

WATER & WASTE WATER

The following vision statement, goals and objectives were developed by the Water and Wastewater Subcommittee with input from the local community. Appendix A includes 1) current efforts within the community of Stevens Point, 2) the process used to prioritize recommendations for future actions, and 3) information solicited from the community regarding vision, goals and objectives.

VISION STATEMENT

The community of Stevens Point values its surface and groundwater resources. The community's actions result in no negative environmental impact and enhance the quality of life for all living beings.

GOAL 1: To improve and maintain the groundwater resources of Stevens Point.

Objective 1.1: Reduce levels of contaminants in the source waters used to supply the city's drinking water.

Many land-use activities have the potential to contaminate our groundwater supply. Since groundwater is the primary source of water for Stevens Point's municipal wells, it is important that we have plans in place to protect the recharge areas of the city's wells and reduce the need for costly contaminant removal technology. Zones A and B include the land area in which water travels to the City wells in 5 and 10 years respectively. Activities in this area have the potential to affect the water supply quickly because of their proximity to the well.

Action 1: Send educational materials about nitrogen fertilizers in zones A and B of the wellhead protection ordinance and arrange educational programs for landowners in these areas about their role in protecting drinking water quality. Rating: 9.4

Nitrate levels have been increasing in some of Stevens Point's municipal wells to the point where the City will be installing nitrate treatment technology. Landowners have a critical role to play in protecting water quality. Fertilizer inputs are one source of nitrate in groundwater; educating land-owners about their role in protecting drinking water quality may help in transitioning to practices that reduce nitrogen inputs and minimize the need for nitrate removal technology.

Action 2: Continue to investigate and purchase when feasible lands or conservation easements in zones A and B of the wellhead protection

ordinance that will lead to a reduction in the application of pesticides and nitrogen. Rating: 8.2

Purchasing lands or conservation easements offers the city an opportunity to control what activities are allowed to take place in the recharge area of the City's wells; ultimately offering greater protection of water quality.

Action 3: Offer incentives and/or investigate grant programs that enable agreements to be reached with interested farmers in zones A and B of the wellhead protection ordinance. Agreements could encourage farmers to transition to certified organic agriculture practices or grow crops that require less nitrogen fertilizer inputs. Rating: 7.8

Incentives or agreements with farmers to promote groundwater friendly practices within those zones would help to reduce nitrogen and pesticide inputs in the most critical wellhead recharges zones of the municipal wells; ultimately resulting in improved water quality of our municipal water supply.

Action 4: Investigate the creation of a Drinking Water Protection Fund to fund projects that protect the city's municipal water supply. Rating: 7.6

Projects that work to protect drinking water quality are difficult to fund because they are not directly associated with the energy or infrastructure costs of providing water. A dedicated source of funds would allow for funding of projects that work towards protecting water quality and hopefully avoid the need for expensive water treatment. Long-term these projects have the ability to eliminate the need for treatment; thereby saving the city money or even generating revenue if lands are able to be used for activities such as timber production or groundwater-friendly agriculture.

Objective 1.2: Reduce water consumption and improve water use efficiency to minimize impacts of groundwater withdrawals on the Plover River.

As demand for water increases, more infrastructure is needed to produce water and treat resulting wastewater. Conserving water helps to extend the life of water supply infrastructure; which in turn keeps water rates low, effectively increases the capacity to provide water to expanding populations and emerging industries, and helps to minimize the negative effects of groundwater pumping on the Plover River.

Action 1: Advertise Wisconsin Focus on Energy rebates for water-saving devices to water customers. Rating: 8.0

Many homeowners may not realize that there are incentives available for people that install water saving devices. Being able to take advantage of incentives may make the difference between purchasing a water-saving device (which initially are often more costly) versus traditional devices.

- Action 2: Encourage new construction to incorporate water reuse (greywater and/ or stormwater reuse) and/or conservation technologies. Rating: 7.6

New buildings have the potential to use much less water because of new technologies and changes to plumbing codes. Businesses that invest in water conservation and water reuse technologies help to increase the city's overall water use efficiency. This helps to decrease the demand for water, decrease the amount of wastewater produced, and in the case of stormwater-reuse reduce the impacts of stormwater.

- Action 3: Investigate opportunities to use wastewater effluent for irrigation or other landscape watering needs on city property or local businesses. Rating: 7.2

Effluent is treated wastewater that would normally be discharged to the Wisconsin River. Using effluent for irrigation ensures that potable water is not being used on activities for which a lower quality of water could be used. Using effluent for irrigation also reduces the amount of nutrients that are being discharged to the Wisconsin River.

- Action 4: Develop an ordinance to only allow unattended watering of landscaping before 10 a.m. and after 5 p.m. to reduce the amount of evaporation. Rating: 7.0

Large amounts of water are lost to evaporation, particularly during the hottest part of the day. By limiting landscape watering around the hottest part of the day, less water is needed to satisfy the plants water requirements. An ordinance ensures that the city has the authority to limit water use during periods of drought when using large amounts of water can put stress on the water system. Every other day lawn water restrictions may also be an alternative tool.

- Action 5: Investigate the implementation of a residential rate structure for Stevens Point that rewards conservation (seasonal or inclining rate structure). Rating: 6.2

Currently Stevens Point has a declining rate structure which means that the price per unit of water drops after a certain volume of water is reached. This type of rate structure does little to provide incentive for

conservation. The volume of water sold by the Stevens Point water utility is greatest during summer months when flows in the Plover River are at their lowest. Groundwater pumping as a percentage of water flow in the Plover River during this time is also at its highest. Conservation oriented rate structures provide incentive for residents to become more efficient water users which should aid in reducing the city's peak demand for water and reduces negative effects of pumping on the Plover River. Two types of rate structures that could be investigated include: 1) A seasonal rate structure charges more per unit of water when the overall demand for water is at its highest, 2) In an inclining rate structure, the price per unit of water goes up once a certain threshold is reached. These thresholds can be set so only those residences that use a disproportionate amount of water are affected and the average homeowner would see little to no difference in their water bill.

GOAL 2: To improve and maintain the rivers, lakes, ponds and wetlands of Stevens Point.

Objective 2.1: Reduce the amount of storm water and pollutants that flow into surface waters.

Whenever rain falls or snow melts water flows across city streets and other impervious areas washing soil particles, pesticides, pet wastes, oil and other pollutants into lakes and streams. Sediments, nutrients, other pollutants, and thermal heat transported by stormwater contribute to many of the problems in our streams and lakes.

Action 1: Create a rain barrel demonstration site in Stevens Point and develop a local source of rain barrels at a reasonable cost. Provide associated educational materials and technical assistance for homeowners.
Rating: 9.2

Rain barrels collect stormwater from roofs and other impervious surfaces. This helps to reduce stormwater volumes and the ability of water to transport pollutants. The collected water is utilized for landscape irrigation which helps to conserve municipal water.

Action 2: Create a rain garden demonstration site in Stevens Point and provide educational materials related to installation for homeowners and local businesses. Rating: 8.6

Rain gardens are landscaping design features that collect stormwater from impervious surfaces and reduce stormwater that enters surface waters. Instead of routing water from impervious areas to stormwater sewers, the water is first routed to a pervious low area that collects

water and allows it to infiltrate. Many times these depressions are planted

Action 3: Work with the county to only allow the sale of phosphorus fertilizers if a certified soil test shows phosphorus addition is needed. Rating: 6.4

Phosphorus is delivered to surface water primarily through runoff from stormwater events. Increasing phosphorus concentrations in surface waters leads to excessive vegetative growth and algal blooms. Phosphorus builds up in most soils; as a result most soils have sufficient phosphorus levels for plant growth. Banning the sale of phosphorus fertilizers (unless a soil test shows its lacking) ensures that phosphorus is not unnecessarily being applied to lawns. A city-wide ban would likely not be as successful as a county-wide ban.

Objective 2.2: Protect and enhance the aesthetic beauty of Stevens Point's water resources for all to enjoy.

High quality and attractive water resources that are easily accessible increase property values and can contribute to a high quality of life.

Action 1: Identify and prioritize sensitive lands, distinctive open spaces and natural areas surrounding Stevens Point's lakes, rivers and streams that are worth preserving. Rating: 7.4

Lands directly adjacent to surface waters have great ecological and aesthetic significance. Identifying areas based on their sensitivity or uniqueness will help the community prioritize which lands to focus on preserving for future generations.

GOAL 3: To reduce environmental impacts of wastewater discharge and byproducts produced by the Stevens Point community.

Objective 3.1: Reduce fossil fuel use associated with operating water and wastewater facilities.

The processing of water and wastewater is a very energy intensive process and therefore costly. Using fossil fuels to generate energy also contributes to the production of greenhouse gases.

Action 1: The water utility will continue to investigate and incorporate energy efficiency and renewable energy technologies to help power water and wastewater operations. Rating: 6.2

Energy efficiency helps to decrease the amount of pollution generated by fossil fuels for purposes of water and wastewater treatment. Energy

efficiency can also result in cheaper water rates. Renewable energy offers cleaner solutions to producing energy.

Objective 3.2: Reduce the amount of pollutants and byproducts discharged into surface waters.

GOAL 4: To be knowledgeable stewards of all Stevens Point's water resources.

Objective 4.1: Education and promotion of good water stewardship practices.

While most people want to do the right thing, sometimes it's a matter of not knowing what good water stewardship practices are and how they help the community.

Action 1: Mark storm sewer drains to prevent dumping anything into them except storm water. Rating: 9.6

Stenciling storm drains is one way to inform residents that anything that enters the storm drain will eventually wind up in Stevens Point's rivers or streams.

Action 2: Work with local businesses to support a Stevens Point "Where Water Matters" campaign to encourage water conservation, promote water quality and quantity friendly landscaping practices, inform residents of the benefits of trees for improving water quality, provide ways for residents to minimize their impact on the environment, inform about the value of water to our local economy, and advertise interesting facts about the City's water resources. Rating: 9.0

An educational campaign is a way to help raise awareness of local water issues in Stevens Point. It is also a way for local businesses and residents to show pride in our community and take ownership of our water resources. .

Action 3: Work to support a water education program in the Stevens Point School District. Rating: 8.6

Golden Sands RC & D has a model program for groundwater education in the classrooms; however the program in Portage County was discontinued. With a little support it may be possible for them to again target Stevens Point schools for water education.

Action 4: Install an educational display on the Green Circle Trail about the Plover River Watershed and its role in providing water for Stevens Point. Rating: 8.2

Many people in Stevens Point use the Green Circle Trail for recreation. A watershed is the land area that contributes water to a particular body of water. A sign on the trail about the Plover River Watershed as the source of Stevens Point's water is an easy way for residents of the area to better understand groundwater and where the city's drinking water comes from.

Action 5: Work with the Portage County Master Gardeners to organize a garden walk for sustainable landscaping in the city of Stevens Point. Rating: 6.8

Landscaping is important to maintaining the beauty and character of neighborhoods. Offering attractive landscaping ideas that use less water and fewer chemicals may encourage residents to do the same.

Objective 4.2: Attract businesses that promote water stewardship.

Action 1: Actively pursue the creation of small businesses that process and market local groundwater friendly products (organic agriculture practices, rotational grazing, local sources of timber, etc.). Rating: 8.2

There is an increasing trend of consumers looking for locally and organically grown foods and products. Pursuing or encouraging businesses that use and market locally produced groundwater friendly products is good for the environment and good for the local economy.

Objective 4.3: Monitor the relationship between the community of Stevens Point and its water resources.