

SUSTAINABLE DECATUR

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Water Working Group – May 19, 2010

The working group began by reviewing and affirming the vision statement recommended by the Sustainability Team:

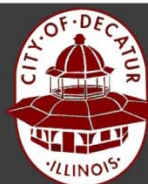
The Decatur area promotes economic prosperity, social and community well-being, and environmental stewardship for generations to come.

We welcome the world to join our region as we continually seek innovative, marketable, and environmentally sound public and private actions, strong collaboration to improve the community's well-being, and involved residents who are stewards of their city and environs.

The working group then reviewed and suggested edits to the five water-related goals:

- Protect the water quality of the Sangamon River Basin including the Lake Decatur Watershed.
- Improve stormwater quality and reduce runoff by implementing Best Management Practices (BMPs)
- Ensure that Decatur has an adequate water supply to allow for both population growth and economic development.
- Promote environmentally responsible and efficient conveyance & treatment of wastewater to meet long-term needs.
- Produce a market for bioenergy in a way that protects water resources.

The working group then discussed each goal, baseline analysis, available data for each indicator, and suggested strategies to meet the goals.



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Goal #1 Improve stormwater quality and reduce runoff by implementing Best Management Practices (BMPs)

| Stormwater Baseline Indicators | | |
|---|---------------|----------------------------|
| Baseline Indicator | 2010 Baseline | 2020 Goal |
| Number of citizen response system reports regarding flooding. | | |
| Annual expenditures for stormwater capital improvement projects | \$ 100,000 | \$5 million (2010 dollars) |
| # of acres of reduced flooding through capital improvement projects | 0 | |
| Number of acres rehabilitated with BMPs | 0 acres | |
| Number of acres of new development with BMPs | 0 acres | |

Stormwater Strategies

- Define use of BMPs in stormwater ordinances throughout County.
- Utilize BMPs as a strategy to address current issues through capital improvement plans.
- Educate public regarding use of naturalized stormwater management (rain gardens, native plants, rain barrels, disconnecting drain spouts) and importance of stormwater quality.
- Examine public and private areas for naturalized stormwater management (parkways, boulevards, streams, etc).



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Goal #2: Decatur will ensure that it has an adequate water supply to allow for both population growth and economic development.

| Water Supply Management Baseline Indicators | | |
|---|--|--|
| Baseline Indicator | 2010 Baseline | 2020 Goal |
| Obtain additional water supply. | 22,000 acre-feet | 10,000 additional acre feet |
| Dredge portions of Lake Decatur | 900 acre-feet over past 6 years | At least 2,887 acre feet over next 5 years |
| Maintain Lake Decatur storage capacity | 22,000 acre-feet | 25,000 acre-feet |
| Watershed erosion control measures Tons of soil conserved annually | | |
| Improve Lake Decatur water quality | 33.4 Nephelometric Turbidity Units (NTU) | 31.7 NTU* |
| Stream quality | Tbd | Tbd |
| Reduce average daily residential water use | X gal/day | X-5% gal/day |

Water Supply Strategies:

- Expand water supply
 - Public and private strategies
 - Lake Tokorozawa
 - ADM
 - Shallow aquifer
- Improve quality
 - Erosion and sedimentation measures on agricultural lands, construction, and streams
 - Improve monitoring of Lake Decatur and tributaries
 - Improvement of shorelines by property owners
- Water conservation
 - Continue to invest in reducing water main leakage



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- Reduce public consumption:
 - Ultra low-flow appliances
 - Rain sensors on irrigation and smart controllers
 - Expand rain barrel use
 - Reduction of irrigated turf area
 - Low impact development policies
- Explore use of non-potable water irrigation of golf courses and athletic fields
- Improve drought preparedness plan

Goal #3: Increase use of sustainable production of bioenergy

| Baseline Indicators | | |
|---|---------------|-----------|
| Baseline Indicator | 2010 Baseline | 2020 Goal |
| Number of acres of perennial energy grasses | 8 acres | |
| Quantity of perennial energy grasses consumed in Decatur | | |
| Quantity of sustainable bioenergy exported beyond Decatur | | |

Bioenergy Strategies:

- Build market for bioenergy – recruit purchasers
- Recruit ag participants for demonstration project
- Determine bioenergy crops/perennial grasses that would be most beneficial to the watershed and water quality



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Goal # 4: Promote environmentally responsible and efficient conveyance & treatment of wastewater to meet long-term needs.

| Wastewater Baseline Indicators | | |
|---|---------------|-----------|
| Baseline Indicator | 2010 Baseline | 2020 Goal |
| Lineal feet of sewer rehabilitation annually | | |
| Reclaimed treated municipal wastewater reused for non-domestic purposes | 0 | 2.5 mgd |
| Number of sanitary overflows annually | | 0 |
| Reduce number of Customer Response for sewer surcharge | | 0 |

Wastewater Strategies

- Implement asset management plan
- Actively seek partnerships for reclamation of municipal treated water
- Pursue a delivery system to reuse water
- Public education program fats, oils and greases
- Public education for sump pump disconnection
- Continue to reuse 100% of biosolids

