**Case Study Category:** MPDW

**Case Study Title:** Portland Water System Assets, Business Risk Exposure (Criticality), and Risk Mitigation (Business Case) Evaluation

**Utility Name:** Portland Water Bureau

**Case Study Abstract:** The work upon which this case study was based was done as a first attempt to apply the concepts of business risk exposure and risk mitigation to the Portland water system. The case study includes Portland Water Bureau’s framework for quantifying the consequence and likelihood of failure of assets in order to compare the consequence and likelihood of failure of assets across the water system to identify highly critical assets. The benefits and costs of intervening in the pipeline deterioration process are quantified. The benefits include the “risk cost reduction” associated with the triple bottom line of potential financial, social and environmental costs. A list of recommended actions is also given for highly critical assets.