

Innovation in West Michigan

Sustainability



Sustainability: making wise use of our natural resources to assure they will meet the needs of future generations – is everyone’s responsibility. At the Holland BPW we take this responsibility seriously, from the sustainable practices we employ in our day-to-day operations to the tools and teachings we share with our customers and community.

Sustainability at the Holland BPW

Sustainability begins at home, and at the Holland BPW we are constantly finding efficiencies, some literally in our own backyard. For example, we have established new landscape management practices that include less frequent mowing for some areas – a simple choice that conserves a significant amount of fuel over the warm-weather months.

Energy Smart

The Holland BPW is engaged with several customer and civic initiatives designed to improve energy use and efficiency. In 2009, the Holland BPW designed and implemented “Energy Smart,” our energy efficiency program focused on encouraging energy efficiency to our residential and commercial & industrial customers.

Our customers saved over 3.2 Million kWh of Electricity

CFL Bulb Recycling Program

We also offer a CFL bulb recycling program for our residential customers. Old CFL bulbs may be dropped off at the BPW Service Center, 625 Hastings Avenue, Holland, MI 49423.

Education is another key component of our public outreach efforts. We are firm believers in the value of CFL and Light-emitting Diode (LED) lighting, which are more energy-efficient, less expensive to operate and longer-lasting than traditional incandescent lights. In addition to changing out all of our traffic signals to LED technology in 2009, we continue to convert other municipal lighting throughout Holland to LED’s, and provide and install 30,000 LED lights each year in Centennial Park to illuminate the city for the holiday season.

Holland Community Sustainability Committee

To further reinforce our commitment to sustainability, the BPW, along with the City of Holland, formed a new committee in early 2009: the Holland Community Sustainability Committee.

This nine member committee, made up of community citizen representatives, is charged with engaging the greater-Holland community in sustainability measures. In 2010, the Sustainability Committee hosted 19 community forums, which gathered information and input on two important subjects: energy management and water management. The committee will continue to explore opportunities to engage the community on other sustainability efforts in the future.

Innovation in West Michigan

Fiber Optics



The Holland BPW has been building the area's fiber optic network since the early 1990s. What began as an innovative approach to improving communications between our substations has expanded to become a fiber optic infrastructure connecting most of the Holland BPW's geographically distributed electronic equipment.

High-Speed Telecommunications

This fiber optic structure also provides high-speed telecommunications access to the Greater Holland area's local governments, schools, small and large businesses, medical offices and community service organizations. Our role in the growing fiber universe is to provide a system "backbone" or highway; we do not provide content. The HBPW presently owns nearly 100 miles of fiber optics cable, and provides two service options: Ethernet Bandwidth and Dark Fiber.

Fiber's Value and Desirability Continues to Grow

New Fiber Lines

Since 2005, we have added several new fiber customers and expanded the reach of several others. Our newest customers include Magna Donnelly, Technocoat/Nu-Var, T2 Communications, Buhler Prince and Berghorst Enterprises.

Longtime customers, including the Ottawa Area School District and Holland Hospital, continue to connect more of their facilities with Holland BPW fiber.

Integration with our Infrastructure

Fiber optics plays an increasingly important role in our own infrastructure as well.

Fiber's value and desirability continues to grow. That's why when Internet powerhouse Google announced plans to build and test ultra high-speed broadband networks in a small number of trial networks across the country, we led a community wide effort called the Holland-Google FiberTown Initiative.



Our campaign incorporated city and county proclamations supporting the initiative; letters of support from community and business leaders; a variety of clever, fun and informative videos about Holland; and the use of social media to spread the word, including Facebook, Twitter and LinkedIn. Although Google has yet to announce its selected cities, the outpouring of public support for the FiberTown Initiative shows Holland is a forward-facing community. We envision a time when every home and business in our service area has a lightning-speed connection through fiber to the information superhighway.

Innovation in West Michigan Electricity



We remain firmly committed to providing reliable electric power in the most energy-efficient, cost-effective and environmentally responsible manner possible. Over the past several years we have made considerable progress in achieving these objectives in a number of areas.

Automated Meter Reading

The HBPW introduced automated meter reading (AMR) in 2005, and today more than 99 percent of all Holland residents benefit from this useful technology. The utilization of AMR across our system has reduced costs, provided more accurate billing, and enabled HBPW to respond more quickly to power outages. Automated metering for our commercial and industrial customers is now nearing completion, as a meter data management system and related software upgrades are in their final stages.

99.5% of Residents now have Automated Meter Reading

Transmission & Distribution

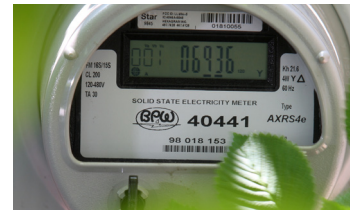
The success of a power utility's Transmission & Distribution (T&D) activity inevitably is determined by its reliability and safety record. Holland BPW is making significant progress in these areas.

Coal

Over the past several years the HBPW has been working hard to improve the economics of internal generation by identifying new coal sources.

Renewable Energy

Over the last few years we have entered into three significant contracts for renewable energy supply.



Automated Meter Reading

(AMR) is just one of many Innovations with Electricity at the BPW

Looking Forward

We believe that a secure energy future must include a cost-effective secure primary power source, effective conservation programs, viable alternative energy solutions and alternative sources for energy purchases - all achievable in an environmentally responsible manner.

Innovation in West Michigan Water



The Holland area's access to abundant reserves of freshwater is unimaginable in many parts of the world. The Holland BPW takes seriously our role as both a supplier of this vital resource to our customers and a steward charged with maintaining its quality and integrity.

Drawing from Lake Michigan as our source, the HBPW water filtration and distribution system contains 230 miles of water main and supports approximately 13,000 service connections and more than 2,300 fire hydrants.

Our water supply is continuously monitored and tested to assure public safety. In recent years we have made several upgrades to systems and equipment to ensure there is always a reliable supply of safe drinking water "on tap."



Ultraviolet Light (UV) Monitor

Jim Van De Wege was nominated for the national award by the AWWA Michigan Section. The AWWA is the world's oldest nonprofit educational society dedicated to the improvement of water quality and supply.

Water Quality Report

In 2008, the Holland BPW earned the AWWA Michigan Section's Annual Water Quality Report Award.

The honor, administered by the section's Customer Satisfaction Committee, is designed to recognize excellence in drinking water utility customer outreach programs, with specific emphasis on the annual Water Quality Report.

Since 2005, the Water Filtration Plant has employed a process that optimizes the use of treatment chemicals. The process has reduced landfill-bound waste byproducts by up to 30%. Significant savings also have been achieved in related hauling and landfill charges.

In 2008, the BPW also renewed a water agreement with Laketown Township. This contract increases delivery from 1.2 million to 1.8 million gallons of water per day. The agreement contains terms under which an additional water filtration plant could someday be built in the township.

In 2008, the BPW completed installation of a new water transmission main below Lake Macatawa. This three year effort supports the transmission of up to 15 million gallons of water per day. During construction, the BPW employed directional drilling technology to install a 30-inch 3,200 ft. long, high-density polyene pipe.

2005

2006

2007

2008

2009

2010

In 2009, outdated and corroded sand filter panel instrumentation was replaced with five strategically situated wireless access points located throughout the water filtration plant. Using laptop computers, on-site staff now manages the filters wirelessly from any location within the plant and monitors the building's overall operation and performance. In addition to creating new water management efficiencies, this project was completed significantly under budget.

In August 2009, the plant installed an online Ultra Violet (UV) monitor. The fully automatic and precisely calibrated UV 254 system monitors organic material in water and provides advance warning of any changes in water quality. All HBPW records are now digitized and available to our field service teams. This enables our staff to access the information immediately from any location and respond to service calls faster and more accurately than before.

Innovation in West Michigan

Wastewater Treatment



Proper treatment and administration of a municipal wastewater system demands constant vigilance to assure the public's health and safety. The Holland BPW fulfills this mission through the management of a sanitary sewer network that includes almost 190 miles of sewer pipe and 35 sewage lift stations spanning the City of Holland as well as portions of Park, Laketown, Fillmore and Holland Charter Township.

Recent Innovations

We work continuously to improve and update our wastewater management systems. Recent innovations include the first-phase launch of a recycled, non-potable water system to serve customers' non-drinking needs in the summer months and the kick-off of a pharmaceutical collection program designed to divert controlled substances from our water supply. We also manage to keep sewer back-ups and similar system disruptions to a minimum.

During our fiscal years 2006 through 2009, we replaced over 4 miles and installed more than 3 miles of sanitary sewer main.

Mercury Reduction Program

Our wastewater treatment plant in 2009 joined the nationally recognized Water and Wastewater Agency Response Network (WARN). The network maintains a mutual aid agreement between its members to come to the aid of their fellow water/wastewater utilities in the event of an emergency affecting water system management.

Personal Pharmaceutical Collection Program

We teamed with the Ottawa County Health Department in 2009 to conduct a Personal Pharmaceutical Collection program. This initiative amassed over 500 pounds of pills, 30 pounds of medicated creams and lotions and 50 pounds of controlled substances for incineration, effectively directing these materials away from the municipal water supply.



Maintenance & Upgrades

At the Waste Treatment Plant, storm drain improvements conducted in fiscal years 2008 and 2009 modified the East Plant's storm drain system so that storm-water discharges are directed into the sanitary sewer on-site rather than into wetlands north of the site.

The improvements were undertaken to prevent any accidental sewage discharge into the Macatawa watershed by sludge haulers loading their trucks at the site.