

**Lower Raritan Watershed Management Area  
Land Use, Wastewater & Water Supply Subcommittee  
Strategy Worksheet LRLU-S1B4  
Strategy Worksheet LRLU-S2A3**

<p><b>Strategy Name:</b> Water Conservation &amp; Re-Use Programs <b>LRLU-S1B4 &amp; LRLU-S2A3.</b> Develop and implement programs to reduce peak daily and average annual per capita water withdrawals through water conservation and re-use.</p>	<p>Strategy Priority: M (H/M/L)</p>
<p><b>Objectives Addressed by Strategy:</b> <b>LRLU-O1B.</b> By 2012, new development and redevelopment will not diminish the quality and quantity of ground water. 30% of municipalities in the Lower Raritan will adopt such requirements by 2008; 100% of municipalities will adopt such requirements by 2014. <b>LRLU-O2A.</b> By 2012, new development and redevelopment will not diminish the quality and quantity of surface water. 30% of municipalities in the Lower Raritan will adopt such requirements by 2008; 100% of municipalities will adopt such requirements by 2014. <b>LRLM-O1A.</b> Land use and management practices will maintain ground water at a level that sustains year round stream base flows while providing for both human needs and basic ecosystem functions in the Lower Raritan WMA.</p>	<p>Strategy Schedule: (Begin/End)</p>
<p><b>Narrative Description of Strategy:</b> Current NJDEP regulations require that water purveyors develop water conservation plans, which require a focus on water losses through leaks in transmission pipelines, etc. in order to improve the efficiency of water delivery so that less water needs to be withdrawn from the source. The State of NJ adopted water conservation standards that are equivalent to federal and DRBC standards – new construction and replacement fixtures must use water conserving fixtures (e.g. toilets, sink faucets, shower heads).</p> <p>The intent of this strategy is to develop and implement programs that promote water conservation and re-use. For example, various wastewater utilities provide treated effluent for use in place of potable water for street sweeping operations. PSEG Power's Bergen Generating Station (Ridgefield/Bergen County) also uses treated wastewater for cooling operations. Other applications recommended by NJDEP (20 June 2002 Executive Order regarding water use restrictions) include landscaping beds, street sweeping, nurseries, non-edible crops, golf courses, roadside plantings and mobile fire protection. Middlesex County Utilities Authority currently has a wastewater-reuse program in effect. In addition, the strategy will work to identify and promote water conservation practices to be promoted at all times and other practices to be promoted during drought situations.</p> <p><b>Areawide WQM Plan Consistency Determination Issues:</b> NA</p>	

Action Plan (Steps or Tasks)	Responsible Parties for Planning, Design & Implementation <sup>1</sup>	Responsible Parties for Oversight	Resource Needs <sup>2</sup>	Committed or Recommended Resources	Major Challenges and Opportunities	Evaluation Method & Indicators	Schedule and Milestones for Implementation
1. Identify prudent water practices to be promoted at all times.	C: R: Elizabethtown Water Co., Middlesex Water Co., other water utilities within the WMA, LRLU (if active) <sup>3</sup>	C: R: LRMC-WRA LRWMG LRWMAC <sup>4</sup>	L	C: R: Existing resources		Identification of practices	

**LRLU-S1B4 & LRLU-S2A3** Water Conservation & Re-Use Programs

Action Plan (Steps or Tasks)	Responsible Parties for Planning, Design & Implementation <sup>1</sup>	Responsible Parties for Oversight	Resource Needs <sup>2</sup>	Committed or Recommended Resources	Major Challenges and Opportunities	Evaluation Method & Indicators	Schedule and Milestones for Implementation
2. Identify additional water conservation practices to promote during drought situations.	C: R: Elizabethtown Water Co., Middlesex Water Co., other water utilities within the WMA	C: R: LRMC-WRA LRWMG LRWMAC	L	C: R: Existing resources		Identification of practices	
3. Investigate feasibility of and opportunities for re-use of treated wastewater.	C: R: NJDEP, sewage treatment plants, LRLU, Raritan Ag Committee	C: R: LRMC-WRA LRWMG LRWMAC	L	C: R: Existing resources	Challenge: Must avoid harming existing water resources through inappropriate reuse	Completion of feasibility analysis Identification of opportunities	
4. If determined to be feasible, develop and implement programs to increase water re-use of treated wastewater.	C: R: NJDEP, sewage treatment plants, business and industry, Raritan Ag Committee	C: R: LRMC-W LRWMAC	L-M	C: R: Revenue generated from project use	Challenge: Acceptance of treated wastewater as safe for use	Evidence that businesses and industry are utilizing treated wastewater	
5. Develop and implement a campaign to promote prudent water use at all times by all water users.	C: R: NJDEP, water utilities, NJWSA, LREO	C: R: LRMC-WRA LRWMG LRWMAC NJWSA	L	C: R: Existing resources, 1981 Water Supply Bond Fund	Challenge: Reaching appropriate audiences	Water use rates during peak periods	
6. Develop and implement a campaign to be utilized during drought warning or emergency periods to promote water conservation by all water users, including homeowners, business and industry. <sup>5</sup>	C: R: NJDEP, water utilities, NJWSA, LREO	C: R: LRMC-WRA LRWMG LRWMAC NJWSA	L	C: R: Existing resources, 1981 Water Supply Bond Fund	Challenge: Reaching appropriate audiences	Water use rates during drought and emergency periods	

<sup>1</sup> C = Committed, R = Recommended

<sup>2</sup> General Estimates: Low = \$5,000 - \$50,000; Moderate = \$50,000 - \$250,000; High = \$250,000 - \$1 million; Very High = over \$1 million

<sup>3</sup> All qualifiers for subcommittees in #1 (e.g. if active) apply throughout the action plan.

## LRLU-S1B4 & LRLU-S2A3 Water Conservation & Re-Use Programs

---

LRLU = Lower Raritan Land Use, Wastewater & Water Supply Subcommittee

LREO = Lower Raritan Education & Outreach Subcommittee

NJDEP = New Jersey Department of Environmental Protection

PSEG = Public Service Electric & Gas

<sup>4</sup> LRMC-WRA = Lower Raritan-Middlesex County Water Resources Association

LRWMA = Lower Raritan Watershed Management Area Committee or equivalent

<sup>5</sup> Rutgers Cooperative Extension. A Guide to Designing a Community Water Conservation Program. <http://www.rce.rutgers.edu/pubs/pdfs/ec378.pdf>

Rutgers Cooperative Extension. Hints for Household Water Conservation. <http://www.rce.rutgers.edu/pubs/pdfs/fs862.pdf>

Rutgers Cooperative Extension. Water Conservation for Homes, Institutions and Business. <http://www.rce.rutgers.edu/pubs/pdfs/fs107.pdf>

NJDEP Drought Information Page. <http://www.njdrought.org>

NJDEP Save Water Outreach & Education Resources. <http://www.state.nj.us/dep/seeds/drought/drought.htm>

Rutgers Cooperative Extension Drought Web Page. <http://drought.rutgers.edu/>

USEPA. 1995. Cleaner Water Through Conservation. <http://www.epa.gov/water/you/intro.html>

NJWSA = New Jersey Water Supply Authority

DRBC = Delaware River Basin Commission

LRWMA = Lower Raritan Watershed Management Group