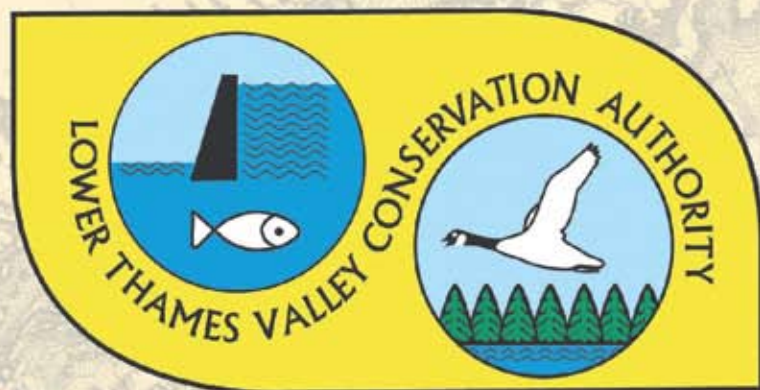


50 years of Conservation



uniongas

A Spectra Energy Company

Read about the Union Gas \$100,000 Centennial Signature Grant Donation to LTVCA on page 3



Compiled from the Latest Authorities

2011

LTVCA Annual Report



9000 BC 1000 BC 900 AD 1500 AD 1600 AD 1700 AD



Hudson's Bay Co
founded May 2, 1670



Tecumseh is killed during
Battle of Longwoods near
Chatham, Ontario October 5, 1813

Chippewa of the Thames
are well established
prior to 1700

French refer to what we now know as the
Thames River as La Tranche or La Rivière
La Tranchée 1745

Caldwell First Nation settlement on Point Pelee

Pre-contact

- First Nations peoples live throughout what is now Southwestern Ontario (Land of Beautiful Water)
- They live within the means of the environment
- Trading between First Nations occurs across North America



First Loyalist
April 1, 1777

Munsee-Delaware settl
Thames River (at Mun
of Delaware) 1783

Moravian Mission among Delaware
Odawa settlement on Walpole Island
Miscellaneous European trappers, tr
settlers in area

Simcoe officially changes name of the Askun
Thames River, and also divides Upper Cana

Pre-History

1800 AD

1900 AD



ing War of 1812 at
ar present day
er 5, 1813

icipation Act abolishes slavery throughout
of the British Empire making Chatham an
tant stop on the Underground Railroad 1833

a from New York State purchase lands along
es River in Middlesex County to establish the
a of the Thames settlement 1840

First telegraph in Canada October 22, 1846

British North America Act March 8, 1867

1763

ists arrive
6

ements along
cey and village

at Fairfield
1792

aders and

nessippi/La Tranche to
la into 19 counties 1793

Dense forests cleared by early Euro-settlers

Ontario Hydro created May 14, 1906

Battle of Vimy Ridge April 9, 1917

First woman elected December 6, 1921

Extensive flooding occurs on
the Thames River April, 1937

Normandy landings
(D-Day) June 6, 1944

1946 Conservation Authorities Act

The Conservation Authorities Act is legislated by
the provincial government in 1946, in response to the
concern by agricultural, naturalist and sportsmen's
groups, that the renewable natural resources of the
province were in an unhealthy state

First Canadian-
born Governor
General
January 24, 1952

October 1954 Hurricane Hazel

After Hazel, the provincial government amends
the Conservation Authorities Act to enable an
authority to acquire lands for recreation and
conservation purposes, to provide flood control
management and regulation for the safety of
the community

Last Spike driven for CPR
November 7, 1885

First Stanley Cup awarded
March 22, 1894

Market crash ignites
depression October 19, 1929
to October 24, 1939

CRBC (future CBC)
established May 26, 1932

Canada declares
war on Germany
September 10, 1939

St. Lawrence Seaway formally
opens April 1, 1959

LTVCA
A Need for Conservation



1960

1961

1962

1963

1964

- 28 municipalities meet in Thamesville and vote to create the LTVCA for the purpose of flood control and flood warning November 10, 1960

LTVCA forms on February 2, 1961

- With less than 10% tree cover, trees are planted to help stop erosion in the Lower Thames watershed



In the Mount Brainerd Conservation Area the watershed before the old post mill is well suited to the development of nature trails along the stream.



- Right to vote is extended to First Nations peoples unconditionally
- Nixon Kennedy television debates
- Halogen lamp invented



- Berlin Wall is built
- Yuri Gagarin becomes the first man in space
- Valium and non-dairy creamer invented



- Cuban Missile Crisis
- Marilyn Monroe found dead
- Rachel Carson published *Silent Spring*
- Audio cassette and silicone breast implants invented



- JFK assassinated in Dallas, Texas
- Dr. King makes *I have a dream* speech



- Beatles come to North America
- Cassius Clay (Mohammed Ali) becomes world heavy-weight champion
- Maple Leafs win Stanley Cup
- BASIC computer language

1960

LTVCA

Formation and Acquisition

1965

1966

1967

1968

1969



- The Administration Building is located at 41 4th Street, Chatham



- The Department of Energy and Resources Management produces the Lower Thames Valley Conservation Report

LOWER THAMES VALLEY CONSERVATION REPORT 1966

SUMMARY



DEPARTMENT OF ENERGY AND RESOURCES MANAGEMENT

- Dover Township is included in the LTVCA



- The MacLaren Report directs flood control downstream from Chatham
- Dyke and erosion control work begins
- 401-Harwich Conservation Area (known today as C.M. Wilson Conservation Area) is purchased

- The Paincourt Creek drainage system is included in the Conservation Authority

- A 3,000 year old archaeological site is found at Big Bend Conservation Area

- Indian/McGregor Creek Flood Control Project is proposed



- A ceremony marks completion of Sharon Creek dam and spillway
- Sharon Creek and Big Bend Conservation Areas are stocked with trout



- Great New York City blackout
- U.S. sends troops to Vietnam
- Astroturf, soft contact lenses, compact disc/CD and Kevlar invented



- Star Trek series launched
- Electronic fuel injection



- Expo 67 in Montreal
- First Heart Transplant
- Che Guevara killed in Bolivia
- 3 astronauts killed in launch pad fire



- Martin Luther King assassinated
- Robert Kennedy assassinated
- Computer mouse and RAM (random access memory for computers)



- Rock concert at Woodstock, New York
- Neil Armstrong walks on the Moon
- Artificial heart, ATM bank machine and bar code scanner invented



1970

1971

1972

1973

1974

- Longwoods Road Conservation Area is opened with a portable classroom
- Ska-Nah-Doht Village construction begins



- The historic Thames Lighthouse is saved from demolition
- C.M. Wilson Conservation Area development begins
- 40 students are employed on project SWEEP (Students Working in an Environmental Enhancement Program)

- First Nations Pow Wow takes place at Longwoods

- First Conservation Authority sponsored canoe race is held on the lower Thames River



- Ska-Nah-Doht Village is completed

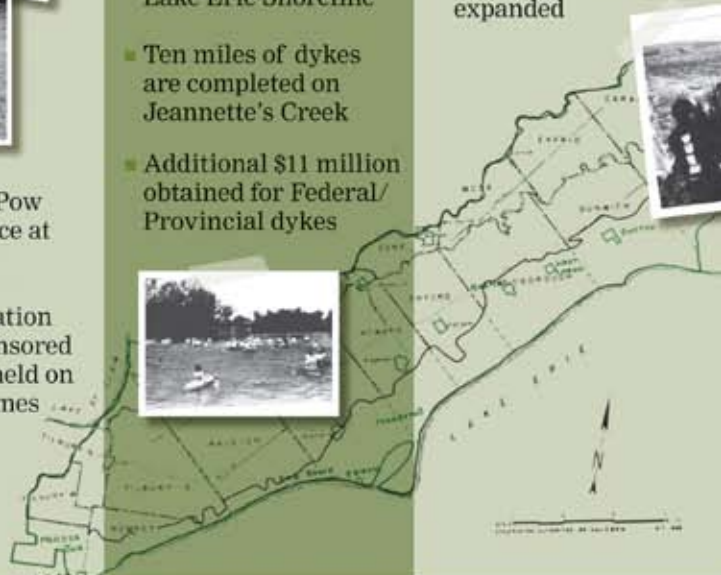
- Conservation Authority boundaries are extended to the Lake Erie Shoreline

- Ten miles of dykes are completed on Jeannette's Creek

- Additional \$11 million obtained for Federal/Provincial dykes



- An Information and Education Program begins at Longwoods
- The Resource Centre at Longwoods is completed
- 3 log cabins and the Burwell House are moved to Longwoods and the workshop is expanded



- The Beatles break up
- Shootings at Kent State
- Computer floppy discs are introduced



- Video cassette recorders are introduced, dot matrix printer, LCD screen and videocassette invented



- Mark Spitz wins 7 gold medals at the Olympics
- Watergate begins
- Pocket calculators and word processors are introduced

- Chicago Sears tower is completed
- U.S. pulls out of Vietnam
- Ethernet and the BIC lighter introduced



- President Nixon resigns
- Post-it® notes and liposuction invented

1970

LTVCA

Growth and Development

1975

1976

1977

1978

1979

- Present day logo is designed
- A fee structure is developed for the conservation areas and master planning begins
- Boy Scouts help plant trees



- LTVCA hosts Conservation Authorities Biennial Conference
- Provincial symbol for conservation areas is adopted



- The Lighthouse Conservation Area opens
- 15 landowners receive trees for a penny a tree
- 59 students are hired on the SWEEP program



- 58 km Federal/Provincial dyke project is completed at a cost of \$12 million
- Lower Thames Valley experiences a major flood



- 10,000 trees planted on private lands



- 6,000 trees planted on private lands
- LTVCA moves to a new Administration Building at 100 Thames Street in Chatham
- Ice management becomes part of flood control
- Wardsville Dam is discussed
- 1.6 km long ice jam at Jeannette's Creek contributes to major flooding in Dover Township and South Chatham
- Telemark stations are installed along the Lower Thames River for flood warning
- Flood contingency guidelines are established

MICROSOFT

- Microsoft Corporation is founded
- Saigon falls to North Vietnam
- Laser printer, disposable razors and the drink can pull tab invented



- Nadia Comaneci given seven perfect tens
- Ink jet printer invented



- Apple Computer is launched
- Elvis Presley is found dead
- The movie *Star Wars* is released



- First test tube baby is born
- John Paul II becomes Pope



- Margaret Thatcher first woman Prime Minister of Great Britain
- Mother Theresa awarded the Nobel Peace Prize
- Cell phone invented



1980

1981

1982

1983

1984



- Dover Township dyke requires major repairs
- It's determined that dykes will be maintained by the Conservation Authority and be eligible for a 1/3 grant from the Ontario Ministry of Agriculture and Food



- Ice-breaking tugs are used for ice management instead of hovercraft
- A Watershed Plan is started



- LTVCA education and public programs grow

- The Flood and Fill Line Mapping and Watershed Plan are completed
- 3 km long ice jam near Prairie Siding
- The Conservation Authority is given responsibility for floodplain management

- \$40,000 fundraising campaign is organized for Ska-Nah-Doht Village maintenance
- The Ministry of Natural Resources gives technical approval for construction of Indian/McGregor Creek flood control project



- Mount St. Helens erupts in Washington, killing 57 causing \$3 billion U.S. in damage
- John Lennon assassinated
- Terry Fox begins his Marathon of Hope

- Ronald Reagan President
- Charles and Princess Diana wedding
- Pac-Man is popular
- MS-DOS and the IBM PC invented

- Movie *E.T. The Extra-Terrestrial* is released
- Falkland Islands invaded by Argentina
- Michael Jackson's *Thriller* sells 20 million
- First artificial heart transplant

- Cabbage Patch Kids dolls
- Russia shoots down Korean Airlines 007
- Camcorders and Compact Discs introduced

- Bhopal, India gas leak disaster
- CD-Rom and Apple Macintosh invented



1980

LTVCA
Recreation and Education

1985

1986

1987

1988

1989



- Lower Thames experiences worst flooding in 40 years
- An ice jam at Prairie Siding bridge floods 13,000 acres
- Ice Management Committee is formed
- Lake Erie shoreline floods
- Boy Scouts help plant trees
- Conservation Authorities become the lead agencies for Great Lakes shoreline management programs



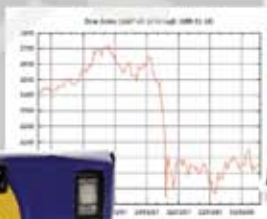
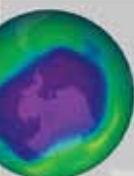
- LTVCA celebrates its Silver Anniversary
- Tugboats on stand-by during the winters of 1986-91 but not used



- The Battle of Longwoods becomes a new public event
- Environmental Assessment for the Indian/McGregor Creek Flood Control Project is approved. 8 participating municipalities agree on the project costing \$16 million
- LTVCA and Ducks Unlimited lower the water level to encourage vegetation growth at McGeachy Pond Management Area



- Ground breaking ceremony for Indian/McGregor Creek Flood Control Project held August 14
- A ceremony recognizes the Union Gas financial contribution for Sinclair's Bush



MICROSOFT
WINDOWS

- Ethiopian famine
- Hole in ozone layer discovered
- Microsoft® Windows released

- Challenger space shuttle explodes on take off
- Chernoble nuclear disaster
- Disposable camera is introduced

- Black Monday stock collapse (-22%) in North America
- World population reaches 5 billion
- Condom commercials appear on TV for the first time

- Pan Am flight explodes over Lockerbie, Scotland
- Ben Johnson caught doping at Korean Olympics
- CDs outsell vinyl records, the human genome project begins, Prozac introduced

- Berlin Wall falls
- Exxon Valdez spills millions of gallons of oil on Alaska coastline
- China's Tiananmen Square massacre



1990

1991

1992

1993

1994



- Ska-Nah-Doht Village reaches \$40,000 fundraising goal for maintenance, but fundraising continues
- LTVCA participates in Earth Day and Arbor Week
- LTVCA has 35 member municipalities
- Flood and erosion control projects

- Windbreak planting program levels off with 165,000 trees planted at 22 cents each, 2/3 in Kent County and 1/3 in Middlesex and Elgin Counties
- Indian/McGregor Creek Flood Control Project nears completion

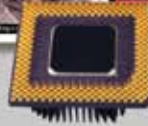
- CURB Program is launched (Clean Up Rural Beaches)
- Big 'O' Conservation Area is donated to LTVCA
- Shoreline Protection study begins

- Province slashes almost \$11 million (22%) from budgets of Conservation Authorities
- LTVCA restructuring alternatives considered
- School and admission fees are increased to offset losses due to funding cuts

- Province cuts another 13% from budgets of Conservation Authorities
- Indian/McGregor Creek Flood Control Project completed protecting South Chatham area from flooding



- Aquatic Species at Risk recovery strategies include Eastern Spiny Softshell Turtle protection
- Pond fish stocking ends



- Nelson Mandela is released
- World wide web HTTP and HTML invented
- The Oka crisis begins in July

- Operation Desert Storm in Kuwait
- Prince Charles and Diana split
- Digital answering machine invented

- Los Angeles riots after Rodney King verdict
- Johnny Carson leaves the *Tonight Show*
- Toronto Blue Jays win the World Series
- Official end of the Cold War

- Use of the Internet grows exponentially
- World Trade Center bombed
- *Jurassic Park* movie is released
- Pentium® processor

- Major ice storm causes power outages and widespread damage
- The Internet goes public
- O.J. Simpson is arrested for murder
- Jackie Kennedy-Onassis dies

1990

LTVCA

Cut-backs, Restructuring and Partn

1995

1996

1997

1998

1999



- LTVCA works with local partners and "Friends of" volunteers to preserve land, programs and services



Watershed residents' opinions surveyed about important services

■ Lower Thames Valley Conservation Foundation is created

■ Forestry Program tree planting exceeds 1 million trees, over 1,000 nesting boxes, 1,000 acres of conservation lands preserved, and 200,000 youth and adults enjoy school programs over 10 years

■ Filming of *Young Hawk* in June and *Project Grizzly* in September at Ska-Nah-Doht Village

- Consultant hired to look at possible restructuring

- Province ends all capital grants for conservation areas

- Municipalities amalgamated and dissolution of the LTVCA is considered along with other alternatives



- Department of Fisheries and Oceans Drain Classification project begins



Thousands of volunteers begin annual cleanup of Thames River

- LTVCA has 10 member municipalities and 12 Directors

■ The Walter Devereux Conservation Area is commemorated

■ Total visitors to conservation areas since they were opened passes the 1.25 million mark

- 7 acre tall grass prairie is planted at Sharon Creek Conservation Area

■ Foundation's Memorial Forest Program grows in 5 conservation areas with support from local funeral homes



00100111
01000110
0100100

- Euro is new European currency

- Widespread fear of Y2K computer bug

- Columbine massacre in Colorado

- Windows 95 is released
- Oklahoma City bombing
- First planet found outside our solar system
- Netscape® debuts and the dot com boom begins

- Mad Cow disease hits Britain
- Charles and Diana and Andrew and Fergie both divorced
- Dolly the sheep is cloned

- Princess Diana killed in Paris car crash
- Comet Hale-Bopp visible

- The movie *Titanic* most successful ever
- Viagra® introduced

2000

2001

2002

2003

2004

2005



- The Thames is designated a Canadian Heritage River



- LTVCA hosts Conservation Authorities Biennial Conference



- Healthy Futures landowner incentive program begins

- First annual Thames River Symposium celebrates the Heritage River designation of the Thames



- Ska-Nah-Doht Village wins Attractions Canada Provincial Winner – Developed Outdoor Site

- Walking Trails of Middlesex County booklet features four LTVCA conservation areas



- LTVCA, UTRCA, and SCRCRA work together as the Thames-Sydenham and Region Source Protection Region with provincial funding to protect municipal drinking water sources



- Emerald Ash Borer infestation results in the destruction of 90,000 trees to prevent the spread



- Repairs a to McGre dam

- Emerald Response begins



DRINKING WATER SOURCE PROTECTION

- Conservation Authorities and Ontario Ministry of the Environment work together in Source Protection planning

- Project Manager hired
- Groundwork laid
- Thames-Sydenham and Region Source Protection Region forms

- Watershed De
- Web site estab
- Municipal edu workshops
- Source Protec formation disc



- A full draft of the human genome is completed
- George W. Bush wins U.S. election by a Supreme Court ruling
- Contaminated water in Walkerton results in 7 deaths



- 911 attack
- China admitted to World Trade Organization
- World economic slowdown
- War in Afghanistan



- Corporate scandals: Enron, Arthur Andersen, Merrill Lynch, WorldCom, Citigroup, Kmart
- Queen Mother dies at the age of 102
- Queen Elizabeth celebrates 50 years reign



- Space shuttle Columbia explodes on re-entry killing crew of 7
- SARS crisis hits Toronto



- George Bush wins a second term Presidency
- Tsunami in the Indian Ocean kills 200 thousand people



- Lance Armstrong wins 7th France
- Hurricane Katrina d Louisiana

2000

LTVCA

Watershed Protection and Restoration

2006

2007

2008

2009

2010



are made
rgor Creek

Ash Borer
Program



- Chatham-Kent Children's Safety Village opens at C.M. Wilson Conservation Area
- Forestry grant program available
- Thames River floods

- First annual Chatham-Kent Children's Water Festival is held in October at C.M. Wilson Conservation Area

- LTVCA receives over \$100 thousand from Lower Thames Valley Conservation Foundation to restore and preserve 3 historic aboriginal log cabins at Longwoods

- New generic regulation *Development, Interference with Wetlands and Alterations to Shorelines and Watercourses*

- Significant flooding in 2008 and 2009



- Continuation of Chatham-Kent Greening Strategy started in 2007 that plants 200,000 trees over 4 years



- Carey Carolinian Arboretum and Trail officially opens at Longwoods Road Conservation Area
- Forestry grant programs continue
- Community Trees Initiative



Description Report
published
ication

tion Committee
used

- Public consultation
- Recruit technical staff

- Clean Water Act passed
- Source Protection Committee formed
- Draft Watershed Characterization Report

- Terms of Reference, Watershed Characterization Report, Ontario Drinking Water Stewardship Program begins
- Municipal forums
- Protection zones and protection areas identified

- Threats and risk assessment, vulnerable areas and threats identified, public consultation

- Public consultation
- Assessment Report submitted to Ontario Ministry of the Environment



Armstrong
Tour de
e
devastates
a and Texas

- Stephen Harper wins minority in Federal election
- Global warming documentary *An Inconvenient Truth* opens

- Sub prime mortgage crisis
- The iPhone is launched in the U.S.

- World Markets plunge—Dow Jones suffers its largest one day fall
- Barack Obama is elected to become first black U.S. President

- Miracle on the Hudson—Sully Sullenberger, pilot of U.S. Airways Flight 1549, ditches the plane in the Hudson River
- Michael Jackson dies

- Team Canada wins Gold at the Vancouver Olympics
- BP Deep Water Horizon Well explodes in the Gulf of Mexico

ation

2011 Table of Contents



Tulip Tree - a symbol of the Carolinian Canada Life Zone.



*The LTVCA is one of 36
Conservation Authorities in the
Province of Ontario.
Member of Conservation Ontario.*

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Thanking Partners in Conservation

50 years

Union Gas Celebrates Centennial By Investing in Conservation and a \$100,000 Gift to LTVCA



To mark its Centennial, **Spectra Energy**, the parent company of Union Gas, awarded a \$100,000 Signature Grant to the LTVCA to fund new biodiversity education, conservation and restoration programs and an expanded community trees initiative. Over the next several years, these programs will raise awareness of the benefits of variety in the natural ecosystem, provide cleaner air and water, reduce soil erosion and add green space within the 10 member municipalities served by the Conservation Authority. The announcement of the award was held at a Union Gas Centennial Reception on June 20, 2011, at The Armoury Banquet and Conference Centre in Chatham.

LTVCA staff began to implement the new projects in 2011, which included researching a fund-raising database, developing a Grade 6 Biodiversity Education Program, and a Biodiversity Conservation and Restoration Program, expanding and enhancing programs in the Community Trees Initiative Program and the Chatham-Kent & Lambton Children's Water Festival.



l-r: Julie Dill - President Union Gas, Greg Ebel - President and Chief Executive Officer of Spectra Energy, Brian King - Chair of the LTVCA, Bill Esrey - Chair of the Spectra Energy Board of Directors, Elder Myeengun Henry of the Chippewas of the Thames First Nation.

Recognizing Funding Partners, Private Donors and Volunteers

The LTVCA also wishes to extend its appreciation to the following for their contribution to Conservation Authority programs and services in 2011. With donations and grants valued at \$497,793 and hundreds of hours of volunteer service, conservation programs across the watershed and region were augmented. Support is highlighted throughout this Annual Report.

Blenheim District High School
Bluewater Centre for Raptor Rehabilitation
Boy Scouts of Chatham
Canada Summer Jobs *
Canadian Museum Association *
Captain Garnet Brackin IODE *
Catherine McVean Chapter IODE *
Chatham Christian School
Chatham Community Living
Chatham-Kent Children's Safety Village
Chatham-Kent Secondary School
Chevaliers De Colomb Conseil 9693 *
Chris Coates *
CKSS Life Skills
Delaware Lioness Club *
Delaware Lions Club *
Dillon Consulting Ltd. *
Dover Kinsmen *
Ducks Unlimited Canada *
Earth Day Canada Community Environment Fund *
Ecole Secondaire de Pain Court
Enbridge Gas Distribution Inc. *
Environment Canada *
Forest City Checkers
Friends of C.M. Wilson Conservation Area
Friends of the St. Clair River *

Friends of Tilbury Northside Park
George Wickham
Glencoe District Lions Club *
Goodwill Future Focus
Guardians of Longwoods
Highgate District Lions Club *
Jack Peltier **
Jason Homewood
Jerry DeZwart *
Jessica Levesque
Jim Stirling **
John and Wendy Britan *
John McGregor Secondary School
Kiwanis Club of Chatham-Kent *
Knights of Columbus Council 7251 *
Lambton Kent Composite School
London District Chiefs Council
Longwood Kennels
LTVC Foundation *
Mark Gagner
Matt Franczuk
Ministry of Culture *
Ministry of Natural Resources *
Ministry of Training, Colleges and Universities *
Montessori House of Children - London
Northern Casket *

Ontario Archaeological Society - London Chapter
Ontario Museums Association
Ontario Power Generation *
Optimist Club of Bothwell *
Optimist Club of West Lorne *
Pioneer Hi Bred Ltd. *
Private Giving Foundation - Moore Family Foundation *
Raymond J. Pilon Enterprises Ltd. *
Ridge Landfill Community Trust *
Ridgetown High School
Rodney Lions Club *
Rondeau Bay Watershed Coalition
Rotary Club of Chatham *
Royal Canadian Astronomical Society
Royal Canadian Legion Branch 251 *
Royal Canadian Legion Branch 598 *
Scribendi Editing *
Ska-Nah-Doht Advisory Committee
Southern First Nations Secretariat
Stewardship Kent
TD Community Giving *
TD Friends of the Environment Foundation
- Chatham Chapter *
TD Friends of the Environment Foundation
- Lambton Chapter *
Tilbury and District Horticultural Society

Tilbury High School
Trees Ontario Foundation *
Union Gas, a Spectra Energy Company *
University of Western Ontario Althouse College
Upper Thames Military Re-enactment Society
Ursuline College Secondary School
Vancouver Foundation *
Victor Lauriston Public School
Wallaceburg Community Living
Wheatley Two Creeks Association *
William Dodman *

* denotes a financial contribution
** denotes a property donation

Chair's Remarks

50 years

It is my pleasure as Chair, to bring greetings from the Lower Thames Valley Conservation Authority (LTVCA), and reflections of our **50th Anniversary** celebrations in 2011. Our vision remains to work with the local community to protect and enhance the environment for present and future generations. We manage this watershed and region's natural resources by working with our conservation partners. Of special mention is **Union Gas's** celebration of its Centennial with a tremendous investment in conservation - a **\$100,000 Signature Grant** gift to the LTVCA in June. Total contributions from all our partners in 2011 are valued at nearly \$500,000, along with hundreds of hours of volunteer service, which allowed us to efficiently serve our member municipalities and residents of the lower Thames region. We are extremely grateful and recognize everyone's support throughout this report.

The LTVCA **protected life and property** from natural hazards such as flooding and erosion by predicting flows and water levels, operating flood control structures and releasing flood warnings to municipalities and agencies. During 2011, the Lower Thames River experienced six flood events. Each were sufficient to flood the river flats upstream of Chatham, but did not cause flooding to areas in Chatham other than parks, parking lots and low lying areas beside the river. In addition, over 1,000 plan reviews identified potential threats by monitoring new development near or in natural hazard areas. 150 applications were reviewed under the Development, Interference with Wetlands and Alteration to Shorelines and Watercourses Regulation. Moving through our fourteenth year of an agreement with the Federal Department of Fisheries and Oceans, 224 applications for proposed works in watercourses and effects on fish habitat were reviewed. Work continued in areas of **research and monitoring** with the Ontario Ministry of the Environment in the Provincial Groundwater Monitoring Program, laying the groundwork for the development of watershed report cards for the lower Thames region.

Habitat was protected and restored as the pace continued to increase in our reforestation efforts. Staff engaged local schools, community groups and businesses in tree plantings made possible through the Chatham-Kent Greening Partnership and funding provided through Union Gas and many other partners highlighted in this report. In 2011, nearly 50,000 trees were planted across the watershed and region. Endangered tall grass prairie habitats continue to spread across Chatham-Kent with the help of the LTVCA's Pollinator Enhancement Program.

Through the **Drinking Water Source Protection Program**, policy discussion papers for significant drinking water threats were presented to the Thames-Sydenham and Region Source Protection Committee to be taken through the policy development process. During 2011 and early 2012, the Source Protection Committee began reviewing these threats discussion papers to create draft policies. A pre-consultation plan will be developed in 2012 for the implementers of the policies for which they are proposed to implement. This will be an opportunity for implementing bodies (Municipalities, Conservation Authorities and the Province) to provide official comment on draft policies prior to the later public consultation on the Draft Source Protection Plans. Following comments from implementers, the Source Protection Committee will prepare for formal public consultation on the Draft Proposed and Proposed Source Protection Plans. This is expected to occur by mid 2012. The target date for submission of the Proposed Source Protection Plans for the Thames-Sydenham and Region to the Province is August 2012.

Conservation lands allow the public to **enjoy, learn and respect the environment**, and provide important habitat for wildlife. In 2011, over 6,000 students, youth and chaperones took part in education programs, while over 24,000 recorded visitors enjoyed events, camping and day use in our conservation areas. We accessed \$113,226 of funding through a Job Creation Partnership, Summer Experience, Canada Summer Jobs and Young Canada Works programs to hire eleven workers, who assisted full time staff with conservation projects and services on our conservation lands. And of special note are our newest conservation areas - Merlin and Stirling - both donated to the LTVCA and located in the Municipality of Chatham-Kent.

The **Lower Thames Valley Conservation Foundation** has raised over \$550,000 for conservation projects over the years, and I recognize the volunteer Directors for their ongoing support of the LTVCA.

In closing, I thank our Directors who represented their municipalities well over the past year, balancing watershed needs with needs of individual municipalities, and the staff team for their dedicated work and support.



Brian King - Chair of the Lower Thames Valley Conservation Authority speaking at the 2011 Annual General Meeting in Ridgetown.

Brian W. King
Brian King - Chair LTVCA

Board of Directors & Committees

50 years



*Lower Thames Valley Conservation Authority Directors 2011
r-l:*

Linda McKinlay - Town of Lakeshore

Jim Straughan - Municipality of Middlesex Centre

Ian Fleck - Municipality of Dutton/Dunwich

Grant Jones - Township of Southwold

John Kavelaars (Vice-Chair) - Municipality of Southwest Middlesex

Brian King (Chair) - Municipality of Chatham-Kent

Steve Pinsonneault - Municipality of Chatham-Kent

Charlie Wright - Municipality of Leamington

Norm Miller - Municipality of West Elgin

Stanley Caveney - City of London

Ron Doane - Municipality of Strathroy-Caradoc

Absent: *Michael Bondy - Municipality of Chatham-Kent*



An orientation session for the LTVCA Board of Directors was held early in the year to review policies and procedures, programs and services of the LTVCA.

Committees

Personnel and Finance / Executive

Chair Brian King, Vice - Chair John Kavelaars, Ron Doane, Stanley Caveney, Charlie Wright

Ice Management

Chair Brian King, Vice - Chair John Kavelaars, Steve Pinsonneault, Michael Bondy, Linda McKinlay

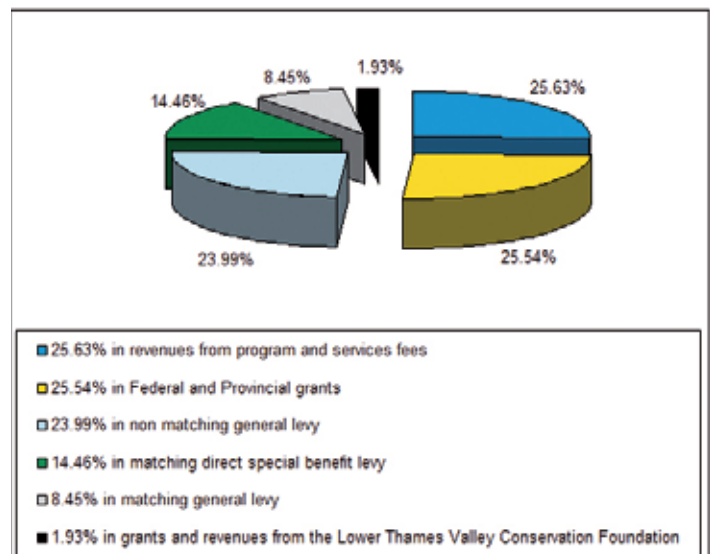
Ska-Nah-Doht

(Conservation Authority Representatives):

Brian King, John Kavelaars, Ron Doane, Stanley Caveney, Ian Fleck, Jim Straughan, Jerry Campbell

Budget

The LTVCA's 2011 budget of \$2,113,567 received approval in February. Jerry Campbell - General Manager/Secretary-Treasurer, directed the administration and financial aspects of the LTVCA, with support from the Accounting Clerks - Sharlet Piggott and Sandy Maynard.



This chart illustrates the breakdown of the 2011 LTVCA budget.

Staff Directory 2011

50 years

Lower Thames Valley Conservation Authority Administration Building

Jerry Campbell - General Manager / Secretary-Treasurer

Sandy Maynard - Accounting Clerk

Sharlet Piggott - Accounting Clerk

Jack Robertson - Water Management Supervisor

Valerie Towsley - Resource Technician

Jason Wintermute - GIS Specialist / Resource Technician

Chitra Gowda - Source Protection Technical Coordinator

Randall VanWagner - Environmental Project Coordinator

Greg VanEvery - Environmental Technical Assistant

Chris Tasker - Source Protection Manager of the Thames-Sydenham and Region Source Protection Region - (Lower Thames Valley, St. Clair Region and Upper Thames River Conservation Authorities)

Longwoods Road Conservation Area

Workshop

David Little - Eastern District Supervisor

Bruce Clark - Construction & Maintenance Technician

Resource Centre and

Ska-Nah-Doht Village and Museum

Bonnie Carey - Community Relations Coordinator

Agnes Vriends - Clerk / Secretary

Karen Mattila - Village Curator

Rose Nicholas - Village Education Technician

Jerry DeZwart - Conservation Education Technician

Derekica Snake - First Nations Liaison / Source Protection Technician of the Thames-Sydenham and Region Source Protection Region

C.M. Wilson Conservation Area

Workshop

Russ Dysarz - Western District Supervisor



LTVCA Staff l-r: Karen Mattila, Greg VanEvery, Randall VanWagner, Derekica Snake, Russ Dysarz, Jack Robertson, David Little, Jerry Campbell, Rose Nicholas, Sharlet Piggott, Agnes Vriends, Sandy Maynard, Valerie Towsley, Chitra Gowda, Jerry DeZwart, Bonnie Carey.

Absent: Jason Wintermute, Bruce Clark, Chris Tasker

Our Vision

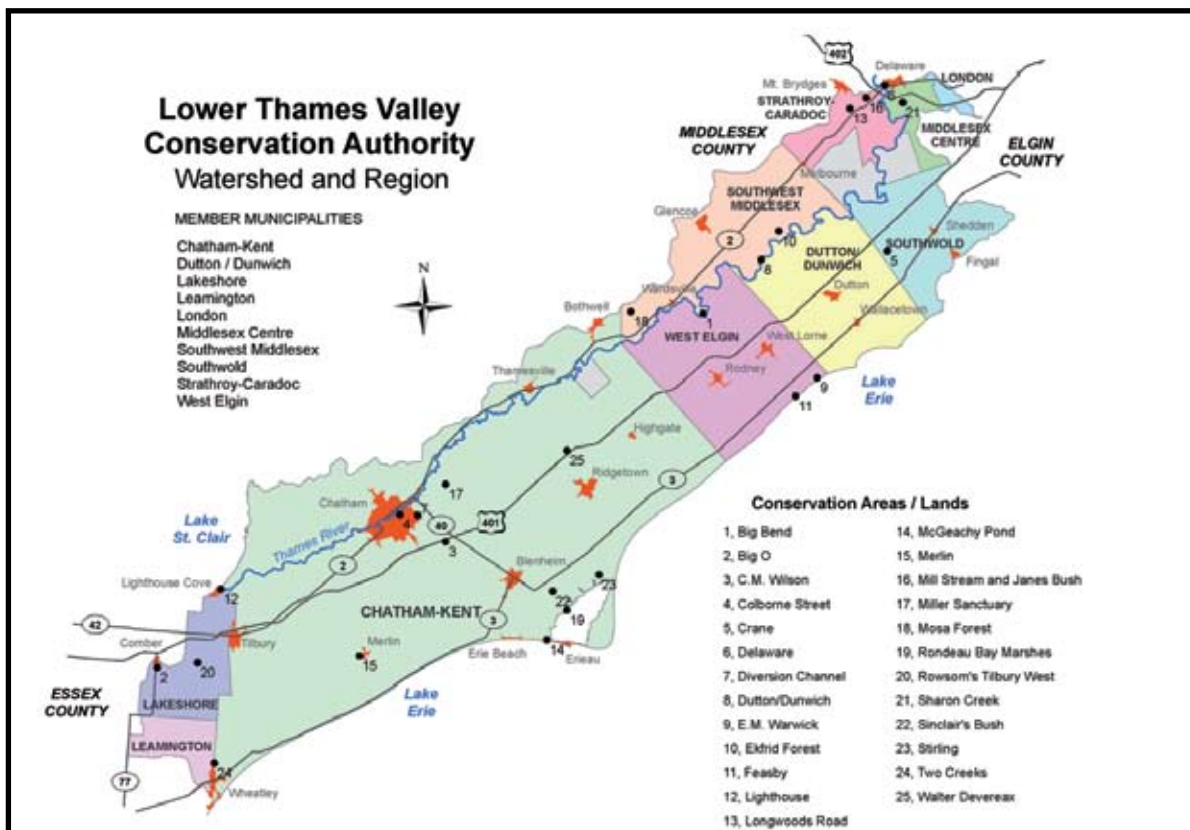
50 years



“The Lower Thames Valley Conservation Authority (LTVCA) is a watershed-based partner, working with the local community, providing services and information to efficiently protect and enhance the environment for present and future generations.”

Our Objectives

- Protecting Life & Property
- Protecting & Restoring Habitat
- Research & Monitoring
- Providing Opportunities to Enjoy, Learn & Respect
- Partnering with the Local Community



Area of jurisdiction lies over the watersheds of all streams, which drain into the Thames River from the Village of Delaware, to Lake St. Clair. Southern boundary has jurisdiction over the watersheds of all streams which drain into Lake Erie, from the Talbot Creek watershed in the east, to the Two Creeks watershed in the west. Total area covers over 3,275 square kilometres (1,264 square miles) in southwestern Ontario and is home to 109,709 people.

Protecting Life & Property

50 years

Water Management Flood Control

During 2011, the Lower Thames River experienced six flood events. Events occurred in January, February, three more in March and another in December. Each were sufficient to flood the river flats upstream of Chatham, but none were sufficient to cause flooding to areas in Chatham other than parks, parking lots and low lying areas beside the river. The Conservation Authority did not need to close the McGregor Creek Dam and undertake pumping operations in the south Chatham area for any of these events.

January Event

At the beginning of January 2011, approximately 30 mm of water equivalent in the snow pack was found in the Upper Thames watershed. There was 37 mm of water equivalent in the snow pack in the watershed of the North Branch and 22 mm in the watershed of the main Thames. Approximately 15 cm of ice was on the Lower Thames.

After midnight of December 31st, a weather front passed through the area and deposited 10 to 15 mm of rainfall to much of the region. In areas of the North Branch of the Upper Thames watershed, up to 30 mm of precipitation occurred. An abundance of snow can absorb much precipitation, but this rainfall was enough to create a runoff event. Concurrent with the precipitation, temperatures reached 6.8 degrees Celsius on December 31st and 9.0 degrees Celsius on January 1st. Although daytime temperatures were warm, night time temperatures were quite low. Unfortunately during these two days, the area only received five Celsius degree-days of thaw. The more days of thaw prior to an event help to soften or melt the ice in the lower river and lessen the probability of ice jam flooding. The runoff from this climactic event created a flow on the Thames River which reached approximately 580 cubic metres per second (cms) at the Byron stream gauge by noon of January 2nd.

On January 3rd an ice jam had formed at Prairie Siding. Between 1800 and 2100 hours, the ice jam moved down to the river mouth. By the morning of January 4th, the flows were sufficient at the ice jam to flood approximately 20 homes in the Harbour Drive and Mariners Road area of Lighthouse Cove.

The peak flow at the Dutton gauge occurred at 0400 hours on January 4th with a flow of 430 cms. The peak at Thamesville occurred with a flow of 410 cms at 2200 hours.



An ice jam at the Thames River mouth extended out into Lake St. Clair approximately 1 km and upstream in the river almost 2 km in early 2011.

The river crested in Chatham at a level of 178 m C.G.D., which is considered 3 m above normal on the afternoon of January 5th.

The homes in the Lighthouse Cove area were flooded from January 4th in the morning until January 5th in the late evening. Flows at the river mouth then subsided. Because of the cold weather and the reasonably low flows during the event, the ice jam at the river mouth did not release into Lake St. Clair. At the culmination of the event, the ice jam extended out into Lake St. Clair approximately 1 km and extended upstream in the river approximately 2 km.

February Event

By mid-February, the Upper Thames River Conservation Authority (UTRCA) had measured the snow in their region to find that the snow contained approximately 75 mm of water equivalent with a density of 26 percent. Snow usually begins to runoff at a density of 40 percent. Since the first week of January, the area had experienced colder than normal temperatures and the Thames River had approximately 28 cm of ice near the river mouth and 22 cm in Chatham. The area received high temperatures of 5 degrees Celsius on January 16th and 9 degrees Celsius on January 17th and 18th. The warm temperatures were not accompanied by rain, however, were sufficient to melt some of the snow pack. The flows at the Byron gauge reached 389 cms at 1900 hours on February 19th. The

Dutton gauge peaked at a flow of 390 cms in the early hours of February 21 and Thamesville peaked at an ice affected flow of 465 cms at 1900 hours the same day. The Chatham gauge on the river peaked at an elevation of 177.5 m at 0400 hours on February 22nd. This was at an elevation considered to be 2.5 m above normal. After the event, the ice cover generally remained in place from Chatham down to the river mouth, but had thinned due to the flows and warm temperatures.

March Events

At the beginning of March, the UTRCA had measured the snow in their region to find that the snow contained approximately 41 mm of water equivalent with a density of 30 percent. The area received between 20 and 30 mm of rainfall on March 5th and the temperature reached 6 degrees Celsius the same day. As a result, the Thames River peaked at Byron with a flow of 535 cms at 0900 hours on March 6th. The Dutton gauge peaked at 415 cms at 1800 hours on March 7th and Thamesville peaked at a flow of 436 cms at 1500 hours on March 8th. The Chatham gauge on the river peaked at an elevation of 177.7 m at 1800 hours on March 8th. This event was sufficient to move the remaining ice on the river into Lake St. Clair during the afternoon of March 7th.

A period of above freezing temperatures began on March 8th with temperatures reaching 5 degrees Celsius on March 10th. The relatively warm period was accompanied

by precipitation amounts over March 9th to 11th, from 45 mm in London to 40 mm in Chatham and 20 mm in Dutton. As a result of this event, the Thames River peaked in Byron at a flow of 565 cms at 1400 hours on March 11th. The Dutton gauge peaked at 450 cms at 0100 hours on March 13th and Thamesville peaked at a flow of 490 cms at 2100 hours on the same day. The Chatham gauge on the river peaked at an elevation of 178.15 m at 0600 hours on March 14th.

By March 15th, the Upper Thames still had 27 mm of water equivalent in the snowpack. Temperatures reached near 15 degrees Celsius on March 17th and 18th. These temperatures melted the remainder of the snowpack in the region. As a result of this event, the Byron gauge peaked at 1800 hours on March 18th at a flow of 550 cms. The Dutton gauge peaked at 415 cms at 0100 hours on March 20th and Thamesville peaked at a flow of 435 cms at 2200 hours the same day. The Chatham gauge peaked at an elevation of 178.0 m at 1800 hours on March 21st.

December Event

By the end of November, the watershed was essentially saturated when the area received approximately 15 mm of rain on November 27th. Late on November 28th and during the day on November 29th the Lower Thames region received an additional 70 to 90 mm of rainfall with the higher amounts in the southwestern portion of the watershed. As a result of this event, the Byron gauge peaked at 1800 hours on November 30th at a flow of 585 cms. The Dutton gauge peaked at 485 cms at a flow of 487 cms at 0100 hours on December 2nd and Thamesville peaked at a flow of 500 cms at 0300 hours on December 3rd. The Thames River peaked in Chatham at an elevation of 178.2 m at 1500 hours on December 3rd.



A spring runoff event, precipitated by rainfall, occurred in March in the Thames River flats upstream of Chatham. Conservation Authority staff Jack Robertson, monitored conditions throughout the year.



A heavy rainfall in early December resulted in 75 mm of runoff from the McGregor Creek. The McGregor Creek Diversion Channel reached levels similar to those in February of 2009.

Provincial Water Monitoring Program

The Conservation Authority continued to work with the Ontario Ministry of the Environment (MOE) in the Provincial Groundwater Monitoring Program. The intent of the program is to have a provincial network for monitoring ambient ground water conditions. Such a network will assist in the monitoring of potential drought conditions and in the implementation of provincial and local action plans and environmental decision making by municipalities and the province. In 2011, the LTVCA undertook water sampling at nine wells and sent the samples to the MOE laboratory for analysis.

The Conservation Authority also continued working with the MOE with the sampling of in-stream waters at 11 locations in the watershed. In this program, water is collected on a

monthly basis in the spring, summer and fall and then sent to the MOE laboratory in Toronto for testing. The results are then returned to the Conservation Authority.

2011 marked the fourth year that the LTVCA tested for e-coli at each of its stream sampling locations. The results from this testing, as well as the results obtained from the Provincial lab, will be useful in the preparation of Watershed Report Cards for the Lower Thames Valley Conservation Authority.

Both the Provincial Groundwater Monitoring Program and the Provincial Water Quality Program emphasize the Conservation Authority's role as the primary delivery agent for provincial programs related to the environment and natural resources.

Provincial Grant Funding for Capital Maintenance & Flood Forecasting

The LTVCA receives grant funding from the province each year for:

- the operation, routine minor maintenance and preventative maintenance of flood and erosion control projects
- flood forecasting and warning
- chronic ice management
- legal costs for ongoing joint Conservation Authority / Provincial capital projects
- watershed management and related administration

Category	2011	2010	2009
Flood Control Operations	120,603	120,603	120,603
Hazard Prevention, Watershed Management	37,006	37,006	37,006
Total	157,609	157,609	157,609

The above table outlines the total approved funding in each category in 2011, as well as comparable numbers in 2010 and 2009. The costs outlined are the grants received. Eligible project costs would be twice the number shown in the table.

Great Lakes Levels

Lake St. Clair began the year approximately 30 cm below normal but by May it had climbed to the long term normal water level. It then tracked the long term normal for the remainder of the year.

Lake Erie began the year approximately 15 cm below normal and by May was about 20 cm above normal. It then tracked this trend for the remainder of the year.

With lake levels at near normal levels and the lack of any significant wind generated storms, no flood events were recorded on the lakes in 2011.



In October, an unusually large Cyanobacterial bloom occurred in the western Lake Erie basin. This mass may have resulted from above normal precipitation carrying more nutrients out to the lake, feeding the algae. Cyanobacteria is toxic if ingested and a skin and soft tissue irritant affecting eyes and nasal passages.

Land Use Planning & Regulations

Municipal Plan Input & Review Under the Conservation Authorities Act

Plan input and review is one of the ways the Conservation Authority monitors development and achieves its objectives. The input the LTVCA has on new development near or in natural hazards like flood plains and steep slopes, ensures identification of potential hazards before complications arise. This can be of great importance to municipalities, developers and private individuals who may not be aware of potential hazards.

	2011	2010	2009	2008	2007	2006
Official Plans	3	3	0	2	3	0
Official Plan Amendments	4	2	7	8	11	7
Comprehensive Zoning Bylaws	3	2	2	2	3	0
Zoning Bylaw Amendments	96	91	110	135	102	109
Severances	117	123	107	132	128	124
Minor Variances	43	52	42	39	46	49
Plans of Subdivision	3	3	5	1	3	11
Drainage Reports & Maintenance	46	115	46	54	49	49
Property Clearances	31	50	82	41	72	33
General Property Inquiries	723	649	735	694	731	452
Total	1,069	1,090	1,142	1,108	1,148	834

Planning development issues reviewed in 2011.



In 2011, 1,069 plan reviews were completed for LTVCA municipalities.

Official Plans	1				1			1		1
Official Plan Amendments	2				1				1	
Comprehensive Zoning Bylaws			1				1	1		
Zoning Bylaw Amendments	63	6	2		2	1	8	2		12
Severances	63	11	6	2		2	6	5	5	17
Minor Variances	29	5	1			1	1		3	3
Plans of Subdivision	3									
Property Clearances	18		1		1		2	1	2	6
Drainage Reports & Maintenance	23		6	1		1	8	3		4
General Property Inquiries	431	14	93	11	3	6	22	19	9	60
TOTAL SERVICES PER MUNICIPALITY	632	36	110	14	8	11	48	32	20	103
SERVICES										
MUNICIPALITY	Chatham-Kent	Dutton/Dunwich	Lakeshore	Leamington	London	Middlesex Centre	Southwest Middlesex	Southwold	Strathroy-Caradoc	West Elgin

Plan input and review services by Municipality 2011.

Regulation of Development, Interference with Wetlands & Alterations to Shorelines & Watercourses

2011 marked the fifth year that the Conservation Authority's new Regulation was in effect. The regulation is known as the Regulation of Development, Interference with Wetlands and Alterations to Shorelines and Watercourses. The Conservation Authority reviewed 150 applications under the Regulation in 2011.

The main objective of the Conservation Authority Regulation is to ensure public safety with regards to natural hazards through issuance of permits for works within or in proximity to lakes, rivers, streams or wetlands.

One application was denied without any further proceedings. Three applications required a hearing before the Conservation Authority's Executive Committee. One was denied and two of these applications were approved with conditions.



One of the purposes of the Conservation Authority Regulation is to ensure fill is placed such that banks remain stable and that a watercourse's capacity is not impacted. The above area was investigated by Conservation Authority staff in 2011.

Department of Fisheries & Oceans Drain Classification

2011 marked the fourteenth year of an agreement with the Federal Department of Fisheries and Oceans (DFO) for the review of proposed works in watercourses and their effect on fish habitat as it relates to the Federal Fisheries Act. The Conservation Authority entered a “Level Two” agreement with the DFO in 2004. Level Two status means that the LTVCA conducts the initial assessment of the project to identify any impacts on fish habitat. If an impact is foreseen as a result of the proposal the matter is then referred to DFO. With Level Two status the Conservation Authority can also determine how the proponent can mitigate any impacts.

Valerie Towsley, Resource Technician for the LTVCA, wrote 224 items of correspondence regarding DFO applicable works in 2011. Those included items relating to the Conservation Authority Regulation, Municipal Drainage Report reviews and 103 Notifications of Drain Maintenance Works submitted by Municipal Drainage Superintendents. There were 50 Notifications of Drain Maintenance Works in Chatham-Kent along with 30 in Elgin County, 13 in Middlesex and 10 in Essex Counties.



This perched road pipe culvert is a blockage to fish migration upstream. The Conservation Authority, DFO and municipalities work together to achieve a solution that benefits all. The pipe will be extended to allow for a wider, safer top road width. Lowering the pipe outlet below the bed of the stream will allow for fish passage through the pipe to access upstream spawning areas.

Other Water Related Initiatives

2010 Provincial Aerial Photography Project

The Conservation Authority continued to partner in the 2010 Provincial Aerial Photography Project. It is also known as SWOOP2010 (South Western Ontario Orthoimagery Project). The aerial photography was taken in the spring of 2010 and the initial imagery was delivered in the summer of 2011. The total cost of the project to the Conservation Authority was approximately \$32,000. The imagery has an accuracy of 20 cm as opposed to the 30 cm accuracy that was obtained when the 2006 project was undertaken. The project will also result in a layer of spot elevations throughout the LTVCA with an accuracy of plus or minus 0.5 m.

Drainage Superintendents Association of Ontario

The Conservation Authority is a long-standing associate member of the Chatham-Kent-Essex Chapter of the Drainage Superintendents Association of Ontario. This organization holds four to six meetings per year.

Summer Student Employment

The LTVCA hired student Julie Adams of Merlin for the summer under the Ministry of Natural Resources - Summer Experience Program. She worked with Matt Franczuk of London, who had volunteered for the Conservation Authority from February to September. They undertook numerous projects including;

- site surveying for the Conservation Authority Regulation
- water quality sampling
- maintenance of the wells within the Provincial Groundwater Monitoring Program
- quality checks of the Provincial Aerial Photography

Protecting & Restoring Habitat

50 years

Reforestation LTVCA Tree Planting Program

From 1988 to 2011, the LTVCA has planted approximately 2,130,405 trees within the Lower Thames Valley Conservation Authority's watershed. In 2011, 49,140 trees were planted into windbreaks and woodlots on private lands, memorial forests and conservation areas. (2010 - 69,332 trees planted). The Lower Thames Valley Conservation Foundation funded \$7,144,50 for memorial trees (2010), supported by local funeral homes and private individuals.

The cost to landowners for the Conservation Authority to supply trees varied in 2011 depending upon the species, ranging from \$.065 to \$4.06 for seedling stock. A minimum order of \$100 and 25 trees per species was required.

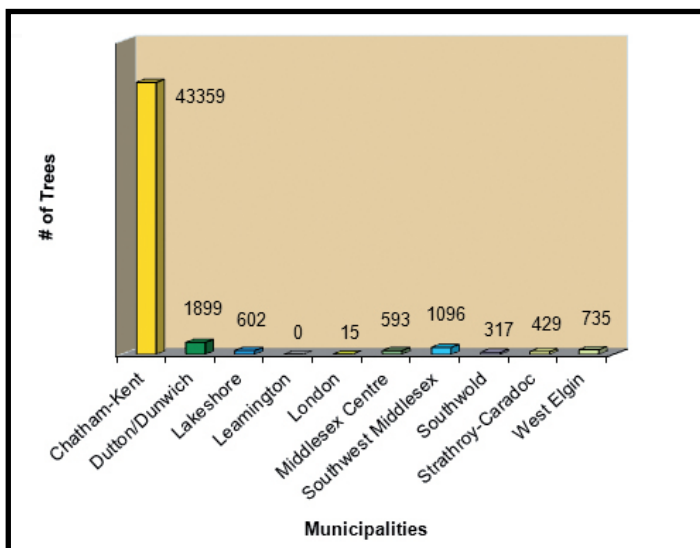
The spring of 2011 was very wet, making planting difficult. Machine planting was done when soil dried out, but hand planting had to be done for many projects, such as the 10,000 conifers along the 401 highway.



The spring of 2011 was very wet, making planting difficult. Machine planting was done when soil dried out, but hand planting had to be done for many projects.

Pine Needle Farms, Forest Care, and Sommerville Nurseries supplied our seedling stock in 2011, all delivering the week of April 18th. Manitree Orchards in Cedar Springs provided the cooler as trees were sorted and shipped out. A total of 100 orders were received for 20 different species and over 35 varieties, for a total of over 42,579 seedlings.

Tree orders were taken in the fall for a limited number of species suited to fall planting. The species list was posted on the website and a newspaper ad went out to rural papers in Chatham-Kent. A total of 3,500 seedlings were ordered from Pineneedle Farms. Trees were planted by LTVCA staff and private landowners throughout the Chatham-Kent region. Landowners accessed financial assistance from the Natural Areas Grant Restoration Program. Randall VanWagner - Environmental Project Coordinator and Greg VanEvery - Environmental Technical Assistant coordinated funding and habitat restoration projects.



Forestry program by Municipality 2011.

TREES SOLD TO INDIVIDUALS FOR PRIVATE PLANTING

Municipality of Chatham-Kent	42,942
Municipality of Dutton/Dunwich	1,899
Town of Lakeshore	601
City of London	15
Municipality of Middlesex Centre	593
Municipality of Southwest Middlesex	1,038
Township of Southwold	317
Municipality of Strathroy-Caradoc	429
Municipality of West Elgin	735
Chippewa of the Thames First Nations	75
Oneida of the Thames First Nations	20
TOTAL	48,664

MEMORIAL FOREST PLANTINGS

Badder & Robinson at Mosa Forest	58
McKinlay Woodlands at C.M. Wilson Conservation Area	381
Rowsom's Tilbury West Conservation Area	1
Tilbury Northside Park	15
Secord & Smith at Merlin Conservation Area	21

TOTAL TREES PLANTED IN 2011	49,140
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Forestry Grant Programs

To promote tree planting, staff apply for funds from the Trees Ontario Foundation (\$33,082 in 2011), and the local Natural Areas Grant Restoration Program through Ontario Power Generation fund (\$19,236.50 in 2011). Landowner's received over \$50,000 in 2011 for financial assistance. Union Gas also contributed \$25,000 towards tree planting efforts within the Municipality of Chatham-Kent. Staff training was funded with a \$1,000 TD Community Giving - TD Friends of the Environment Training Grant.



The LTVCA loaded tree nursery stock for the 401 highway plantings.

Chatham-Kent Greening Strategy

Our "Greening Partners" - the Municipality of Chatham-Kent and Stewardship Kent (MNR), were involved in many ways. Chatham-Kent Parks Cemeteries and Horticulture assisted with watering, plant propagation, delivering mulch, and equipment use: shovels, rakes and wheelbarrows, large stock tree delivery, customer contacts, and technical expertise.

Another partnership with the Ministry of Transportation and Trees Ontario resulted in LTVCA staff planting over 300 large stock trees at Victoria Road and Orford Road interchanges along the 401 highway.

Dillon Consulting came on board with a \$5,000 donation for trees at Thames Grove Park. Scribendi Editing also donated time and \$410 for tree plantings at Henry Weaver and Taylor parks, in the City of Chatham.



Union Gas staff planted trees at Thames Grove Park with the assistance of LTVCA staff and a \$2,000 grant for trees from the Vancouver Foundation.



Staff from Dillon Consulting planted 100 large stock trees. This company donated \$5,000 towards trees for Thames Grove Park in Chatham-Kent.

Community Trees Initiative

Our Community Trees Initiative (CTI) program continues to grow. With \$34,177.83 of funding from Union Gas, \$952.41 from the Ministry of Natural Resources Community Fish and Wildlife Improvement Program and a \$16,712 grant from Eco-Action in 2011 (approved for \$60,000 over two years), the CTI program has ensured its future for a few more years.

Volunteer participation increased in 2011. Over 400 volunteers helped out with planting, mulching, staking, seed collection, and tree maintenance. Many thanks to the community groups, schools and individuals: Boy Scouts of Chatham, Tilbury High School, Ridgetown High School, Chatham-Kent Secondary School, John McGregor Secondary School, Blenheim District High School, Lambton Kent Composite School, Chatham Christian School, Ursuline College, Victor Lauriston Public School, Ecole Secondaire de Pain Court, Chatham Community Living, Wallaceburg Community Living, Union Gas, Goodwill Future Focus, Jason Homewood, Mark Gagner and Scribendi Editing. As well the Friends of Tilbury Northside Park and the Tilbury and District Horticultural Society volunteered many hours to the reforestation efforts at that location.

During seed collection seasons, 62 litres of a variety of native Carolinian tree species were collected as well as 12 kg of tall grass prairie seed. Approximately 5,000 one to three year old potted stock are being nursed at the Grand Avenue greenhouses destined to be planted throughout Chatham-Kent in the future.



Amanda Griffore - Community Trees Initiative Coordinator, teaches Union Gas staff about seed forecasting and collection at Maple Leaf Cemetery in Chatham.

Pollinator Enhancement Program Gaining Headway



A Monarch Butterfly Caterpillar and a Longhorn Beetle enjoy milkweed in their host habitat at one of the prairie sites.

Working in cooperation with the Community Trees Initiative, 12 kg of tall grass prairie seed was collected for the program. This is a great educational experience for volunteers, school, and community groups. The Chatham-Kent Secondary School Life Skills group volunteered for this program.

Through an Earth Day Canada Community Environment Fund, \$7,500 was available to support the pollinator enhancement program's Environmental Greening Coordinator, signs, and plant material.

Our prairie projects have been consistently improving over the growing season. The Merlin, Mitton, McMullen, and Diversion Channel prairies were planted with plugs in the spring and fall of 2011 to complement the broadcast seeding completed in 2010. There are 12 to 15 native tall grass prairie species now established within the four new sites.

The Maple Leaf Cemetery prairie is in its third year and is becoming very diverse. Survival assessment will be performed in spring 2012.

Conservation Scholarships and Awards

For at least 26 years, the Conservation Authority has made a contribution to the Scholarships and Awards Committee of the Ridgetown College, University of Guelph. The award in 2011 was the sponsorship of "Proficiency in Farm Structures and the Environment Award" with a monetary value of \$200. J. Gordon Albias of Branchton, Ontario received the award at convocation on June 3, 2011. Ridgetown College offers an excellent program and for years, has been a promoter of the conservation ethic in agriculture. In 2011, the Conservation Authority increased the value of this award to \$500 for upcoming scholastic years.



I-r: LTVCA's Water Management Supervisor - Jack Robertson, presented the 2011 Proficiency in Farm Structures and the Environment Award to J. Gordon Albias.

The LTVCA also provides annual financial support to the Chatham-Kent Soil and Crop Association with their Conservation Farmer Award. In 2010, judging was conducted in December and the award was presented at the Chatham-Kent Soil and Crop Association Annual Meeting in January of 2011. The award went to Bill and Susan Litwin of Route 1, Highgate.

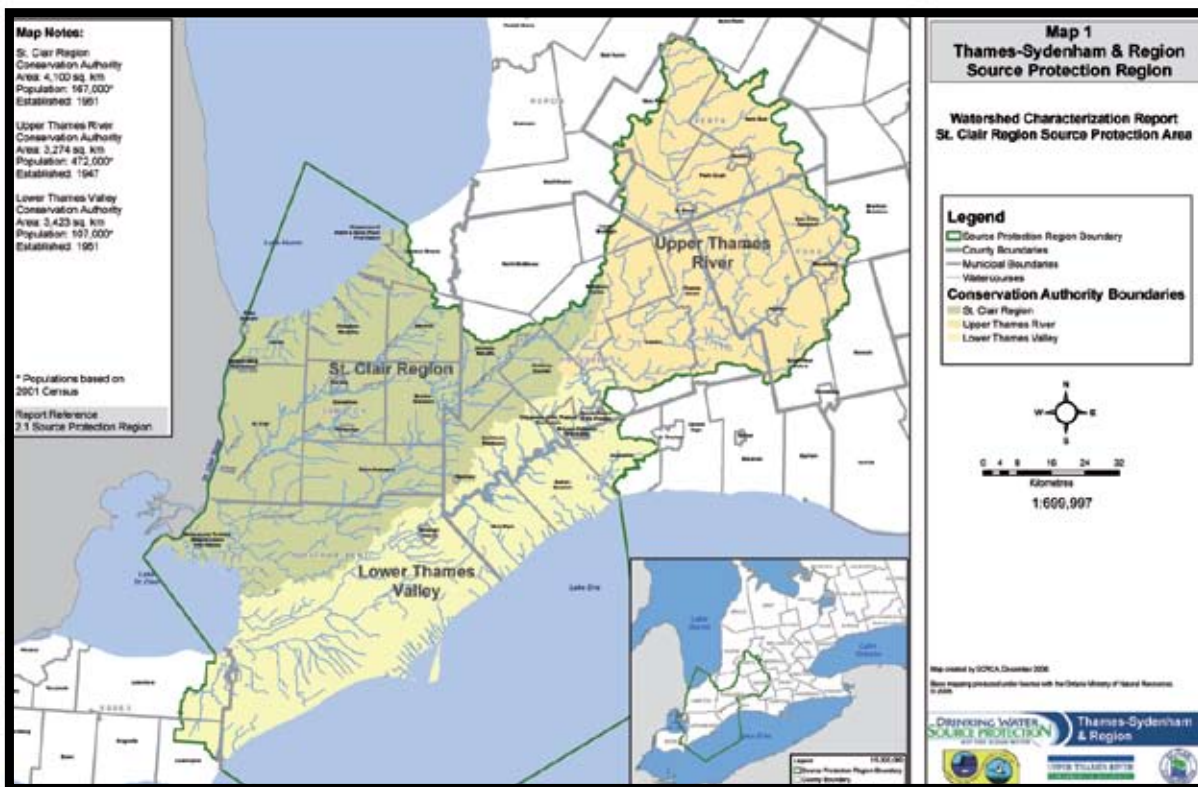


I-r: Dave Emery - Kent Soil and Crop Improvement Association, Greg Van Every - LTVCA and Bill and Susan Litwin - 2011 award recipients.

Thames-Sydenham and Region Source Protection Region Drinking Water Source Protection

Water is critical to all aspects of our lives and it is important that we ensure there is a safe and reliable source of water for all our uses - now and in the future. Our municipal drinking water comes from lakes, rivers, streams or underground sources (aquifers) located across the province. In our region, most municipalities rely on piped water from the Great Lakes. This does not lessen the importance of protecting water source areas within our watersheds. We need to be proactive to protect our watersheds and, as a result, the Great Lakes upon which we depend.

The Upper Thames River, Lower Thames Valley and St. Clair Region Conservation Authorities have partnered together to form the Thames-Sydenham and Region Source Protection Region. We are committed to working with our municipalities, other stakeholders and the public to develop Source Protection Plans that serve to protect our drinking water while taking into account the other needs of our communities. The Project Manager is Chris Tasker, Chitra Gowda is the Technical Coordinator and Jason Wintermute provides technical GIS support.



The Thames - Sydenham and Region Source Protection Region.



The responsibility of the Source Protection Committee, appointed in November 2007, is to guide the development of local source protection plans. Information on committee meetings including notices, meeting minutes and reports can be accessed through the website at www.sourcewaterprotection.on.ca.

2011 Highlights

LTVCA Assessment Report

The Assessment Report is a technical document that forms the basis of the source protection plans. Technical studies were completed as per the Clean Water Act (2006). Intake protection zones (IPZ) for the Lake Erie surface water intakes and wellhead protection areas (WHPA) for the groundwater systems were delineated and assessed. Highly vulnerable aquifers and significant groundwater recharge areas were also delineated and assessed. Water Budget reports were completed, identifying where drinking water sources may be stressed and determining areas where water taking might have an impact on those sources. Based on these, activities that 'are or would be' significant threats to drinking water systems were identified.

The proposed Assessment Report for the Lower Thames Valley Source Protection Area was posted in late 2010 for a comment period to end on January 7, 2011. No written comments were received on the Proposed Assessment Report in the comment period while the Ministry of the Environment (MOE) required some minor amendments to fill some data gaps. The Assessment Report was ultimately approved by the Minister of Environment in February 2011.

Threat Policies and Source Protection Plans

Source Protection Plans will have policies that reduce the risks posed by significant threats identified in Assessment Reports and prevent any new significant threats. Threats may be reduced through voluntary action by landowners, or with assistance from certain programs. Threats could also be addressed through regulatory requirements or through Risk Management Plans.

A tabloid newspaper was created and circulated in the fall of 2011, bringing the latest updates on the Source Protection Planning process to all households within the Thames-Sydenham and Region. Drinking water threat policy discussion papers were presented to the Source Protection Committee (SPC) to be taken through the policy development process. The SPC began reviewing these threat discussion papers and creating draft policies into early 2012. Policies will affect the implementers of policies (Municipalities, Conservation Authorities and the Province), and those who plan to engage in existing and future activities where the policies would apply. A pre-consultation plan will be developed in 2012 for the implementers of the policies for which they are proposed to implement. This will be an opportunity for implementing bodies to



LOWER THAMES VALLEY ASSESSMENT REPORT

Municipal Drinking Water System Summary - Chatham & South Chatham-Kent Water Supply System

Assessment Reports compile and summarize information from the technical reports that have been completed on each of the municipal drinking water systems in the Thames-Sydenham and Region.

This Municipal Drinking Water System Summary provides an overview of information in the Lower Thames Valley Assessment Report related to this system. For more detailed information and mapping, please refer to the Lower Thames Valley Assessment Report at www.sourcewaterprotection.on.ca.

The information presented in the Assessment Report, including this system summary, will be used to develop Source Protection Plans as required by the Clean Water Act (2006). Source protection is the first barrier that helps provide safe drinking water for Ontario and focuses on protecting the source of the drinking water systems (raw, untreated water). The other barriers that help protect drinking water, including treatment, testing and distribution, are governed by the Safe Drinking Water Act (2002).

Chatham & South Chatham-Kent Water Supply Systems Overview

Systems	Chatham and South Chatham-Kent	
Operating Authority	Municipality of Chatham-Kent Public Utilities Commission	
Systems Classification	Drinking Water System - 1 (Large municipal residential)	
Rated Design Capacities	Chatham system - 60,190 m ³ /day	South Chatham-Kent system - 22,800 m ³ /day
Pumping Rates (m³/day)	Chatham system - Maximum Annual 11,553,058 - Average Annual 11,137,375 - Average Monthly 926,447	South Chatham-Kent system - Maximum Annual 2,468,410 - Average Annual 2,352,900 - Average Monthly 196,075
Intake Location	Lake Erie at Erie Beach, south of Chatham	
Description of Intake	1 intake shared by both water supply systems, 701 m from shore, at a depth of 7.3 m below the low water level	
Classification of Intake	Type A - Great Lakes	
Approximate Population Served	Chatham system - 47,815	South Chatham-Kent system - 12,108
Area Served	Chatham system - Chatham, Pain Court, Grande Pointe, Mitchell's Bay, Dresden, Tupperville and Thamesville	South Chatham-Kent system - Southern Chatham, Berheim, Charing Cross, Erie Beach, Ilexton, Port Ainslie, Rendshaw Bay Estates, Shrewsbury, and South Ruxton

Intake Protection Zones

Intakes are used to draw drinking water from lakes or rivers. One intake, located in Lake Erie at Erie Beach, serves both the Chatham and the South Chatham-Kent water treatment plants. This intake is referred to as the Chatham-South Kent Intake in the Assessment Report.

An Intake Protection Zone, or IPZ, is an area of water and land delineated around a municipal water intake, where special care must be taken in the use and handling of potential contaminants. A spill or a leak in this area may threaten the municipal drinking water supply so quickly that there may not be enough time to warn the system's operator to shut down the water intake.

Each IPZ is comprised of three areas: Intake Protection Zone 1 (IPZ-1), IPZ-2, IPZ-3. Figure 1 shows the delineated IPZ-1 and IPZ-2 of the Chatham-South Kent intake.




Thames-Sydenham and Region - Municipal Summary - Chatham & South Chatham-Kent Water Supply System - www.sourcewaterprotection.on.ca - November 2010

provide official comment on draft policies prior to the later public consultation on the Draft Source Protection Plans. Following dealing with comments from implementers, the SPC will prepare for formal public consultation on the Draft Proposed and Proposed Source Protection Plans. This is expected to occur by mid 2012. The Proposed Source Protection Plans for the Thames-Sydenham and Region must be submitted to the Province in August 2012.

First Nation Liaison Committee

A First Nation Liaison Committee (FNLC) was created in 2011 to help First Nations in the Thames-Sydenham and Region become more involved in the drinking water source protection process. The FNLC will be working closely with the three First Nations representatives from the Source Protection Committee.

Providing Opportunities to Enjoy, Learn & Respect

50 years

Employment Grants

In 2011, the LTVCA accessed \$113,226.22 of grant funding for 11 workers to assist with the completion of projects over and above those of full time staff in field services management, forestry, watershed planning, water quality sampling, groundwater monitoring, community relations, visitor services, museum assistance, clerical and GIS. Through the Provincial Ministry of Training, Colleges and Universities (MTCU) Job Creation Partnership (JCP), seven workers assisted the LTVCA with field and technical services in our eastern watershed conservation areas. Four summer student positions were funded through other Provincial and Federal grant programs. All gained experience working with an environmental agency and the public. We were able to augment and improve our programs and services through these Federal and Provincial employment program grants.

In addition, the Municipality of Chatham-Kent (C-K), provided two positions approved by council for a fifth term in 2011 to continue the Greening Partnership (LTVCA, C-K, and Stewardship Kent) with a mandate to 'green' Chatham-Kent, through tree planting, wetland, and tall grass prairie restorations.



Illustrated here, employment program workers applied their skills and expertise to Conservation Authority field and technical projects. In return, the LTVCA provided workers with training and experience to improve future employment opportunities in their desired fields. Some of the projects completed in 2011 included roof and window repairs and interior painting of the Resource Centre, construction of a cabin stairwell roof, longhouse and bat nesting box, creation of six conservation area brochures with maps, general maintenance of eastern watershed conservation areas, development of a new website, compilation of a Ska-Nah-Doht education program staff manual, tree planting, water testing, visitor services and marketing.

	MTCU Job Creation Contribution	LTVCA Authority Contribution	LTVCA Foundation Contribution	Length of Program	Total Program Costs
Resource Centre/Museum Handyperson 1 Position				26 weeks	
Marketing/Communications Assistant 1 Position				26 weeks	
Conservation/GPS Education Assistant 1 Position				26 weeks	
Ska-Nah-Doht Education Assistant 1 Position				26 weeks	
Field Service Management Technicians - Eastern District 3 Positions				26 weeks	
		\$81,560.00 (In-kind)			
		\$6,352.00			
Total Job Creation Program Costs	\$101,044.00	\$87,912.00			\$188,956.00
	Prov. Summer Experience Contribution				
Assistant Water Resource Technician 1 Position	\$2,785.35			34 days	\$2,785.35
GIS Technician 1 Position	\$2,785.35			34 days	\$2,785.35
	Canada Summer Jobs Contribution				
Community Activities Coordinator 1 Position	\$3,648.00	\$149.64		9 weeks	\$3,797.64
	Young Canada Works Contribution				
Exhibition Design Assistant 1 Position	\$2,963.52	\$244.16	\$1,009.00	10 weeks	\$4,216.68
TOTALS	\$113,226.22	\$88,305.80	\$1,009.00		\$202,541.02



2011 Employment Programs and Grant Funding Accessed by LTVCA.

Conservation Lands

The Lower Thames Valley Conservation Authority has protected environmentally sensitive lands, wetlands, culturally unique features and significant biological, ecological, and scenic qualities through its conservation lands program. Nearly 690 ha of conservation land have been preserved at 25 properties for public use in the LTVCA watershed and region. Russ Dysarz and David Little - Western and Eastern District Supervisors respectively, and Bruce Clark - Construction and Maintenance Technician, are responsible for the management of these sites. The LTVCA's Staff Safety Committee tour all the conservation lands annually to ensure the properties are safe for public use.

Two new properties were acquired in 2011, both located in the Municipality of Chatham-Kent. Merlin Conservation Area is a 2.8 ha property donated by Mr. Jack Peltier to the Lower Thames Valley Conservation Authority. It was formerly the site of the Merlin District High School (MDHS) in the Community of Merlin. MDHS operated from 1950 until 1980. Merlin Conservation Area is now being re-naturalized for the benefit of the community. Many trees were planted here in 2011. The Secord & Smith Memorial Forest will be planted here as well, in partnership with the Secord & Smith Funeral Home of Merlin, the Lower Thames Valley Conservation Foundation and the LTVCA.

The second new property is Stirling Conservation Area, which is an 8.09 ha forest. The Lower Thames Valley Conservation Authority acquired this property in 2011, as a result of the land donation from Mr. Jim Stirling. Stirling Conservation Area is located on Rondeau Estates Line in the Community of Harwich.

In addition to the above donations, the following donors to the LTVCA of time and money towards Conservation Areas in 2011 are recognized in this section of the report:

Anonymous – \$10 C.M. Wilson CA
 Friends of C.M. Wilson Conservation Area - volunteers
 George Wickham - volunteer at Moonlight Winter Family Hike at Longwoods
 Guardians of Longwoods - volunteers at Longwoods Road CA
 Jessica Levesque – invasive species mapping at Longwoods Road CA
 John and Wendy Britan - \$50 donation to Longwoods Road CA
 Longwood Kennels – birdseed for Longwoods Road CA
 Lower Thames Valley Conservation Foundation - \$325 for sign at Big 'O' CA
 Ministry of Training, Colleges and Universities - 7 workers east watershed CA's
 Northern Casket - \$28 C.M. Wilson CA
 Private Giving Foundation - Moore Family Foundation - \$250 Two Creeks CA
 Ridge Landfill Community Trust - \$20,000 C.M. Wilson CA playground
 Rondeau Bay Watershed Coalition – volunteers planted prairie at C.M. Wilson CA
 Upper Thames Military Re-enactment Society – volunteers Longwoods Heritage Weekend
 Wheatley Two Creeks Association - volunteers and \$1,600 Two Creeks CA
 William Dodman - \$100 C.M. Wilson CA

New Playground and Outdoor Classroom at C.M. Wilson CA

A \$20,000 donation from Ridge Landfill Trust plus prior funding from Chatham-Kent Community Foundation, the Friends of C.M. Wilson and Chatham-Kent Recreation Partnership Fund afforded a new playground at C.M. Wilson Conservation Area in 2011. Active Playground Equipment assisted with the ordering of structures and equipment, as well as the layout of the project site.

A new outdoor classroom was also installed along the shore of the pond to be used by local groups and the LTVCA for environmental teachings. Funding for this project was accessed by Stewardship Kent.



At a dedication ceremony on June 4th, the Merlin Conservation Area was officially opened. The donor of the property, Jack Peltier is second from the right with LTVCA Chair Brian King to his left.

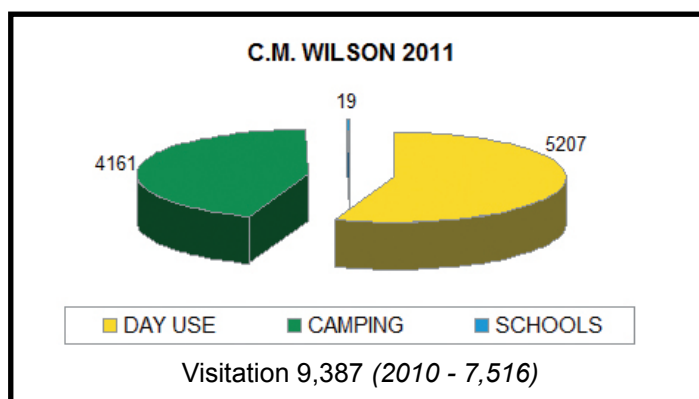
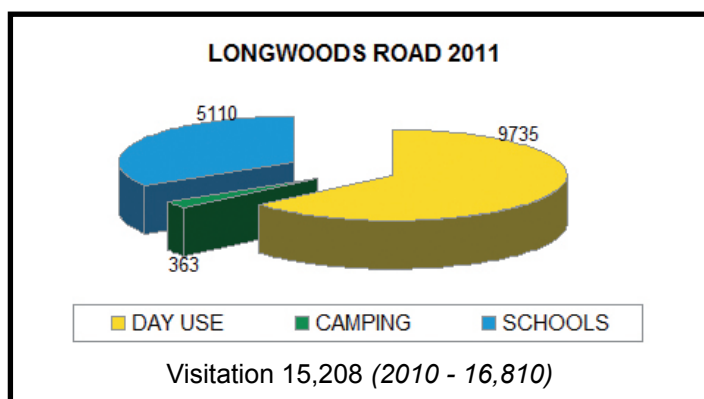


Above is the new playground and below, the new outdoor classroom, both located at C.M. Wilson Conservation Area.



Recorded Conservation Area Visitation

Not all of our conservation areas have recorded attendance figures, however the following statistics are available for 2011: Big Bend CA - camping 1,990 (2010 - 1,617), E.M. Warwick CA - camping 2,299 (2010 - 2,290). The charts below breakdown the visitation at Longwoods Road and C.M. Wilson Conservation Areas in 2011.



MUNICIPALITY	Chatham-Kent												Dutton/Dunwich	Lakeshore				Middlesex Centre		Southwest Middlesex			Southwold	Strathroy-Caradoc		West Elgin	
FACILITIES																											
Land Area (hectares)	35.21	2.22	30	1.62	8.09	20.64	14.97	33.55	2.86	39.83	.48	.93	.78	25.66	4.53	46.37	3.06	36.42	40.47	121.2	3.19	9.22	59.68	7.88	14.16		
Day Use	■	■	5207	■	■		■	1000's	■		■	■	■	■	■	■	■	■		■	■	■	■		■		
Historic / Museum													■										■				
School Program			19																				5110				
ANSI / PSW Site				■		■	■													■			■				
Wetland / River			■					■			■	■	■	■	■	■	■	■	■	■		■	■		■		
Forest	■	■	■	■	■			■				■	■	■	■	■	■	■	■	■	■	■	■	■	■		
Family Camping			4161															1990									
Group Camping			■					■						■		■		■					363		2299		
Memorial Forest			■					■						■		■		■		■							
Volunteer Groups			■					■															■				
Pavilion			■					■						■				■					■	■	■		
Trails / Boardwalks	■		■	■			■	■						■	■	■	■	■	■	■		■	■	■	■		
Fishing			■			■	■					■	■			■	■	■				■			■		
Boat Launch																		■									
Unsupervised Beach			■				■									■									■		
Picnic Table			■				■	■					■					■					■	■		■	
CONSERVATION AREA LANDS	Walter Devereux	Miller Sanctuary	C.M. Wilson	Sinclair's Bush	Stirling	Rondeau Bay Marshes	McGeachy Pond	Two Creeks	Merlin	Diversion Channel	Colborne Street	Dutton/Dunwich	Lighthouse	Rowsons Tilbury West	Big 'O'	Sharon Creek	Delaware	Big Bend	Ekfrid Forest	Mosa Forest	Crane	Mill Stream/Janes Bush	Longwoods Road	Feasby	E.M. Warwick		

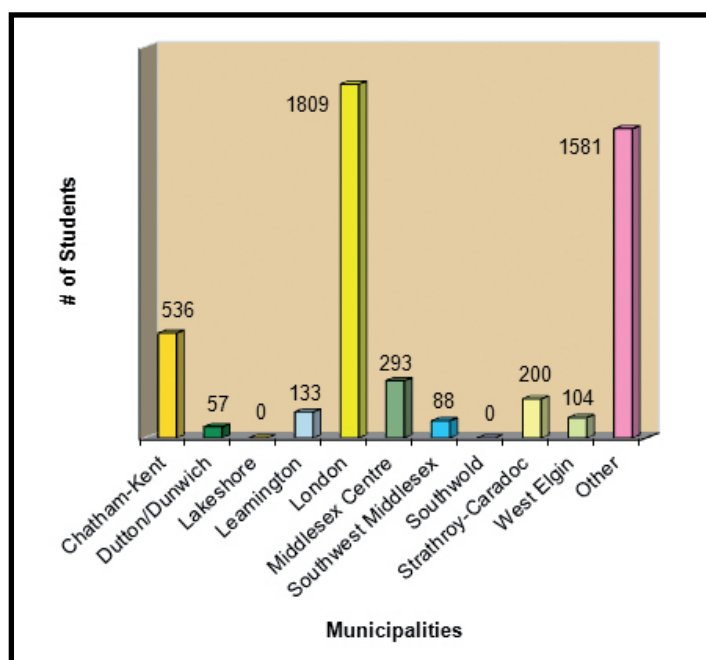
Conservation Authority Education Programs

The LTVCA offers two types of education programs from Longwoods Road Conservation Area - Conservation Education and Native Studies at the Ska-Nah-Doht Village and Museum.

SKA-NAH-DOHT VILLAGE						CONSERVATION EDUCATION LONGWOODS ROAD C.A.						COMBINATION SKA-NAH-DOHT and CONSERVATION EDUCATION					
	# Adults free	# Adults paid	# classes half day	# Students Half Day	# Students Full Day	# classes full day	# Adults free	# Adults paid	# classes half day	# Students Half Day	# Students Full Day	# classes full day	# Adults free	# Adults paid	# classes full day	# Students Full Day	
January	20				117	7											
February	44	5			257	11							17			4	74
March	31	4			172	8											
April	32				242	11	21		5	93							
May	71	19	7	175	277	13	28		5	108	102	4					
June	145	11	7	164	591	25	84	7	10	218	214	9	5			1	23
September	1	7			29	2											
October	46	45	7	141	481	20	12	30	8	172	61	2	2	0		2	47
November	22	57	1	17	360	17	9	22	5	107			1	1		1	26
December													2	4		2	37
TOTALS	412	148	22	497	2526	114	154	59	33	698	377	15	27	5	10	207	

CONSERVATION EDUCATION C.M. WILSON C.A.						CONSERVATION EDUCATION OUTREACH					
	# Adults free	# Adults paid	# classes half day	# Students Half Day	# Students Full Day	# classes full day	# classes quarter day	# Students Quarter Day	# classes half day	# Students Half Day	# classes full day
January											
February											
March							12	274			
April											
May											
June											
September											
October	4	0	0	0	15	1					
November											
December											
TOTALS	4	0	0	0	15	1	12	274	0	0	0

Education program statistics 2011



Education programs by Municipality 2011.



A new longhouse was built at Ska-Nah-Doht Village with some labour and materials supplied through the Job Creation Partnership of the Ministry of Training Colleges and Universities.



Ducks Unlimited continued sponsorship of "Project Webfoot", a wetland program at Longwoods Road with \$1,362.



C. M. Wilson Conservation Area is available for guided conservation education programs.

LTVCA Provides Experience through Education!

Longwoods Road Conservation Area received volunteer help from many university, college, secondary and elementary age students from education institutions across Middlesex County in 2011. Secondary school students Cori Charlton, Amber Albert, T.J. Albert, Kieran Costello, Josh Schiller, Joe Roes and Justin De Zwart assisted education staff with many projects. These volunteers receive training and experience in the field of conservation and native history towards their community service hours. The help these students provide is greatly appreciated!



Students from Montessori House of Children in London camped at Longwoods Road Conservation Area and completed a trail improvement conservation project for the park!



Ian O'Neill and Emma Del Degan (above) and Derek Williams were Althouse College students who volunteered several weeks at Longwoods Road Conservation Area through the T2P program.

Chatham-Kent & Lambton Children's Water Festival



The fifth annual Chatham-Kent & Lambton Children's Water Festival was held October 4-6, at the C.M. Wilson Conservation Area. 1,301 grade three to five students attended the festival. Over 100 volunteers helped each day! Some donations were received through the LTVCA for the 2011 Water Festival. Many thanks to the following donors:

Captain Garnet Brackin IODE - \$2,000
 Catherine McVean Chapter IODE - \$100
 Chatham-Kent Children's Safety Village - use of parking area
 Chevaliers De Colomb Conseil 9693 - \$50
 Dover Kinsmen - \$200
 Enbridge Gas Distribution Inc. - \$500
 Friends of the St. Clair River - \$2,500
 Highgate District Lions Club - \$100
 Kiwanis Club of Chatham-Kent - \$1,000
 Knights of Columbus Council 7251 - \$100
 Optimist Club of Bothwell - \$50
 Pioneer Hi Bred Ltd. - \$1,000
 Rotary Club of Chatham - \$500
 Raymond J. Pilon Enterprises Ltd. - \$150
 TD Friends of the Environment Foundation - Chatham Chapter - \$3,000
 TD Friends of the Environment Foundation - Lambton Chapter - \$2,500
 Union Gas, a Spectra Energy Company - \$1,000

Ska-Nah-Doht Village Programs



Advisory Committee

Don Fairbairn - Chair Ron Watts - Vice-chair
 Brian King, John Kavelaars, Ron Doane, Stanley Caveney, Ian Fleck, Jim Straughan,
 Andy Chisholm, Glenn Stott, Stan Lidster, Conrad Wodrich, Darcy Fallon, Jerry Campbell

The Budget

Village Curator - Karen Mattila managed the \$219,165 Ska-Nah-Doht Village and Museum budget for 2011. Rose Nicholas - Village Education Technician conducted programs, events and managed the inventory for the Turtle Trail gift shop. Funding is acknowledged from the Ministry of Culture through the Community Museum Operating Grant (CMOG) of \$22,992. This Ministry also provided an \$800 grant towards a new sign for Ska-Nah-Doht. Our Museum is a member of the Ontario Museums Association, which facilitates the CMOG and offers many programs for staff development.

Highest Ontario Awards Honour

Amber Albert is the kind of volunteer that everyone wants; enthusiastic and willing to try anything. A member of the Chippewa's of the Thames Band, Amber started sharing her culture with us as an extra in the Nightwalk event. She quickly worked her way up to the starring role as Sky Woman. She has mentored younger volunteers. Amber's mother and grandmother also volunteer, a legacy that we hope will continue. Amber was chosen for "The Ontario Medal for Young Volunteers" 2011 presented by the Lieutenant Governor of Ontario. She was one of only five recipients out of 300 applications. We are proud and honoured to have her as part of our team.



Amber Albert (right) was chosen for "The Ontario Medal for Young Volunteers" 2011, presented by the Lieutenant Governor of Ontario. Her mother Norma Albert (left) also volunteers at Ska-Nah-Doht.

Education Programs

A total of 3,230 students (2010 – 2,995) and 592 supervisors and parents (2010 - 563) enjoyed the Village programs this year. In addition, there were 384 public tour / workshop participants (2010 - 479).

Annual Events

The Village hosted Archaeology Day (assisted by the Ontario Archaeological Society - London Chapter) and Tastes of Fall. Chris Coates and Jerry DeZwart each donated \$250 towards the Ska-Nah-Doht Fund following this last event. The Guardians of Longwoods and the Forest City Checkers volunteers are pivotal at our events.

Past comes to Life Hollywood North Style

YAP Productions (Toronto) came to Longwoods in the fall for the authentic look of the village and the vast green space of the park. In three days, they replicated life in a 20 longhouse village, harvested hundreds of hectares of corn, chopped down a forest with hundreds of men and witnessed the first meeting of First Nations and French explorer, Etienne Brule! The final production will be on television in late 2012.

Federal Summer Grants

We received a Young Canada Works in Heritage grant through the Canadian Museum Association and hired Emma Young of Mount Brydges. We also received a Canada Summer Jobs grant for one student, Codie Kish of Glencoe. The students worked to create a traveling display to take into the community. The display celebrated the 50th Anniversary of the Conservation Authority and upcoming events at Longwoods.

Conservation Education Programs

Union Gas Supports New “Biodiversity and You!” Program

A generous grant from Union Gas enabled the development of this new program which addresses grade six curriculum requirements. Designed as a free-of-charge resource that provides educators with a basic introduction to the major theme of biodiversity, the program addresses other curricular themes including species at risk, invasive species, and a multicultural/heritage strand. The \$34,177 of Union Gas funding also includes free one hour in-class presentations to schools within the LTVCA watershed to be performed by LTVCA staff, along with a Biodiversity and You! Presentation Package. The Package contains all of the materials necessary for future teacher use of the program. The program is available on the www.ltvca.ca website and can be downloaded free-of-charge for any educator/education facility wishing to use it. The Biodiversity and You! program will be shared across the Province of Ontario.

Classroom Programs

An application submitted by the Lower Thames Valley Conservation Foundation to the RBC Bluewater Project Community Action Grant was approved for \$3,000 and provided to the LTVCA for the development of a new “Watershed Awareness Classroom Program”. This funding will augment the efforts of the Thames-Sydenham and Region Source Protection Region of which LTVCA is a part as they protect the municipal drinking water sources of the watershed. Schools targeted with this proposed program are located within or near the five drinking water surface intakes and well head protection areas in our region. Approximately 450 students could potentially benefit by learning about the importance of protecting these sensitive drinking water zones.

The River and Creek Safety Program (RCSP) was jointly presented by the Chatham-Kent Children’s Safety Village (to schools within the Municipality of Chatham-Kent) and by LTVCA staff (to schools east of Chatham-Kent). This outreach program for schools in the Municipalities of West Elgin, Dutton/Dunwich, Southwest Middlesex, Middlesex Centre, Strathroy-Caradoc and Southwold offered by LTVCA staff was delivered to 274 students - 12 classes (2010 - 285 - 14 classes) during the month of March. The RCSP targets grade two students, teaching them waterway safety with special emphasis on the winter (ice safety) and spring (melting) seasons when danger is greatest. Special thanks goes to these service clubs for their support of this important safety program in 2011:

Delaware Lioness Club - \$200

Delaware Lions Club - \$200

Glencoe District Lions Club - \$300

Optimist Club of West Lorne - \$200

Rodney Lions Club - \$100

Royal Canadian Legion Branch 251 - \$200

Royal Canadian Legion Branch 598 - \$200

Field Trips

During 2011, 1,297 elementary and secondary students (2010 - 1,852) accompanied by 249 adult supervisors (2010 - 295), participated in field trips to Longwoods Road Conservation Area (Municipality of Strathroy-Caradoc) and C.M. Wilson Conservation Area (Municipality of Chatham-Kent). These numbers represented 59 half and full day class visits (2010 - 86). Pre-school through secondary school groups participated in various curriculum related programs such as Soil Ecology, Habitats and Communities, Acid Rain, Aquatic Ecology, Wetlands, and Predator-Prey. Outdoor learning opportunities greatly enhanced student comprehension of scientific, geographic, mathematic and environmental concepts.

Conservation Workshops

A variety of workshops at Longwoods Road Conservation Area and LTVCA outreach locations were offered to 156 Scouts, Guides, Cubs, Brownies, Beavers, Sparks, and Venturers (2010 - 184). Youth groups obtained different badges for various outdoor activities including Owl Hikes, Snowshoeing, World Conservation and Forestry.



Jerry DeZwart - Conservation Education Technician, teaches students about life forms, habitat, and biodiversity on field trips to Longwoods Road Conservation Area.

Partnering with the Local Community

50 years

Community Relations - A Part of All Programs

Community Relations activities inform Directors, member municipalities and residents, media and politicians about all LTVCA's programs and services. Staff participate in special events and tours, initiate and assist with local environmental projects, produce literature on conservation programs, design and create displays for fairs and conferences and write articles for local newspapers and newsletters. We partner with organizations, volunteers and other stakeholders, including our Foundation, to help with the conservation of our watershed resources. The communication of information and education about the LTVCA encourages the wise management of our natural environment in the lower Thames River watershed and region. This report highlights Community Relations activities in 2011. Bonnie Carey - Community Relations Coordinator is assisted by Agnes Vriends - Clerk - Secretary with many communications projects.

Communications staff worked on many projects for the Thames-Sydenham and Region Source Protection Region in 2011. These included advertising, and organizing and supporting meetings as per the Clean Water Act.

LTVCA Launches New Website

Through a Job Creation Partnership in 2011, a new website was designed for the Conservation Authority as part of its 50th Anniversary celebrations. Along with the new site at www.ltvca.ca, a grcode was created for our publications and signage, which when scanned with smart phones, will take viewers directly to our website.



Communications Products & Services

writing, editing, designing, presenting

- annual reports
- presentations for member municipalities and stakeholder groups
- conservation area brochures and publications
- displays and exhibits
- advertising, marketing, public relations
- website updates
- media releases and public service announcements
- communications plans for special projects
- "Lower Thames Beacon" newsletter

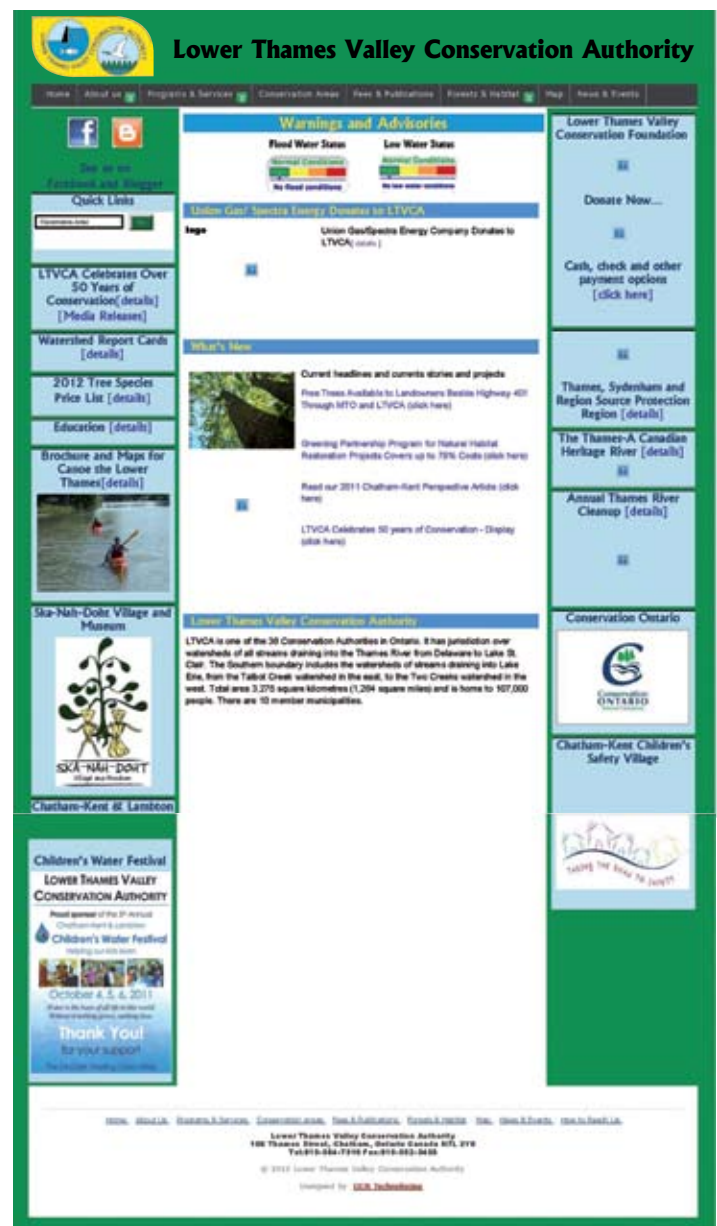
organizing

- meeting facilitation
- public events / public consultations

fund raising

- employment programs
- conservation projects and services

representation on watershed committees and working groups



Year-round Special Events

Exploring the natural environment is made fun at the special events organized in our many conservation areas. Whether learning about endangered species or habitat restoration, enjoying an activity like hiking, canoeing or bird watching, reliving local history or listening to an outdoor concert, the LTVCA joins with great partners, provides ideal locations and has the expertise to offer year-round activities for everyone! Effort is made to host or help partners organize events in as many of our conservation areas as possible. Highlights of some 2011 events have been included in this report.

Moonlight Winter Family Hike

A beautiful winter's evening was enjoyed by 106 participants (2010 - 108) who searched for Eastern Screech Owls at Longwoods Road Conservation Area. Many thanks to Foundation Directors volunteering at the February event: Peter and Dawn Snow, Rick Gray, and past Director Al McGregor. Community volunteers Vickie and Corey Day, Janine Butler and Denis Bolohan, Debra and Nikita Ramjeawan, Cleve Lowthian, Cori Charlton and the DeZwart family - Deb, Collin, Justin and Rachel lent a hand, making the night a huge success. Over \$937 was raised for the LTVCA from registered hikers. Hikes were fully booked 2 weeks before the event. Screech and Great Horned Owls were seen and heard on the hike and live owls were a hit indoors at the Resource Centre. George Wickham was present to reveal his award winning bird carvings while Lynn Eves and her assistant from the Bluewater Centre for Raptor Rehabilitation, allowed audiences to view a long-eared and a screech owl up

close! Owl crafts were made downstairs and owl pellets were investigated by children to determine what owls eat.



The annual Moonlight Winter Family Hike (owl hike) in February was enjoyed by 106 people and 20 volunteers at Longwoods Road Conservation Area.

Longwoods Heritage Weekend



In May, the Upper Thames Military Re-enactment Society hosted the annual Longwoods Heritage Weekend. Hundreds of re-enactors from across North America engaged in the weekend long 1812 event, along with close to a thousand spectators.

Doors Open Middlesex



As part of the Doors Open Middlesex event in September, LTVCA staff were on hand at Skunk's Misery to greet and tour visitors through this beautiful forest. Longwoods Road Conservation Area also hosted this event.

Star Party

At Longwoods Road, an evening in June featured a presentation by Dave McCarter and the Royal Canadian Astronomical Society (RCAS) of London. Visitors learned about stars, constellations, globular star clusters, planets and methods used to view them. Later, the crowd enjoyed using RCAS telescopes to view the night sky.

LTVCA Celebrates 50 Years of Conservation!



1961-2011

50 years of conservation for the Lower Thames Valley Conservation Authority and we celebrated with a multitude of events and activities across our watershed! Here's to the next 50 years!

- Beginning in February, a media release captured the five decades of conservation services and programs in which the LTVCA has been engaged.
- At our Annual General Meeting (AGM) in February, special guests attended and the Conservation Authority's achievements were highlighted.
- A DVD premiered at the AGM with memories of the LTVCA's past 50 years paralleled with world events setting the time period for our viewers.
- In preparation for the AGM and a watershed municipal library tour, a seven panel display was created with details on our pre-history and each decade of our incorporation, and of course a 50th Anniversary panel. This display will find its home in the boardroom of the LTVCA.
- Merlin and Stirling Conservation Areas were welcomed as new land donations to the Conservation Authority.
- To mark its Centennial, **Spectra Energy**, the parent company of **Union Gas**, awarded a \$100,000 Signature Grant to the LTVCA in June to fund new biodiversity education, conservation and restoration programs and an expanded community trees initiative - a great way to recognize our 50 year anniversary as well!
- East and west watershed bus tours were organized for our Board of Directors and partners, complete with 50 trees planted by bus tour participants and the community at Merlin Conservation Area, and a celebratory anniversary cake at one of the lunches.
- An application for a Job Creation Partnership (JCP) for seven workers was funded in part due to the fact we were celebrating our 50th Anniversary and many proposed projects reflected that milestone, including the creation and launch of our new website and a new longhouse at Ska-Nah-Doht Village.



Lower Thames Valley Conservation Foundation

2011 Highlights



The Lower Thames Valley Conservation Foundation works in partnership with the Lower Thames Valley Conservation Authority, to raise funds towards the wise management of our renewable natural resources. Since 1995, the Foundation has raised over \$550,000 for natural and cultural heritage conservation. Thousands of dollars were raised in 2011 for conservation projects.

The Lower Thames Valley Conservation Foundation assists volunteer organizations with their fund raising efforts and manages the Sharon Creek Trust Fund, initiated by the Friends of Sharon Creek. The Foundation supports special projects and events like the annual Moonlight Winter Family Hike, the Carey Carolinian Arboretum and Trail and the William Erickson Bursary. Through the Foundation's Memorial Forest Program, the Conservation Authority has planted thousands of trees in the lower Thames region. The Foundation submits funding applications to corporations, government agencies, service clubs and other philanthropic organizations to undertake projects and programs which assist the LTVCA.

The Conservation Foundation is an independent, not-for-profit, federally registered charity - Number 898198171 RR0001. Tax receipts are issued for all donations. It is governed by a Board of Directors.

The Foundation helped fund many Conservation Authority and watershed initiatives in 2011:

- Signage for Big 'O' Conservation Area
- RBC Bluewater Project Community Action Grant
- New Secord & Smith Memorial Forest at Merlin Conservation Area and signage
- 476 memorial trees from 2010 and 12 ceremonial trees in 2011
- Support costs for summer students
- Sharon Creek Conservation Area land taxes (from Friends of Sharon Creek Trust Fund)

Carey Carolinian Arboretum & Trail

Facilitated through the Foundation, a \$26,000 gift in 2008 from a private donor - Dr. Lewis Carey, was used by the Lower Thames Valley Conservation Authority for an educational "Carey Carolinian Arboretum and Trail" project at Longwoods Road Conservation Area in 2009. Dr. Carey passed away in November of 2009.

Large stock Carolinian trees have been planted with their signage. An official opening and recognition ceremony was held in 2010.

Both the Conservation Foundation and Conservation Authority realize the importance of creating a Carolinian arboretum and trail system as an educational tool for this unique habitat. Dr. Carey's wish for messaging to reflect the connection between First Nations peoples and the natural surroundings of a Carolinian forest came to fruition, as Longwoods highlights both native and natural history. The final phase of this project will be the construction of an Carolinian information kiosk with plans that began in 2011 with the initial excavating for the kiosk.



Every fall, close to 2,000 people attend memorial forest dedications held across the LTVCA watershed at McKinlay Woodlands in C.M. Wilson Conservation Area in Chatham-Kent, Badger and Robinson Memorial Forest in Mosa Forest near Bothwell (above) and Tilbury Northside Park.



*The Thames,
A Canadian Heritage River*

*In 2011, the Thames River celebrated its eleventh year as a Canadian Heritage River.
The twelfth Annual Thames River Clean-up was held in April
with thousands of volunteers cleaning up hundreds of kilometres along the river.*



**Lower Thames Valley
Conservation Authority**

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