

WATER

VISION: Water conservation efforts decrease the amount of water city residents use, and streams and creeks are clean and clear.

Goal 1: By 2050, there will be a 50% reduction in the water flow (quantity) from 2008 annual levels through the Corvallis municipal water systems (currently including the Taylor and Rock Creek Water Treatment Plants, Wastewater Treatment Plant, and storm water piping system).

Strategy 1: Develop programs to reduce water level flows by addressing individual and organizational water/wastewater use patterns.

Action 1: *Adopt* individual plans and goals to reduce drinking, sewer and storm water flow levels resulting from personal water/wastewater use patterns.

Action 2: *Provide* recognition and economic incentive programs for reduced usage of the three municipal water systems.

Action 3: *Evaluate* both residential and institutional usage patterns of the three municipal water systems and current water use reduction programs. Recommend new programs targeting lowering water-use patterns.

Strategy 2: Install water-efficient technologies that reduce annual flow through municipal tapwater, wastewater, and stormwater pipes.

Action 1: *Promote and incentivize* water-efficiency technologies to all property owners and, during the permitting phase, require such technologies on all water-related systems.

Action 2: *Promote* state-sanctioned water-efficiency wastewater technologies that safely reduce municipal wastewater flow for all existing buildings and, for all relevant building permits, require technologies that result in reductions. These technologies could include composting toilets, graywater re-use, and on-site biological wastewater treatment systems.

Action 3: *Promote* Low Impact Development (LID) techniques for all properties and, when issuing building permits, require use of LID techniques. These techniques include minimizing pavement/building footprint plus installing rain gardens, infiltration trenches, permeable pavers, rainwater harvesting systems, green roofs, vertical gardens, drought-tolerant/layered vegetation, and “permaculture” design techniques.

Strategy 3: Develop alternative water sources that will reduce current flow levels in the municipal piping systems.

Action 1: *Install* community sustainable water demonstration sites in high-traffic and accessible existing enterprises that demonstrate large-scale usage of alternate water sources, such as rainwater and graywater.

Action 2: *Develop* a system for reclaiming municipal treated wastewater for state-approved functions within the City of Corvallis.

Goal 2: By 2025, Corvallis watersheds will be revived to conditions that provide healthy habitat characteristics that support reproducing populations of cold water native fish as indicator species of aquatic health in Corvallis principal streams.

Strategy 1: Evaluate current stream habitat characteristics and develop a plan to meet the designated federal or state standards, whichever is higher.

Action 1: *Evaluate* the presence and conditions of cold water native fish in the waterways.

Action 2: *Engage* property owners adjacent to principle streams in the evaluation of the healthy habitat characteristics, such as diversity and biomass of native riparian vegetation and native aquatic fauna, natural stream flow patterns, and a functioning underground hyporheic zone.

Action 3: *Engage* property owners adjacent to principle streams in the planning process to remediate, where necessary, stream characteristics and to preserve the existing healthy stream characteristics.

Strategy 2: Reduce or eliminate piped stormwater from draining directly into streams.

Action 1: *Evaluate* the number and impact of direct storm drain outfalls on local waterways.

Action 2: *Open and set back* piped stormwater outfalls that drain directly into streams.

Action 3: *Construct* velocity-reducing wetlands and/or buffers between selected piped stormwater outfalls and stream channels.

Strategy 3: Improve and protect Corvallis urban stream corridors to provide habitat characteristics that support cold water native fish.

Action 1: *Pursue* acquisition or easement to protect land along principle stream corridors.

Action 2: *Implement* plans to improve healthy stream characteristics.

Action 3: *Evaluate and develop* plans to increase sufficient vegetation throughout the Corvallis watersheds that will provide ecological and hydrological support to cold-water native fish in the streams.