

# Water Efficiency Plan

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## WATER EFFICIENCY PLAN

— GREELEY, CO —



2022

# Water Efficiency Plan (WEP)- What is it and why now?

- Technical document
- Required by the State
- Updated every 5-7 years



# Planning methodology

- Sustainable water future
- Use of
  - Imagine Greeley Comprehensive Plan, February 2018
  - Water Conservation Plan, 2017
  - Greeley Non-Potable Water Master Plan, June 2021
  - Greeley Water Transmission and Distribution Master Plan, June 2021
  - Greeley Integrated Water Resources Plan, draft 2022
  - Greeley Drought Emergency Plan, January 2021
  - Enhancing Greeley's Water Efficiency Portfolio through Performance Analysis Report, May 2022



# WEP- Roadmap with goals

- Create efficiencies, synergies, and consistencies among policies, plans, projects and programs
- Maximize cost savings opportunities
- Create goals to measure success and progress

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**2,034 acre-feet of water savings by 2030**





# WEP- Tools

1. Triple bottom line
2. Selection Process
3. Implementation
  - Score cards



# WEP- How to make the target goal?

Triple Bottom Line Approach:

- Community
- Prosperity
- Management





# WEP- Goals

2,034 acre-  
feet of  
water  
savings by  
2030



Community	Performance Indicators	Status	Resources Allocation
<b>Education- Lecture and Presentations</b>	<ul style="list-style-type: none"> <li>▪ Educational awareness of methods for water conservation.</li> <li>▪ Community outreach and engagement for classrooms, civic clubs, and other groups.</li> <li>▪ Work to enhance cohesiveness of presentations and water related topics.</li> </ul>	Ongoing	<ul style="list-style-type: none"> <li>▪ Staff Time- Full time person assigned to Water Conservation Administration</li> <li>▪ Guest speakers</li> <li>▪ Educational materials</li> <li>▪ Marketing</li> </ul>
<b>Education-Teacher Training</b>	<ul style="list-style-type: none"> <li>▪ Provide teachers credits for water and conservation issues for local teachers</li> <li>▪ Correlate material within lesson plans towards water resources</li> </ul>	Ongoing	<ul style="list-style-type: none"> <li>▪ Staff Time- Full time person assigned to Water Conservation Administration and Water Conservation Specialist</li> <li>▪ Educational materials (models, lesson plans, etc.)</li> <li>▪ Credits and Transportation</li> </ul>
<b>Education- Tours</b>	<ul style="list-style-type: none"> <li>▪ Provide the public with opportunities to tour Water facilities including the Water-wise gardens.</li> </ul>	Ongoing	<ul style="list-style-type: none"> <li>▪ Staff Time- Full time person assigned.</li> <li>▪ Educational Materials</li> <li>▪ Hand-on demonstration</li> <li>▪ Transportation</li> </ul>
<b>Online Water Efficiency Tools</b>	<ul style="list-style-type: none"> <li>▪ Maintenance and updates to current online tools.</li> <li>▪ Contract agreements and associated budgets.</li> <li>▪ Ensure tools are customer friendly and provide accurate information.</li> </ul>	Ongoing	<ul style="list-style-type: none"> <li>▪ Staff Time- Full time water conservation assigned.</li> <li>▪ Legal for contract agreements.</li> <li>▪ Internal Departments- IT and Communications and Engagement.</li> </ul>
<b>Technology and Innovation</b>	<ul style="list-style-type: none"> <li>▪ Survey to evaluate program outreaches and more effective communication strategies.</li> <li>▪ Use data-based information to construct a more effective outreach strategy.</li> <li>▪ Explore methods to engage all sectors of the community and embrace diversity.</li> </ul>	New (2021)	<ul style="list-style-type: none"> <li>▪ Staff Time- Full time person assigned to Water Conservation Manager and Administration</li> <li>▪ Survey materials</li> <li>▪ Open Forums</li> <li>▪ Marketing</li> </ul>
<b>Strategic Marketing Plan</b>	<ul style="list-style-type: none"> <li>▪ Create quarterly plans to support objectives of the water conservation program related to marketing strategies.</li> <li>▪ Quarterly report on progress on all strategic briefs including budget allocation will be created.</li> <li>▪ Alignment of other city public relations strategic planning with Water Conservation</li> </ul>	Ongoing	<ul style="list-style-type: none"> <li>▪ Staff Time- Full time person assigned to Water Conservation Manager, Water Conservation Administration and Community Engagement Department</li> <li>▪ Budgeting</li> </ul>
<b>Collaboration</b>	<ul style="list-style-type: none"> <li>▪ Outreach to community businesses, non-profits, irrigation and landscape industries, etc. to create partnerships and methodology for water savings.</li> <li>▪ Tap into the Water-Energy nexus.</li> <li>▪ Provide guidance for partnerships.</li> <li>▪ Reduce barriers and provide value</li> </ul>	Ongoing and New	<ul style="list-style-type: none"> <li>▪ Staff Time- Full time person assigned to Water Conservation Manager, Water Conservation Administration and Water Conservation Specialist.</li> <li>▪ Hosting meetings and forums</li> <li>▪ Agreements</li> <li>▪ Associated educational credits and certifications</li> <li>▪ Educational materials</li> </ul>



# WEP- Goal

**2,034  
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Prosperity	Performance Indicators	Status	Resources Allocation
<b>Rebates and Incentives</b>	<ul style="list-style-type: none"> <li>Annual review of rebate program including alignment with state and federal standards, industry changes and data-driven decisions on rebate performances.</li> <li>Annual review of return on investment and water savings.</li> <li>Alignment with the Water Department &amp; City initiatives.</li> </ul>	Ongoing	<ul style="list-style-type: none"> <li>Staff Time- Full time water conservation manager and water conservation specialist assigned.</li> <li>Federal, State and local standards to guide changes</li> <li>Alignment with other City initiatives</li> <li>Finance and Billing Departments</li> </ul>
<b>Advanced Metering Infrastructure (AMI) Optimization</b>	<ul style="list-style-type: none"> <li>Expansion of WaterSmart participation</li> <li>Utilization of spatial data paired with other dataset to detect patterns in water budgets, rebate/incentives utilization, irrigation practices, etc. to improve the Water Conservation programs.</li> <li>Utilize WaterSmart's data to improve efficiency, communications strategies and customer engagement.</li> <li>Provide customers with notifications and/or alerts regarding water usage</li> </ul>	Ongoing and New	<ul style="list-style-type: none"> <li>Staff Time- Full time water conservation assigned.</li> <li>Internal Departments- IT, Water Resources, Meter Shop, Engineering, GIS, Water Conservation, Billing and Finance</li> <li>WaterSmart software</li> </ul>
<b>Leak Detection</b>	<ul style="list-style-type: none"> <li>Reduction of water loss due to leaks.</li> <li>Provide customers with notifications and/or alerts regarding water usage (i.e. water leaks, burst water pipes, emergency water issues).</li> <li>Leak repair credit</li> <li>Develop a new program to quantify and reduce leaks.</li> </ul>	New	<ul style="list-style-type: none"> <li>Staff Time- Full time and part-time water conservation assigned.</li> <li>Internal Departments- IT, Water Resources, Meter Shop, Engineering, GIS, Billing and Finance, and Communications and Engagement</li> <li>WaterSmart software</li> <li>Educational materials and marketing</li> </ul>
<b>Enforcement</b>	<ul style="list-style-type: none"> <li>Provide educational opportunities and/or fees to water wasters.</li> <li>Enforcement of the Landscape and Irrigation Criteria, and lawn variances.</li> <li>Develop policies and tracking methods for Drought Emergency Plan, Landscape and Irrigation Criteria and lawn variances.</li> <li>Develop policies and methods for tracking</li> <li>Community outreach and engagement.</li> </ul>	New	<ul style="list-style-type: none"> <li>Staff Time- Full time and part-time water conservation assigned</li> <li>Internal Departments- IT, Water Resources, Meter Shop, GIS, Billing, Finance, Parks, and Community Engagement.</li> <li>Seasonal staff for enforcement</li> <li>Alignment with other City initiatives</li> <li>Educational materials and marketing</li> </ul>
<b>Income Qualified</b>	<ul style="list-style-type: none"> <li>Ensure social equality for Water Conservation programs and project.</li> <li>Enhance opportunities to serve all community members.</li> <li>Explore methods to engage all sectors of the community and embrace diversity.</li> </ul>	New	<ul style="list-style-type: none"> <li>Staff Time- Full time and part-time water conservation assigned</li> <li>Internal Departments- IT, GIS, Billing, Finance, and Communications and Engagement.</li> <li>Community Engagement.</li> <li>Educational materials and marketing</li> </ul>



# WEP- Goal

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acre-feet  
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Water Conservation Management	Performance Indicators	Status	Resources Allocation
Organizational Collaboration	<ul style="list-style-type: none"> <li>Continue to leverage community and professional partnerships.</li> <li>Expand Water-Energy nexus, CII high water use relations, stormwater partnerships, etc.</li> <li>Alignment with community partnerships</li> <li>Pilot projects- testing new ideas based on data</li> </ul>	Ongoing	<ul style="list-style-type: none"> <li>Staff Time- Full time person assigned.</li> <li>Federal and State standards to guide changes</li> <li>Align with other city initiatives</li> <li>Align with community partnerships</li> <li>Memberships, sponsorships, etc.</li> <li>Data monitoring</li> </ul>
Land Use	<ul style="list-style-type: none"> <li>Leveraging the Water budget for all customer classes targeting outdoor water use.</li> <li>Promoting water wise landscapes and demonstration garden areas.</li> <li>Maintenance of the Landscape and Irrigation Criteria</li> <li>Survey landscapes to have a pulse on landscape health.</li> </ul>	Ongoing and new	<ul style="list-style-type: none"> <li>Staff Time- Full time person assigned.</li> <li>Align with other city initiatives</li> <li>Community Engagement.</li> <li>Educational materials</li> <li>Marketing</li> </ul>
Water Conservation Development	<ul style="list-style-type: none"> <li>Aligning performance goals with the annual scorecard and 5-year scorecard.</li> <li>Provide training and leadership opportunities for staff.</li> <li>Workload alignments with individual programs.</li> <li>Improve efficiency through cross-training, documenting operations and procedures, increase internal mobility and ensure collaboration.</li> <li>Targeting water efficiency programs</li> </ul>	Ongoing and new	<ul style="list-style-type: none"> <li>Staff Time- Full time Water Conservation Manager</li> <li>Align with other city initiatives</li> <li>Training</li> <li>Memberships, sponsorships, etc.</li> </ul>
Financial Resources and Budget	<ul style="list-style-type: none"> <li>Submit a water conservation budget annually.</li> <li>Track budget and return on investment for each program.</li> <li>Leverage resource through grants and other funding opportunities.</li> </ul>	Ongoing	<ul style="list-style-type: none"> <li>Staff Time- Full time Water Conservation Manager and input from staff.</li> </ul>
Reporting	<ul style="list-style-type: none"> <li>State reporting including HB1051</li> <li>Annual score cards to the Board</li> <li>Ensuring website information, reports and forms for the public are updated.</li> <li>Aligning data analysis internally on water consumption.</li> <li>Drought Emergency Plan reserve tracking</li> <li>Update Water Efficiency Plan</li> </ul>	Ongoing and New	<ul style="list-style-type: none"> <li>Staff Time- Full time person assigned.</li> <li>Internal staff- Water Resources, IT, and Communications and Engagement</li> </ul>
Water Loss	<ul style="list-style-type: none"> <li>AWWA M36 Water Loss Audit (M36) occurring annually.</li> <li>Internal collaboration on water loss</li> <li>Assets management with AML meters.</li> </ul>	Ongoing and New	<ul style="list-style-type: none"> <li>Staff Time- Full time person assigned.</li> <li>Alignment with AWWA audits</li> </ul>

# WEP- Total future water savings by 2030

TLB Type	Acre-Feet
Community	386
Prosperity	1,363
Water Conservation Management	285
<b>Total</b>	<b>2,034</b>





# WEP- Making the mark

## Score Cards

- Updated annually reported back to Board
- Tied to staff performance evaluations

## Selection of Water Efficiency Activities

- Water Savings Potential
- Cost Effectiveness
- Community Vitality
- Likelihood of success



# Water Sustainability

- Innovation and technology
- Customer service
- Continue and build on Greeley's water conservation history
- Sustainability and environment
- Pulse on acceptance







# Questions