving the City millions of dollars through the 25-year planning period. MSA has also performed on-call miscellaneous hydraulic analysis tasks.