# Work Plan Outline

## Bundle 8: Meters

* Prioritized actions:
  + 14 - Implement more efficient advanced metering infrastructure to enable faster identification of leaks and shortages, and support best practices for water providers to meet industry standards for documenting water loss
  + 28 - Support upgrading and maintaining water metering system infrastructure, where possible. Note: Automated read systems (not SMART) can be installed at reduced cost.
* Gaps:
  + All actions in this bundle have at least one associated project, but efforts can be expanded for each of the actions, such as by more water providers implementing upgraded Automatic Meter Reading (AMR) or Advanced Metering Infrastructure (AMI) systems
* Approach:
  + Help Mid-Coast water providers become aligned in their knowledge of industry best practices and standards for metering infrastructure and water loss control practices. Support water providers in implementing upgraded meter infrastructure and improved water loss tracking across the region.
  + Support water providers by:
    - Connecting water providers with each other and with resources on industry best practices (e.g., manuals, potential events/workshops) to enhance and align education
    - Providing water providers with ideas about funding resources for meter infrastructure upgrades and possibly pooling funding resources (such as through Mid-Coast Water Conservation Consortium)
* Resources:
  + Oregon Water Resources Department (OWRD): Water Projects Grants and Loans
  + United States Department of Agriculture (USDA) Rural Development: Water and Waste Disposal Loan and Grant Program *(fully funded Seal Rock Water District’s AMI project)*
  + Oregon Health Authority (OHA): Drinking Water State Revolving Fund (low-cost loans, funded through the Safe Drinking Water Revolving Loan Fund)
    - Infrastructure Projects
      * AMR/AMI projects are listed as eligible
  + Oregon Department of Environmental Quality (DEQ): Clean Water State Revolving Fund Program
  + Bureau of Reclamation Water Smart Program
    - Small-Scale Water Efficiency Projects
      * 50/50 cost share funding for small water efficiency improvement projects identified through previous planning efforts (e.g., installation of flow measurement or automation in a section of a water delivery system, etc.)
    - Water and efficiency Projects
  + American Water Works Association (AWWA) resources, including:
    - Water Loss Control Program:
      * Manual of Water Supply Practices M36, Water Audits and Loss Control Programs
      * AWWA Water Audit Software
* Proposed activities:
  + Partnership
    - Provide resources and synthesize information for Mid-Coast water providers on the differences between AMR and AMI and situations where either could be beneficial
    - Provide updated resources and synthesize information for water providers on industry standards for water loss tracking and audits (mainly using AWWA standards)
    - Help water providers identify areas to improve water loss tracking in their systems
    - Share information about applicable funding opportunities for metering infrastructure upgrades and water loss audit programs
    - Track which providers have AMR or AMI systems, which have plans to implement upgrades, and progress of implementation plans, which could help identify opportunities for implementation in the region
    - Hold meetings or provide digital forums (e.g., group emails, Partnership website updates, etc.) for water providers to share information and strategies for improving metering infrastructure and water loss audits
    - Continue tracking which water providers are required to do Water Management and Conservation Plans (WMCPs) and updating this list on the Partnership website and request copies of WMCPs
  + Water providers (individually)
    - Expand knowledge on AMR and AMI systems (through Partnership support) and investigate upgrading water meter systems to AMR or AMI
    - Expand knowledge on industry standards for water loss tracking (through Partnership support), and assess areas to improve water loss tracking in water systems
    - Update WMCPs (if required) and Water System Master Plans (WSMPs) or similar plans, and integrate upgrading metering infrastructure and improving water loss tracking in the planning process
    - Apply for funding and implement meter infrastructure projects and water loss audits