

Welcome to Novi!!

Where Quality of Life is the Way of Life!

In Novi, there is much to be proud of — excellent schools, quality public services, solid property values, and continuing development. Community members choose Novi because these factors reinforce that *Quality is the Way of Life*.

Residents live in Novi for the highly-regarded schools, safe neighborhoods, and preservation of natural resources. Businesses locate in Novi for its great location, easy access to similar organizations, and cultural diversity. Combine these factors with fiscal responsibility, an open, inclusive government that values and welcomes community involvement, and you have a *dynamic, prospering city*.

The City of Novi maintains the sixth lowest milage rate in Oakland County at 10.5416 mils and boasts a State Equalized Value of more than \$3.8 billion, higher than the State Equalized Value of 60 of the 83 *counties* in Michigan. Novi prides itself on maintaining an open, inclusive government and, in 2006, added next-day video streaming of City Council Meetings to the City's enhanced website. Community members can visit cityofnovi.org to see elected policy makers moving the community forward. .

In Novi, we truly believe “Where Quality of Life is the Way of Life”.... safe, friendly neighborhoods; award-winning schools; well-planned, quality development; abundant natural resources; excellent location; and unending community spirit.

This handbook introduces residents to the City of Novi, its governmental structure and how local government works. It provides an overview of the many activities available for Novi residents, businesses and visitors. For more detailed information or up-to-the-minute happenings in Novi, visit the City's website at cityofnovi.org



For more information on any items in this booklet, contact
Community Relations at (248) 735-5628.



Table of Contents

City Government	1
Boards, Commissions and Committees	3
Administrative Staff	15
City Offices	17
City Manager	17
City Clerk	17
Finance	20
Treasurer	20
Assessing	21
Human Resources	21
Public Works	22
Neighborhood & Business Relations	22
Engineering	23
Parks, Recreation & Forestry	23
Map	25
Police Department	26
Fire Department	29
Community Development	30
Building	30
Planning	30
Code Enforcement	31
Helpful Telephone Numbers	35
Emergency Preparedness	46
Environmental	74
Appendix A	
Maps: Voting Precincts, School Districts,	
Parks & Recreation Areas, Emergency Relief Centers,	
Projects, Zoning, Woodlands, and Wetlands	

City Charter

The City Charter is the City’s “constitution” outlining Novi’s government organization authority. The exercise of City authority is consistent with the laws of the State of Michigan and the United States. The Charter was created by residents and can be modified only by the voters.

Mayor and City Council

The Novi City Council consists of seven members, including a Mayor and Mayor Pro-Tem. The citizens of Novi elect the Mayor (two-year term) and the six members of Council (alternating four-year terms). The Mayor and City Council have the power to adopt laws, ordinances and resolutions, to adopt the budget, to levy taxes and to set policy. The City Council appoints a City Manager who is accountable for all administrative functions that are not imposed by the City Charter or ordinance upon another official.

Novi City Council

David Landry, Mayor

Kim Capello, Mayor Pro-Tem

Bob Gatt, Council Member

Terry Margolis, Council Member

Andrew Mutch, Council Member

David Staudt, Council Member

Kathy Crawford, Council Member

All members of the City Council can be contacted through the City Clerk’s Office at (248) 347-0456.

City Council Meeting Procedures

City Council Meetings are typically held at 7 p.m. in the Council Chambers on the first and third Monday of every month. Meetings are open to all community members and broadcast live on Novi Channel 13. The meetings are rebroadcast on channel 13 on Sunday evenings at 7 p.m. City Council meetings are also hosted on the City’s website at cityofnovi.org within days following the meeting.

- **Approval of the Agenda**

At this point in the meeting, additions or deletions may be made to the items originally listed on the agenda by City Council.

- **Audience Participation**

You may participate during the periods of Audience Participation noted on the Agenda. Currently there are three opportunities per meeting — one near the beginning, the second about halfway into the meeting, and the third at the end of the meeting. Citizens are asked to state their name and address for the record and then may state their remarks to Council



from a podium or cordless microphone during audience participation.

- **Consent Agenda (Approvals/Removals)**

At this point in the meeting, Council decides which items will be taken off the Consent Agenda and discussed. The Consent Agenda items are listed on the agenda after the “Adjournment”. Once these items are taken off the agenda they are then discussed under the section “Consent Agenda Removals For Council Action”.

- **Matters for Council Action, Parts I and II**

These are items listed on the agenda that will be discussed and acted upon during the meeting.

- **Public Hearings**

If you attend for a Public Hearing you will be solicited for your input at that time — generally this is one of the first orders of business at a council meeting.

Communications with the City

In addition to attending City Council meetings, you can communicate your specific interests with the City of Novi in a variety of ways. You may want to consider these actions prior to attending a meeting:

- Contact the City Department directly to speak with staff who are there to assist you with your questions and comments. City offices are open for business weekdays from 8 a.m. to 5 p.m.
- City Department Directors oversee the daily operations of the City and may have the specific information you are searching for. Prior to an item being placed on the meeting agenda, there has usually been a record of action of the subject within the City Department, so it may be best to start your inquiries there.
- You may also consider writing a letter to the City Council. Your letter is then photocopied, listed under communications and included in the packet of information that is given to Council prior to a meeting.



Boards and Commissions

Beautification Commission

Term

Three years

Meetings

Second Tuesday of each month at 2:15 pm

Where

Novi Civic Center

Duration

Meetings run approximately one hour, depending on agenda.

Current Membership

Moira Robinson, Chairperson
Connie Garbacik
Barbara Greenberg
Rolland Heaton
Celia Todd
Leslie Weirmeir

Staff Liaison

Matt Wiktorowski

The Beautification Commission consists of nine members. The commission holds an annual Beautification Awards event judging neighborhood entrances, businesses and several other entities within the city by a predetermined set of guidelines. The commission is also responsible for the inception, design and coordination of the “Beautiful Half Mile” which features various plantings in front of the Novi Civic Center and Police Station, and extends west on Ten Mile Road. The commission is also involved in various beautification projects and public events.

Board of Review

Term

Three years

Meetings

Second week in March for three to five days

Where

Novi Civic Center

Duration

Meetings run from 9:00am to 6:00pm daily, depending on the agenda. This is the only board that is compensated. One of the sessions will meet from 1:00pm to 9:00pm. The Board will also meet for one morning in July and December for corrections to the assessment roll.

Current Membership

Ernest Aruffo
Lee BeGole
Marjorie Nanian

Staff Liaison

Glenn Lemmon

The Board of Review is comprised of three members and an alternate appointed by the City Council. The Board of Review is created by the state statutes that govern assessment appeals, and Section 9.6 of the Novi City Charter. The Board reviews property assessments as set by the City Assessor and hears appeals by individual property owners; then reduces, adds to or denies said appeal. A certification of the assessment role is required by the Board of Review per the state statute.



Building Authority

Term

Three years

Meetings

Scheduled by the chairperson

Where

Novi Civic Center

Duration

Meetings run approximately two hours, depending on agenda.

Current Membership

Larry Czekaj - Chairman

Mark Sturing

Clay Pearson - Staff Member

John Hines—Staff Member

Kathy Smith-Roy - Staff Member

The Building Authority is a Commission that oversees the issuance of financing bonds for special projects within the City of Novi. An example is the Meadowbrook Commons Senior Center.

Construction Board of Appeals

Term

Four years

Meetings

On call, scheduled by the chairperson on as needed basis

Where

Novi Civic Center

Duration

Meetings run approximately one hour, depending on agenda.

Current Membership

Jeffrey Bowdell

David M. Byrwa

John E. Enkemann

Lee Mamola

David Stec

Alternate

John Sheffer

Staff Liaison

John Hines

The Construction Board of Appeals consists of five members and an alternate appointed by City Council. Board members must have expertise in a building trade or profession. The board exists as a “fact finding” body for builders and developers. Appeals are usually heard by the board within fifteen days from the date of the actual appeal. The appeals process is for questions of interpretation, proper application and equivalency only. If the board has cause to avoid the strict application of a particular section of the codes, they may grant a waiver of specific code requirements.



Economic Development Corporation

Term

Five years

Meetings

On call, scheduled by the chairperson on as needed basis

Where

Novi Civic Center

Duration

Meetings run approximately one hour, depending on agenda.

Current Membership

Robert Churella
Fred Ciampa
Jon Dostal
Cynthia Grubbs
Todd Kuzma
James McGuire
Eleanor Rzepecki
David Staudt
Michael Watza

Staff Liaison

Ara Topouzian

The Economic Development Corporation (EDC) consists of nine members. The EDC is a resource for reviewing requests for Industrial Revenue Bonds and for other economic development initiatives, as needed.

Election Commission

Term

Three years

Meetings

Scheduled by the chairperson

Where

Novi Civic Center

Duration

Meetings run approximately an hour, depending on agenda.

Current Membership

Brian Larson
Pamela Superfisky

Staff Liaison

Maryanne Cornelius

The Election Commission consists of the City Clerk and two members appointed by City Council. The Commission has the duties and powers conferred on City Election Commissioners by statute. The City Clerk is the chairman of the Commission. The Election Commission shall, before each election, appoint for each precinct of the city a Board of Inspectors. The Board of Inspectors consists of not less than three qualified electors.



Historical Commission

Term

Three years

Meetings

Third Thursday of each month at 10:00am

Where

Township Hall

Duration

Meetings run approximately two hours, depending on agenda.

Current Membership

Gary Gudes
Kathleen Mutch
Elizabeth Nick
Roy A. Prentice

Staff Liaison

Randy Auler

The Historical Commission is comprised of five voting members, of which one member is nominated by the Novi Historical Society. In addition, there are three non-voting liaison members representing the City of Novi, Novi Public Library and Novi Public School District. In cooperation with the Historical Society and the Novi Public Library, the Historical Commission is responsible for Old Township Hall (which serves as a museum), and for the collection, preservation and marking of historical sites.

Housing and Community Development Committee

Term

Three years

Meetings

Scheduled by the chairperson

Where

Novi Civic Center

Duration

Meetings run approximately two hours, depending on agenda.

Current Membership

Ron Boron
Ram Ramachandran
Jerry Ross
Richard Vahlbusch
Sherrie Konkus

Staff Liaison

Marina Neumaier

The City of Novi receives Federal funding called Community Development Block Grant Funds (CDBG) on an annual basis. The Housing and Community Development Advisory Committee (HCD) was formulated for the purpose of reviewing community development needs in regards to these CDBG funds. The committee works in conjunction with City administration to develop annual CDBG goals for the City of Novi. These goals are then used to determine a funding recommendation that is proposed to the citizens of Novi through a public hearing process. The Novi City Council authorizes the final recommendation that is submitted in an annual application.



Library Board

Term

Three years

Meetings

Third Wednesday at 7:00 pm

Where

Novi Civic Center

Duration

Meetings run approximately two hours

Current Membership

Laura Casey
Robert Cutler
Larry Czekaj
Palma Fouratt
Larry Kilgore
Mark Sturing
Ramesh Verma

Staff Liaison

Mary Ellen Mulcrone

The seven member Library Board serves as the governing body of the Library. The board approves payment of bills, acts upon recommendations of the Library Administrator and handles various other business matters. Committees of the board include: finance, which prepares the annual budget and oversees funds; policy, which sets the basic framework for library operations; and the planning process committee which focuses on future development .

Parks, Recreation and Forestry Commission

Term

Three years

Meetings

Held the second Thursday of every month at 7:30pm

Where

Novi Civic Center

Duration

Meetings run approximately three hours, depending on agenda.

Current Membership

Jay Dooley
Paul Policicchio
Christina Radcliffe
Reagan Schwarzlose
Charles A. Staab
Butch Wingfield
Karen Zyczynski

Staff Liaison

Randy Auler

Comprised of seven members appointed by the City Council, the Parks, Recreation & Forestry Commission sets policy for and makes recommendations to the Parks, Recreation & Forestry Department. The Commissioners work together with professional staff in the areas of programming, budget, facilities, planning and public relations. The Commission has the responsibility of meeting community recreational objectives, and reflecting community needs to the Parks, Recreation & Forestry Department and City Council.

Agendas/Minutes for Planning Commission meetings are available online at cityofnovi.org



Planning Commission

Term

Three years

Meetings

Second and fourth Wednesday of each month at 7:00pm

Where

Novi Civic Center

Duration

Meetings run approximately four hours, depending on agenda.

Current Membership

John Avdoulos
Brian Burke
Victor Cassis
Andrew Gutman
Michael J. Lynch
Michael Meyer
Mark Pehrson
Wayne Wrobel

Staff Liaison

Barbara McBeth

The Planning Commission consists of nine members appointed by the Mayor with the approval of City Council. It is the function and duty of the Planning Commission to prepare a Master Plan For Land Use and to advise the City Council in regard to the proper development of the City of Novi. The Planning Commission reviews and recommends to City Council all requests for change in zoning and ordinance text amendments. The commission also reviews and approves industrial, commercial and residential development site plans within the City.

Agendas/Minutes for Planning Commission meetings are available online at cityofnovi.org

Public Access Promotion Committee

Term

Varies (One to three years)

Meetings

Quarterly

Where

SWOCC Studio

Duration

Meetings run approximately two hours, depending on agenda.

Current Membership

Mark Adler
Lynne Boyle
Randy Burlison

The Public Access Promotion Committee serves as a resource to the Southwest Oakland Cable Commission (SWOCC) in promoting access usage and access channel viewership in the Novi community. Functions include, but are not limited to:

- Maintain positive community relations
- Participate in SWOCC special events
- Encourage the use of public channels
- Recruit and support active public and community access users and volunteers
- Increase the level of awareness of public, community and government access

Staff Liaison

Sheryl Walsh
Caren Collins, SWOCC



Stormwater Management and Watershed

Term

Two years

Meetings

Quarterly

Where

Novi Civic Center

Duration

Meetings run approximately two hours, depending on agenda.

Current Membership

Randy Burlison
David Greco
Elizabeth Iszler
Vacancy
Vacancy
Vacancy
Vacancy

Staff Liaison

Ben Croy

The seven members of this committee serve as a valuable resource in providing ideas to maintain and protect the City's environment and natural features.

Youth Council

Term

Two years

Meetings

Every other Wednesday during the school year at 3:30 pm

Where

Novi Civic Center

Duration

Meetings run approximately 45 minutes, depending on the agenda

Current Membership

Vidhi Bamzai	Janani Naidu
Adam Britten	Andrew Phillips
Dayna Dines	Stephanie Raymundo
Christy Duan	Florianne Silvestri
Kathleen Hlavaty	Sara Snyder
Sami Khan	Sarah Wizinsky
Abhigna Kodali	Deepika Yuvaraj
Hollie McDonald	Caryn Zeitlin
Evan Muller	Dexter Zhuang

Staff Liaison

Sheryl Walsh

The Youth Council consists of 19 Novi youths appointed by City Council. The Youth Council is charged with making recommendations to City Council concerning the needs of children, youth and families in the city and the appropriate means by which public and private agencies, in cooperation with volunteer efforts, may address such needs. Functions include but are not limited to:

- Addicted to Movies...Not Drugs Movie Marathon
- Senior to Senior Prom
- Sticker Shock
- Participation in Ringing in the Holidays, the Memorial Day Parade and Fall for Novi



Zoning Board of Appeals

Term

Three years

Meetings

First Tuesday of the month at 7:30pm

Where

Novi Civic Center

Duration

Meetings run approximately three hours, depending on agenda.

Current Membership

Gerald Bauer
Brent Canup
Justin Fischer
Siddharth 'Mav' Sanghvi
Tim Shroyer
*Wayne Wrobel

Vacancy

Alternates

Linda Krieger

Staff Liaison

John Hines

The Zoning Board of Appeals is comprised of six members and one alternate appointed by City Council. The board authorizes use in a zoning district in which it is not otherwise permitted, provided it is clearly shown that the land cannot be utilized for a zoned use. The board is empowered to act on matters where the zoning ordinance provides for administrative review, interpretation, exception or special approval permit, and to author a variance as defined in section 3104 of the Zoning Ordinance and Laws of the State of Michigan.

Agendas/Minutes for Zoning Board of Appeals meetings are available at cityofnovil.org

* Representative from Planning Commission required by the Michigan Zoning Enabling Act



Community activities and/or other experience : _____

References: (Please list name, address and phone number)

1. _____

2. _____

3. _____

Please indicate reasons for desiring to serve: _____

Return form to: Novi City Clerk
 45175 W. Ten Mile Road
 Novi, MI 48375

APPLICATION

CITY of NOVI YOUTH COUNCIL, BOARDS AND COMMISSIONS



45175 W. Ten Mile Road, Novi, MI 48375
Phone: (248) 347-0456 Fax: (248) 347-0577

Thank you for your interest in serving on an advisory board or commission. This application will be kept on file for one year. The file of completed applications is open for public inspection upon request.

Date: _____

Name: _____
(Last) (First) (Middle)

Address: _____ Zip: _____

Home Phone: _____

Parents/Legal Guardian: _____

In case of an emergency, notify: _____ Phone: _____

School / Grade: _____

In order of preference (with one being highest), rank the advisory boards and commissions for which you are applying:

- _____ Novi Youth Council (19 members)
- _____ Parks, Recreation & Forestry Commission (two ex-officio member)
- _____ Historical Commission (two ex-officio member)
- _____ Beautification Commission (two ex-officio member)
- _____ Library Board (two ex-officio member)
- _____ Housing and Community Development Advisory Committee (two ex-officio member)

Community activities and/or other experience: _____

Teacher Reference (name and phone number): _____

I have read the resolutions/bylaws for youth participation on the City of Novi Youth Council, Boards and Commissions and give _____ my permission to apply for and participate if appointed.

Parent or guardian signature Date

Please return the completed application along with an essay of 300 words or less indicating reasons for desiring to serve the City of Novi by June 2 to:

Novi City Clerk
45175 W. Ten Mile Road
Novi, MI 48375

Administrative Staff

Pamela Antil (248) 347-0445
Assistant City Manager

Randy Auler (248) 347-0400
Parks, Recreation & Forestry Director

Charles Boulard (248) 347-0423
Building Official

Maryanne Cornelius (248) 347-0576
City Clerk

Tia Gronlund-Fox (248) 347-0452
Human Resources Director

Carol Kalinovik (248) 347-0446
Purchasing Official

Glenn Lemmon (248) 347-0485
Assessor

Julie Farkas (248) 349-0720
Library Director

Barbara McBeth (248) 347-0475
Community Development
Deputy Director

Benny McCusker (248) 735-5640
Public Works Director

David Molloy (248) 348-7100
Chief of Police

Clay Pearson (248) 347-0445
City Manager

Steve Printz (248) 347-0401
Parks/Forestry
Operations Manager

Steve Rumble (248) 735-5638
Economic Development Director

Frank Smith (248) 349-2162
Fire Chief

Kathy Smith-Roy (248) 347-0465
Finance Director

Ara Topouzian (248) 347-0583
Economic Development Manager

Cindy Uglow (248) 347-0437
Neighborhood and Small Business
Manager

Bev Valente (248) 347-0444
City Treasurer

Sheryl Walsh (248) 735-5628
Community Relations Manager

Rachel Zagaroli (248) 347-0414
Senior Services Manager



City Manager

Clay Pearson, City Manager

The City Manager's Office strives to effectively serve the City Council and public through responsible administration of all City affairs and demonstration and promotion of a high standard of ethics, professionalism, and integrity throughout the City organization. The manager is hired to serve the council and the community and to bring the local government the benefits of training and experience in administering local government projects and programs on behalf of the governing body. The manager prepares a budget for the council's consideration; recruits, hires, and supervises the government's staff; serves as the council's chief advisor; and carries out the council's policies. Council members and citizens count on the manager to provide complete and objective information, pros and cons of alternatives, and long-term consequences.

The City Manager's Office strives to foster open and complete communications, actively seek out and incorporate citizen involvement and participation, and achieve outstanding results through partnerships with other service providers in both the public and private sectors.

City Clerk

Maryanne Cornelius, City Clerk

The City Clerk's Office strives to provide the highest quality of service to the community by supporting the organizational values and goals of the City Council.

The City Clerk's Office is responsible for administering all elections in accordance with State law. The City Clerk and Deputy Clerk are accredited under Michigan election law to conduct training schools for precinct inspectors appointed to serve in the polls at State, Federal, County and local elections. Each election involves a three-month cycle of preparation and follow-up.

This Department is responsible for document storage and retrieval of the City's official records including contracts, agreements, leases, bids, deeds, easements, minutes of City Council and all Boards and Commissions. The City Clerk attends all City Council Regular, Special, Interview and Budget meetings. The staff coordinates all departments in the preparation of the agenda packets. The staff posts meeting notices and publishes notices of public hearings, zoning map amendments and ordinances. The staff also mails notification to residents and business owners for public hearings. All meeting actions are recorded as minutes where they are transcribed and maintained in the Clerk's office. The Council meeting synopsis ("hanging fire") is initiated and distributed through this office.



The City Clerk's Office is responsible for processing liquor license applications, supplements to the Ordinances of the City Code, issuance of business registrations, permits for taxicabs, refuse haulers, arcades, auctioneers, massagist permits, massage business licenses, peddlers and commercial solicitor permits and outdoor gathering permits. This Department also coordinates and fulfills requests under the Freedom of Information Act.

This Department provides Notary services and accepts Passport application documents for processing on a daily basis to all citizens.

Voter Registration

Residents may register to vote in person at the City Clerk's Office, or at any Michigan Secretary of State's Office. A resident must be registered at least 30 days prior to the election to be eligible to vote in that election. The voter will receive a Voter Identification Card by mail after the registration process is completed.

Absent Voter Ballots

Residents who meet any of the following criteria may vote by absentee voter ballot:

- Expect to be away from the community during the entire time the polls are open
- Are 60 years of age or older
- Cannot attend the polls because of religious beliefs
- Are physically unable to attend the polls

Applications are available by calling the City Clerk's Office. Upon receipt of a completed application, the City Clerk's staff issues a ballot to the absentee voter, which must be returned to the City Clerk by 8 p.m. on election day.

City Council Minutes/Agendas

Residents may contact the City Clerk's Office for copies of City Council minutes or upcoming agendas. The agenda is also posted on Cable Channel 13 and the City's website at cityofnovi.org

Copies of City Charter/Ordinances

Copies of the Charter and Ordinances (local laws) are available at the City Clerk's Office. The entire City Charter and Code (book of ordinances) are available for public inspection at the City Clerk's Office and also can be accessed through the City website at cityofnovi.org

Legislative Issues

To contact your County Commissioner, State or Federal Representative, call or visit the City Clerk's Office or the City's website at cityofnovi.org for names, addresses and telephone numbers.



Boards and Commissions

The City of Novi has established the following Boards and Commissions as an opportunity for citizens to participate in local government and, at the same time, help to ensure that the Novi City Council receives a broad spectrum of public input:

- Beautification Commission
- Board of Review
- Construction Board of Appeals
- Economic Development Corporation
- Election Commission
- Historical Commission
- Housing & Community Development Advisory Committee
- Library Board
- Novi Building Authority
- Parks, Recreation & Forestry Commission
- Planning Commission
- Public Access Promotion Committee
- Stormwater Mgmt & Watershed Stewardship Committee
- Youth Council
- Zoning Board of Appeals

Anyone interested in applying for membership on Novi's boards, commissions or committees should complete the application included on page 15 of this book. The application is also located on the City's website at cityofnovi.org under forms. Completed forms should be returned to the City Clerk's Office. The application is then forwarded to the City Council for review and appointment decision. Interviews are held in February, June and December at special City Council Meetings.

City Attorney

The City Attorney represents the City in civil and criminal proceedings and serves as legal advisor to the City, its agencies, and officials and in some instances its employees.

As legal advisor, the City Attorney prepares documents and instruments, renders formal and informal opinions, drafts ordinances, reviews contracts and performs other services as required by law.



Finance Department
Kathy Smith-Roy, Director

(248) 347-0465

The Finance Department is responsible for the general direction and support of all financial operations in the City. The Finance Department works closely with the Office of the City Manager on all issues related to City finances.

The Department provides various support services to the citizens and staff including the following: arbitrage reporting, accounting, budgeting, grant reporting, grant collection, debt administration, payroll, accounts payable, and accounts receivable billing and collection.

Treasurer's Department
Bev Valente, Assistant Treasurer

(248) 347-0440

The Treasurer oversees the billing and collection of City, County, school and State education taxes; billing and collection of water and sewer usage; prepares all special assessment billings and rolls; oversees investment activities; prepares delinquent tax rolls; collects City receivables and conducts daily banking.

Property Taxes

Property tax rates are set by the City Council based upon provisions in the City Charter, State Law or through voter approval. The amount to be levied each year is approved by the City Council after conducting a public hearing.

Novi residential and business taxpayers receive tax bills twice a year, issued by the City of Novi on behalf of the City, the State of Michigan, Oakland County, Oakland County Community College and the school districts serving Novi.

Tax bills are issued

- July 1 – and are payable through August 31 without penalty
- December 1 – and are payable through February 14 without penalty

Tax bills are payable by mail or in person at the Treasurer's Office and at the depository box located at the curb along the south entrance to the Civic Center. For more information call the Treasurer's Office.

Dog Licenses

Oakland County Dog Licenses are available in the City Treasurer's Office. Please be sure to bring in the dog's current rabies certificate for processing. In accordance with Michigan Act 339 of 1919 (the Dog Law), all dogs four months of age or older must be licensed. The license is renewed annually, expiring December 31.



Assessing Department
Glenn Lemmon, Assessor

(248) 347-0485

The mission of the Assessing Department is to uniformly and equitably value all taxable real and personal property within the City of Novi. The annual creation of this tax base provides funding for education, City services and other government functions.

For 2006, the City of Novi has approximately 21,100 real and personal parcels with an assessed value of \$3,845,565,100 and taxable value of \$3,364,061,500. Due largely to new construction, the assessed and taxable values of the City are almost 2.5 times higher than those in 1996. Over 7,600 parcels have been created and added to the tax roll in that time. In spite of the changes since 1996, residential properties have consistently contributed around 64% of the tax base. Commercial properties are 23%, industrial properties at 7% and personal property is at 6% of the 2006 tax base.

The Assessing Department provides the means of assessment appeal through the Board of Review process. Property taxpayers who have appeared before the Board of Review may further appeal their assessments to the Michigan Tax Tribunal.

Taxes are based on the Taxable Value. In 1994, because of Michigan’s Proposal A, a “cap” was put on all property so assessments could not rise over 5 percent annually or the rate of inflation, whichever is lower. When a property is sold the capped value is dropped and the established State Equalized Value (SEV) becomes the Taxable Value. This may result in a higher tax to the new owner than paid by the prior owner.

To review your property valuation record or learn about your appeal rights, contact the Assessing Department.

Human Resources
Tia Gronlund-Fox, Director

(248) 347-0452

Human Resources is responsible for providing support to all departments by performing the centralized functions of recruitment, testing, selection, orientation, development training and labor-employee relations. This function includes contract negotiations and administration of our non-union administrative group. Novi seeks to attract, develop and retain a highly qualified, diverse and dynamic work force.

Human Resources is responsible for ensuring compliance with all employment law requirements such as Equal Employment Opportunity (EEO), Fair Labor Standards Act (FLSA), Family Medical Leave Act (FMLA) and Americans with Disabilities Act (ADA).

Job opportunity announcements are posted in the City Manager’s Office (second level of the Civic Center), 45175 Ten Mile Road, Novi, Michigan 48375 and at cityofnovi.org



Department of Public Works
Benny McCusker, Director

(248) 735-5640

The Department of Public Works is responsible for operating and maintaining all roadways and storm drainage facilities under the jurisdiction of the City of Novi. The Department of Public Works provides the following City services:

- Street sweeping
- Snow removal
- Resolution of drainage problems
- City street repair
- Grass cutting
- Installation of signs
- Repair of catch basins

Recycling

The Department of Public Works is responsible for the operation and maintenance of the RRRASOC recycling center. RRRASOC stands for “Resource Recovery and Recycling Authority of Southwest Oakland County”. Novi is a partner in RRRASOC with the cities of Farmington, Farmington Hills, Lyon Township, South Lyon, Wixom, Southfield and Walled Lake. Novi’s Recycling Center is located at the DPW Garage, 26300 Delwal Drive, and is open Monday - Friday from 8 a.m. to 3:30 p.m.; Saturday 8 a.m. to 5 p.m.; closed Sundays and holidays. The following items are accepted:

- Newspaper in paper bags or tied. Magazines. No plastic bags, phone books or cardboard
- Glass – clean bottles and jars. No tableware, Pyrex or window glass
- Cans – steel, tin or aluminum. Remove labels and crush. No aerosol cans.
- Plastic – number 1 and 2 ONLY. Rinse, remove caps, rings, lids, and, if possible, the labels.

Neighborhood and Business Relations

(248) 347-0415

Neighborhood and Business Relations is responsible maintaining the lines of communication with the citizens and business members of Novi. Community Relations, Neighborhood and Small Business Relations and Economic Development are all housed under the Neighborhood and Business Relations umbrella.



cityofnovi.org

Engineering Division
Rob Hayes, City Engineer

(248) 347-0454

The Engineering Division is responsible for performing engineering activities related to design, construction and review of infrastructure components, the design and implementation of construction programs, traffic engineering, engineering inspection, and analysis, along with policy development regarding public utilities and general development throughout the City.

Parks, Recreation and Forestry
Randy Auler, Director

(248) 347-0400

Parks, Recreation and Forestry provides safe and quality parks and recreation facilities that encourage residents and visitors to play, live and invest in Novi and provides recreation programs that create memorable experiences.

Novi Ice Arena

The Novi Ice Arena is located at 42400 Arena Drive. Amenities include a food concession counter, game room, skate rental and conference room. Open skating is available. Contact the Ice Arena at (248) 347-1010 for further information.

Parks

Brookfarm Park – Seven acres (adjacent to Village Oaks Elementary School)

- Practice soccer field
- Open play area

Community Sports Park – 73 acres (Eight Mile and Napier Road)

- Paved path throughout
- Picnic areas
- Pope Memorial play structure
- Eight ball fields
- Six soccer fields
- Two tennis courts
- Three basketball courts
- Restroom and Picnic Shelters

Ella Mae Power Park - 70 acres (Directly south of the Civic Center parking lot)

- Softball complex with six fields and press box
- Concession stand and restrooms
- Play structure
- Picnic tables/grills



Lakeshore Park – 383 acres
(South Lake Drive)

- Beach and swimming area
- Concession stand
- Picnic tables and grills
- Two picnic shelters
- Multi-purpose building
- Tent rental
- Restrooms
- Two playground areas
- Softball field
- Play field
- Sand volleyball courts
- Mountain bike trail
- Sledding hill
- Cross country skiing

Rotary Park – 55 acres
(Roethel Drive, south of Nine Mile Road)

- Playground
- Picnic shelter
- Two tennis courts
- Nature trails
- Restrooms

Township Hall Museum
(Ten Mile Road, west of the Novi Library)

- Meeting place of the Novi Historical Society
- Available for small group meetings/
small weddings

Wildlife Woods Park – 50 acres
(Eleven Mile and Wixom Roads)

- 12 tennis courts
- Two outdoor basketball courts
- Four soccer fields
- Two ball fields

Park Facility Rental Guidelines

- Residents may not make reservations on behalf of non-Novis businesses or groups
- Please bring a driver's license (or other form of picture identification) for proof of residency and identification and complete information about your party/picnic; date, times, type of activity, number of people attending, specific facility requested
- Applicant must be at least 21 years of age
- The individual listed on the form is responsible for all participants and compliance of all park rules during entire rental period
- The application and fee will be accepted, but is subject to approval by the Parks, Recreation & Forestry Director. A confirmation will be mailed to you within one week of your application.

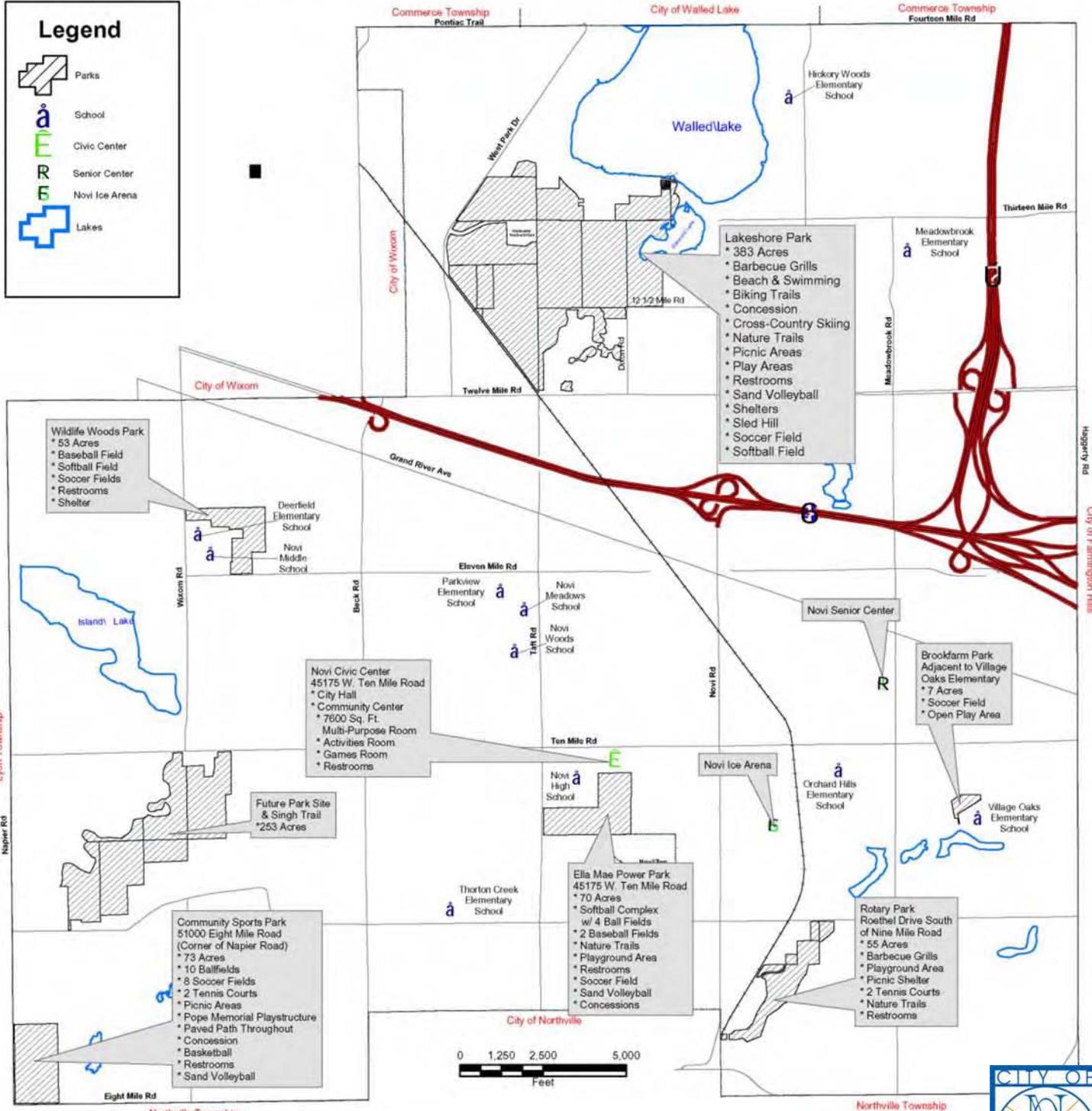




Parks and Recreation Area Map and Site Location Listings

Legend

- Parks
- School
- Civic Center
- Senior Center
- Novi Ice Arena
- Lakes



Novi Theatres

Performances of the Novi Theatres including the Senior Variety Series (ages 50+) and the Little People Players and Children's Annex (ages 7 to 13) are held several times a year. Registration information is published in the Recreation Guide.

Senior Adult Services

The Novi Senior Center is located at Meadowbrook Commons Senior Residential Community, 25075 Meadowbrook Road (between Ten Mile and Grand River).

The Senior Center offers opportunities for residents to register for a wide variety of senior programs as well as any other program offered through Novi Parks, Recreation & Forestry.

Also provided by the Senior Center are social services such as: telephone reassurance, prescription and medication assistance, home repair, health education, information, referrals, Focus Hope Food Commodities and transportation. The Senior Services Division coordinates a variety of programs, activities and services for senior citizens in order to promote independence and improve their quality of life.

Visit the Senior Center and pick up the Monthly Calendar indicating the upcoming senior activities as well as the menu for daily lunches.

Police Department **David Molloy, Chief of Police**

(248) 348-7100

The Novi Police Department strives to be a progressive, productive and proactive agency. The focus is on problem oriented and community oriented policing. The men and women of the Department are committed to enhance the quality of life and lessen the criminal fears of all citizens.

Administration

The Administration is responsible for directing the overall operation of the Department, research, planning, fiscal and personnel management.

Uniform Division

The Patrol Division responds to emergencies and other calls for service. This Division is responsible for traffic and criminal enforcement, preliminary case investigations, arresting offenders and prisoner processing

The Communications Division receives incoming calls for service, dispatching police, fire and ambulance services for the City of Novi and other regional dispatch partners.



General Services Division

The General Services Division is made up of two work units — Records and Investigations. The Records unit is responsible for the storage and retention of all official police documents. The Records unit is also responsible for all aspects of the police computer system. Detectives in the Investigations unit conduct detailed follow up investigations into criminal matters. The Investigations unit is also responsible for crime prevention programs such as Drug Abuse Resistance Education (DARE) and the High School Resource Officer.

9-1-1 Services

Dial 9-1-1- ONLY for police or medical emergencies.

DO NOT use 9-1-1- for non-emergency information such as weather updates or school closing information. The 9-1-1 system should never be used for these needs. For weather updates or school information, refer to a local radio/TV station.

Lakes Area Citizens Police Academy

The Novi, South Lyon, Walled Lake, Wixom, and Wolverine Lake Police Departments have created the Lakes Area Citizens Police Academy. This Academy is a 30-hour block of instruction designed to give the public a working knowledge of the police department's personnel and policies. Anyone 21 years and older may enroll, the only requirement is that you must live or work in the Novi, South Lyon, Walled Lake, Wixom or Wolverine Lake communities.

The Academy covers such diverse topics as training, communications, criminal investigation, drunk driving procedures, crime prevention, family violence, juvenile law and the tactical team. Emphasis is placed on the patrol division as that is the segment of the police department the public most often comes into contact with. Instruction consists of lectures, tours, demonstrations and hands-on experiences. Contact the Novi Police Department at (248) 348-7100 for more information.

Identity Theft

Identity theft is one of the fastest growing crimes in the nation. Credit card numbers, driver's license numbers, social security numbers and other personal identification can net criminals thousands of dollars in a very short period of time.

While the financial loss incurred by this type of crime is not always incurred by the consumer, it can be traumatic. It may take months, even years, to restore credit to one's good name and may prevent the ability to cash checks, obtain loans, rent an apartment or purchase a home.



Preventing Identify Theft:

- Never leave a purse or wallet unattended or in open view in a car, even when locked.
- Destroy all checks immediately after closing a checking account.
- Reconcile check and credit card statements in a timely fashion; challenge any purchase you did not make.
- Limit the number of credit cards you have; cancel inactive accounts.
- Never give your credit card, bank or social security information by telephone.
- Minimize use of social security and credit card numbers; if the numbers are requested for check-cashing purchases, ask if the business has an alternative option such as a check cashing card.
- Safeguard credit, debit and ATM receipts and shred before disposing of them.
- Check utility and subscription bills to ensure charges are accurate.
- Memorize passwords and personal identification numbers (PIN); keep PIN numbers private and stored in a location away from credit cards.
- Keep a list or photocopy of all credit and identification cards.

Victims of Identify Theft Should:

- Report the incident to the Police Department immediately.
- Report all stolen credit or ID cards immediately to issuer.

Procedures for Citizen Requested Traffic Control Signage

Residents shall bring forward to the City Council a recommendation from a particular subdivision association or condominium association for the installation of a traffic control sign. If the subdivision association is not willing to put forth a formal request, then the particular residents must present a petition signed by 51% of the residents of the subdivision requesting a traffic control sign.

Upon receipt of a formal request or a petition, the City Council will have the traffic consultant perform a traffic count and determine whether a traffic control sign comports with the Michigan Manual of Uniform Traffic Control Devices. If it does, then a traffic control sign will be installed. If not, then the City Council may have a traffic evaluation done by a traffic consultant to determine whether there would be an adverse impact upon the City if a traffic control sign were installed notwithstanding the Michigan Manual of Uniform Traffic Control Devices.

If the traffic consultant does not find that there would be any adverse impact from installing the sign, before this matter comes to Council, public notice shall be given in a newspaper of local circulation informing the residents of the request for placement of a traffic control sign to be considered at a Council meeting.

Upon report by the traffic consultant, the City Council would decide whether or not to install such a traffic control sign.



Fire Department
Frank Smith, Fire Chief

(248) 349-2162

The Novi Fire Department provides the community with life and property protection from fire and other threatening situations. The Department seeks to provide timely response and effective management of fire control situations, rescue, medical and environmental emergencies.

The Novi Fire Department is a combination Department, staffed by full-time, part-time, and paid-on-call members. The Department is divided into two divisions — operations and support services.

Operations

The Fire Department responds to all fire, medical emergencies, hazardous material, and service incidents in Novi, as well as mutual aid requests from surrounding communities. This division operates 14 pieces of apparatus from four fire stations located at:

Station #1	Grand River Avenue and Market Street
Station #2	13 Mile Road and Paramount Street
Station #3	Nine Mile Road and Roethel Drive
Station #4	10 Mile Road and Wixom Road

Training

The Fire Department provides fire, medical, and related instruction to members of the Department. Fire safety, cardiopulmonary resuscitation (CPR) training and related fire education programs are provided to the public.

Fire Prevention

Fire prevention involves the enforcement of state and local laws and ordinances that relate to fire protection. Inspections of commercial, industrial, and multiple occupancies, are conducted to determine their compliance with the Fire Prevention Code.

Fire Safety Tips

- Smoke detectors – install detectors on each level of the home and outside each sleeping area; test monthly and replace batteries at least once a year, or whenever a detector chirps to signal the battery is low.
- Plan and practice an emergency escape route in your home or at work.
- Be cautious while burning candles or smoking.
- Be careful while cooking – never leave cooking unattended.
- Matches and lighters are tools – use child-resistant lighters and store all matches and lighters where children can't reach them, preferably in a locked cabinet.
- Use electricity safely – if an appliance smokes or has an unusual smell, unplug it immediately and have it repaired; replace any electrical cord that is cracked or frayed; don't overload extension cords or place them under rugs; don't tamper with the fuse box or use fuses of an improper size.



- Stop, drop and roll – if clothing catches fire, don't run! Stop, drop to the ground, cover your face with your hands to protect your face and lungs and roll over to smother flames.
- Crawl low under smoke – if you must exit through smoke, crawl on your hands and knees to the nearest safe exit.
- Cool a burn – immediately place a burn wound in cool water for 10-15 minutes; if the burn blisters or chars, see a doctor immediately.

Community Development
Steve Rumple, Director

(248) 347-0415

The City of Novi has combined its Building and Planning Divisions into the Community Development Department. The Planning and Building Divisions have the primary responsibility for administering the laws, regulations and requirements that pertain to the physical development of the Novi Community.

The Planning and Building Divisions work in partnership to bring streamlined and accurate information and development review procedures to the Novi community, businesses and prospective developers. Specific tasks include administering planning and building permit procedures, providing public information, performing building and code enforcement inspections, maintaining complete public records on planning and building projects and issuing necessary permits, certificates, approvals and enforcement citations.

The Planning Division is responsible for both current and long range administration of State, regional and local land use laws such as zoning, the Master Plan for Land Use, the environmental regulations and the subdivision regulations. Novi's Director of Planning is Barb McBeth. You can reach the Planning Division at (248)347-0475

The Building Division conducts the administrative and regulatory responsibilities of the Uniform Building, Mechanical and Housing Codes, as well as the National Electrical Code. The Department also enforces compliance with all local ordinances to ensure health, safety and welfare.

Why Get a Permit?

Permits enable code officials to protect residents by reducing the potential hazards of unsafe construction and ensuring public health, safety and welfare. The building permit process helps residents understand local laws and ordinances. Before any construction or remodeling work begins, application for a permit should be made and the permit obtained. Building permits provide the means for code officials to inspect construction to ensure acceptable standards are met and appropriate materials are used.



Detailed handouts are available from the Building Department for various construction projects. These handouts will assist you in providing the necessary information required to obtain a permit.

Code Enforcement Division

Code Compliance covers a wide range of codes and ordinances that the City of Novi has adopted to maintain the quality of life and physical appearance of the City. Code Compliance enforces exterior violations of residential and commercial properties, excluding roofs and structural deficiencies.

By adhering to City ordinances we can avoid common property maintenance problems. Ordinances enforced by the code compliance officers include:

General Ordinances

Vehicles

No **inoperable, junk or unlicensed vehicles** are permitted on any premises unless in a garage or completely screened from public view.

Vehicles may be **sold from premises** owned or leased by the owner of the vehicle only.. Only one vehicle may be sold from the property at any time.

Commercial vehicles (defined as dump trucks, stake trucks, flatbed trucks or semi-tractors) are not permitted in any residential zoning district, except for deliveries.

Zoning

Basketball hoops are permitted to be placed directly on a garage or in the front yard no more than halfway from the dwelling to the property line.

Fences in subdivisions are not to be more than six feet in height, nor may they extend into a front yard any farther than the front of the dwelling.

Businesses defined as "**Home Occupations**" are permitted in residential zoning districts subject to restrictions contained in the zoning ordinance. No signs, keeping of stock in trade, excess parking or deliveries to or from the residence are permitted.

Recreational equipment, as defined in the Zoning Ordinance, may be parked or stored anywhere on residential premises for 72 hours. Recreational equipment less than six feet in height may be stored or parked in side or rear yards. Recreational equipment exceeding six feet in height must be stored or parked in the rear yard only and must be at least 10 feet from any main building, six feet from any rear or side property line and must not occupy more than 25 percent of the rear yard. Recreation equipment must be currently licensed and not occupied for living or housekeeping purposes.

Signs

Signs not more than six square feet in area advertising a **home for sale** are permitted on the premises where the house is being sold. No off premises signs are permitted with the exception of a four square foot "OPEN HOUSE" sign at the entrance to the subdivision and at other locations within the subdivision leading to the open house during the hours of 10 a.m. and 6 p.m., exclusively.



Garage sale signs, four square feet in area, are permitted on the premises where the sale is being conducted. One additional sign may be placed at the entrance to the subdivision and at the intersections within that subdivision leading to the sale. Signs must be at least 10 feet from the traveled portion of the road and not attached to any trees, telephone polls or traffic control devices.

Miscellaneous

No **litter** shall be allowed to accumulate on the owner or occupant’s property except in trash receptacles. Receptacles must be tightly covered and stored in a building or the rear yard of the property until trash collection day. Receptacles and other refuse are not to be placed at the right-of-way earlier than 24 hours before collection day.

Firewood must be stacked in a neat and orderly manner at least six inches from any building or structure and shall not be placed in the front yard of residences.

Compost piles are permitted in platted subdivisions only in rear yards not closer than six feet from the property line. Compost piles are not to exceed four feet by eight feet or six feet in diameter and no more than four feet in height and shall not create offensive odors.

Appliances, fixtures or household furnishings shall not be placed or maintained on the exterior of the dwelling.

Weeds exceeding eight inches are not permitted in any subdivided property or any property occupied by a structure.

Graffiti is not permitted and shall be removed by the City.

All homes must display **address numbers**, which are of a contrasting color to the background to which they are affixed and are clearly visible from the abutting street.

Sidewalks adjoining any residence must be **cleared of snow or ice** within 24 hours after the end of each snow accumulation greater than two inches.

Pets

There are to be **no more than three dogs or cats** allowed in a dwelling in residential districts.

All dogs must be on a **leash when off the premises of the owner** of the dog and the owner must have appropriate devices to pick up excrement from the animal at all times.



Noisy dogs or cats are deemed to be a public nuisance. Complaints regarding barking or dangerous dogs should be referred to the Novi Police Department at (248) 348-7100.



Helpful Telephone Numbers

Novi Public Library

45245 W. Ten Mile Road

(248) 349-0720

Novi Public Library provides the highest quality collections, services and programs to support the educational, cultural, informational and recreational needs of its diverse community. The Novi Public Library supports intellectual freedom and access to information resources for all.

Hours: Monday-Thursday, 10 a.m. to 9 p.m.
Friday-Saturday, 10 a.m. to 5 p.m.
Sunday, 1 to 5 p.m. (during the school year only)

Novi Senior Center

Rachel Zagaroli, Senior Services Manager

25075 Meadowbrook Road

(248) 347-0414

The Novi Senior Center is open Monday through Friday from 8 a.m. until 4:30 p.m. and offers a wide variety of senior programs.

Center activities include: fitness classes, sports leagues, card tournaments, quilting, crafts, Novi Library Bookmobile/book discussion, day and extended trips, line dancing, clogging, big band dance, holiday parties and special events, weekday lunches and Homebound Meals, social services such as: telephone reassurance, prescription medication assistance, home repair, health education/information, referrals, Focus Hope Food Commodities, transportation and so much more.

Senior Transportation

Homebound Meals

(248) 735-5617

(248) 473-1812

52-1 District Court

48150 Grand River Avenue

(248) 305-6080

The 52-1 District Court is committed to the effective administration of justice and to the understanding by the public of the judicial system. Three judges elected from within the district on non-partisan ballots for six-year terms serve the Court.



Contacts for Various Needs

Abandoned Appliances	248-735-5678	Police Dept. Emergency	911
Abandoned Vehicles	248-735-5678	Police Dept. Non-Emergency	248-348-7100
Animal Control	248-391-4102	Power Outage	800-477-4747
Bicycle Registration	248-348-7100	Property Taxes	248-347-0440
Block Party Permits	248-735-5640	Road Repair/City Road	248-735-5640
Boat/Dock Well	248-858-4991	Road Repair/County Road	248-858-4804
Bonfire Permits	248-349-2162	Road Repair/State Highway	248-451-0001
Building Construction	248-347-0415	Recycling	248-735-5640
Business Registration	248-347-0456	Road Construction/City Road	248-347-3270
Cable Service	248-553-7300	Road Construction/County Road	248-858-4804
Cable Community Access	248-553-7303	Sewer System	248-735-5661
Cable Commission	248-473-7266	Snow Plowing/Salting	248-735-5640
City Council/Agendas	248-347-0456	Sports Leagues	248-347-0400
City Council Members	248-347-0456	Streetlight Repair	800-477-4747
Composting Info	248-208-2270	Traffic Signals	248-858-7250
Construction Debris	248-735-5678	Traffic Signs	248-735-5640
Dog Licenses	248-347-0440	Traffic Citations	248-348-7100
Drainage	248-735-5640	Tree Removal (City trees)	248-347-0401
Emergency Shelter	248-347-0473	Voting/Absentee Ballots	248-347-0456
Fire Dept. Emergency	911	Voting/ Precinct Location	248-347-0456
Fire Dept. Non-Emergency	248-349-2162	Voting/Registration	248-347-0456
Impounded Vehicles	248-248-7100	Water Bills	248-347-0496
Hazardous Waste (Household)	248-208-2270	Weddings/City Hall	248-735-5628
Liquor Licenses	248-347-0456	Weddings/52 nd . District Court	248-305-6080
Marriage Licenses (County)	248-858-0571	Zoning	248-347-0475
Parking Violations	248-348-7100		



Utilities

AT & T	800-244-4444
Consumers Energy	800-477-5050
DTE Energy	800-477-4747
Bright House Network (cable & internet)	248-553-7300

Helpful Telephone Numbers

Emergency/Police/Fire

911

Novi Police Non-Emergency Number	248-348-7100
Novi Fire Department Emergency Number	348-349-2162
Novi News	248-349-1700
Novi Public Library	248-349-0720
Novi Senior Center	348-347-0414
Novi Senior Transit Information/Scheduling	248-735-5617
Homebound Meals	248-473-1812
Directory Assistance	248-555-1212
Passports – Novi City Clerk’s Office (M-F, 9 a.m.-noon) (Travel and Passport Information - www.travel.state.gov)	248-347-0456

State and County Governments

Animal Control – Oakland County	248-391-4102
Oakland County Health Department	
General Health (shots, etc.)	248-926-3950
Environmental Health	248-926-3305
West Nile Virus Hotline	877-377-3641
Post Office Answer Line	800-275-8777
Road Commission – Oakland County	248-858-4804
Secretary of State - Novi	888-767-6424



Public Schools

The City of Novi is serviced by four school districts.

Novi Community School District

(248) 449-1200

25345 Taft Road
Novi, Michigan 48374
www.novi.k12.mi.us

Deerfield Elementary

(248) 449-1700

26500 Wixom Road
Novi, Michigan 48374

Novi Woods Elementary

(248) 449-1230

25195 Taft Road
Novi, Michigan 48374

Orchard Hills Elementary

(248) 449-1400

41900 Quince
Novi, Michigan 48375

Parkview Elementary

(248) 449-1220

45825 Eleven Mile Road
Novi, Michigan 48374

Village Oaks Elementary

(248) 449-1300

23333 Willowbrook
Novi, Michigan 48375

Novi Meadows

5th Grade: (248) 449-1250

25540 Taft Road
Novi, Michigan 48374

6th Grade: (248) 449-1270

Novi Middle School

(248) 449-1600

49000 Eleven Mile Road
Novi, Michigan 48374

Novi High School

(248) 449-1500

24062 Taft Road
Novi, Michigan 48375



Novi Adult Education (248) 449-1718
25345 Taft Road
Novi, Michigan 48374

Transportation Center (248) 449-1245
45505 Eleven Mile Road
Novi, Michigan 48374

Preschool Program (248) 449-1714
25345 Taft Road
Novi, Michigan 48374

Northville Public Schools (248) 349-3400
501 W. Main Street
Northville, Michigan 48167
www.northville.k12.mi.us

South Lyon Schools (248) 573-8130
345 South Warren
South Lyon, Michigan 48178
www.slcs.us

Walled Lake Schools (248) 956-2000
850 Ladd Road
Walled Lake, Michigan
www.walledlake.k12.mi.us

Private Schools

Catholic Central High School (248) 349-3146
27225 Wixom Road
Novi, Michigan 48374

Novi Christian School (248) 349-9441
45301 Eleven Mile Road
Novi, Michigan 48374

Colleges

Walsh College—Novi Campus (248) 349-5454
41500 Gardenbrook Rd.
Novi, Michigan 48375



Organizations

Alcoholics Anonymous

Main Office
(248) 541-6565
24 hour hotline
(313) 831-5550
Faith Community
Presbyterian Church
(248) 349-2345
Holy Cross Episcopal Church
40700 W. Ten Mile Road
Monday and Friday evenings at
8 p.m.

American Association of Retired Persons

Al Schneider
(248) 626-0877

American Association of University Women

Northville/Novi
Barbara Wilson
(248) 348-3999

American Business Women's Association

Betty Johnson
(248) 960-9559

Boy Scout Troop #54

Tony Kern
(248) 348-6838

Boy Scout Troop #407

Al Weirmeir
(248) 348-4861

Cub Scout Pack #50 (Parkview)

Chris Pence
(248) 347-8885

Cub Scout Pack #54 (Novi Woods)

Frank Maynard
(248) 207-5528

Cub Scout Pack #240 (Orchard Hills)

Nancy Kaindl
(248) 344-9461

Cub Scout Pack #239

(Village Oaks)

Chorales

Karl Miller
(248) 348-3398

Civil Air Patrol/Sixgate Squadron

Linda Statezni
(248) 349-2607

Common Ground

(248) 456-0909

Community Clothes Closet

Carol Ann Donnelly
(248) 349-8553

Community Education

Bob Steeh
(248) 449-1206

Concert Band

Jack Kopnick
(248) 932-9244

Congregation Beit Kodesh

(248) 477-8974

Deerfield Elementary Community Council

Tina Makim
(248) 344-9353
Kim Love
(248)-305-8775

Detroit Association of Retired School Personnel

Dori Valente
(734) 425-5675

Friends of the Novi Library

Ruth Bozian
(248) 349-1399

Gardeners of Northville & Novi

Doris Brownell
(248) 348-2426

Girl Scouts

Janice Church
(248) 344-4882

Girl Scouts of Metro Detroit Council

Lee Martn
(313) 972-4475, ext. 465

Goodfellows

Bob Peterson
(248) 348-0952

Goodstuff Food Cooperative

Mary Brodrick
(248) 449-3499

Greater Novi Chamber of Commerce

Whitney McClellan
(248) 347-4622

Historical Society

Kathy Mutch
(248) 349-6774

MOMS Club of Novi

Dina Tallman
(248) 960-6123

Michigan 50's Festival

(248) 349-1950



Northville-Novu Colts Football

Ken Hasse, President
 (248) 347-0343
 Bill & Renee Ince
 Registration
 (248) 349-6734

**Northwest Detachment,
Marine Corp League**

Bill Zentner
 (248) 437-2332

Novi Bobcats

(248) 349-6734

Novi Chamber of Commerce

Nora Champion
 (248) 349-3743

Novi Choir Boosters

Don Daniels
 (248) 449-1525

**Novi Emergency Food
Program**

Faith Community
 Presbyterian Church
 Nancy Ryder
 (248) 349-2345

**Novi High School
Athletic Boosters**

Dan Harfoot
 (248) 348-6465

**Novi High School
Band Boosters**

Gail O' Connor
 (248) 374-1194

Novi Jaycees

(734) 678-7321

Novi Lions Club

Jerry Coonce
 (248) 348-0531

Novi Meadows PTO

Vickie McLeod
 (248) 449-4985
 Lisa Confer
 (248) 380-3363

Novi Middle School PTO

Cindy Buckley
 (248) 347-0605
 Michelle Kolis
 (248) 344-2951

Novi Ministers Association

Fr. John Budde
 (248) 349-8847

Novi Newcomers & Neighbors

Debbie Sunden
 (248) 349-2414

**Novi-Northville Center for
Jewish Life**

www.novijewishcenter.com
 (248) 790-6075

Novi/Northville Young Life

Brian Trost
 (248) 477-5001

Novi Rebekah Lodge 482

Laree Bell
 (248) 349-2835

Novi Rotary Club

Ginger Barrons
 (248) 348-0551

Novi Woods PTO

Caroline Williams
 (248) 374-6261

Novi Senior Center

(248) 347-0414

**Oakland Livingston
Human Services Agency
(OLSHA)**

Janet McAlpine
 (248) 347-0414

**Oakland County
Subregional Library for the
Blind and
Handicapped**

(Ask for Librarian)
 (248) 858-5050

Orchard Hills PTO

Kathy Hrit
khrit@aol.com
 Wendy Betts
wendybetts@twmi.rr.com

Overeaters Anonymous

24 Hour Hotline
 (248) 988-0109

Parkview PTO

Bonnie Jones
 (248) 465-1148
 Diane Smith
 (248) 334-0464

PinPointers

Karen Hall
 (248) 476-1914

Preservation Novi

Kathy Mutch
 (248) 349-6774

Salvation Army

(248) 477-1153

**Southwestern Oakland
Cable Commission
(SWOCC)**

Caren Collins
 (248) 473-2830



Special Education/Project Find

Donna Tinberg
(248) 449-1200

Tollgate Center/MSU
(248) 347-3860

Village Oaks Interested Citizens & Educators
Alison Murray
(248) 348-5950

Youth Assistance

Claudia Walter
(248) 347-0410

Youth Baseball League

www.noviyouthbaseball.org

Mike Fraiser
(248) 380-4635
Dan Trainor
(248) 449-6337

Youth for Understanding

1-(800) 872-0200

The following support groups are offered by Providence Hospital in Novi.

Cancer Support Group Providence Park

(248) 424-5543

Healing Arts Program

(248) 465-5455



Places of Worship

Brightmoor Christian Church
40800 13 Mile Rd.
www.brightmoorcc.org
(248) 668-7000

Community Christ Church
46200 Ten Mile Rd.
(248) 380-8633

Faith Community Presbyterian Church
44400 W. Ten Mile Road
www.faithcommunity-novi.org
(248) 349-5666

First Baptist Church of Novi
45301 Eleven Mile Road
www.firstbaptistchurchofnovi.com
(248) 349-3477

Grace Pointe Presbyterian Church (PCA)
*Call or Email for time/location
gracepointe@mac.com
www.gracepointepresbyterian.org
(248)-497-3178

Good Shepherd Lutheran Church
41415 W. Nine Mile at Meadowbrook
www.welsnovi.org
(248) 349-0565

Holy Cross Episcopal Church
46200 Ten Mile Road
www.churchoftheholycross.com
(248) 349-1175

Holy Family Catholic Church
24505 Meadowbrook Road
www.holyfamilynovi.org
(248) 349-8847

Meadowbrook Congregational Church
21355 Meadowbrook Road
www.mbccc.org
(248) 348-7757

Novi United Methodist Church
41671 W. Ten Mile Road
www.umcnovi.org
(248) 349-2652

Oakland Baptist Church
23893 Beck Road
(248) 348-2748

Oak Pointe Church
50200 W. Ten Mile Road
www.oakpointe.org
(248) 912-0043

Oakland Hills Baptist Church
23455 Novi Road
(248) 349-5665

Spirit of Christ Lutheran Church
40700 Ten Mile Road
(248) 477-6296

St. James Catholic Church
46325 Ten Mile Road
www.stjamesofnovi.4lpi.com
(248) 347-7778

St. John Lutheran Church, ELCA
23225 Gill Rd.
(248) 474-0584



Homeowner Associations

The following neighborhoods have active Homeowner Associations. To contact an Association, call Cindy Uglow at (248) 347-0437.

Abbey Hills	Dunnabeck Estates	Novi Homeowner' s Council
Addington Park	Echo Valley	Oakridge Place
Amberlund	Edinburgh	Olde Orchard
Andover Pointe I	Fox Run	Orchard Hills
Andover Pointe II	Garfield Road	Orchard Ridge Estates
Applegate I Condominiums	Glen Haven Condos	Park Place Estates
Applegate II Condominiums	Greenwood Oaks 1	Pebble Ridge
Arden Glen	Greenwood Oaks 3 & 4	Pioneer Meadows
Autumn Park	Haverhill Farms	Pointe Park
Barclay Estates	Highland Hills Estates	River Bridge
Beck Road	Hometown Novi (Chateau)	Roma Ridge
Beckenham Estates	Island Lake - Arbors East	Royal Crown Estates
Birchwood	Island Lake - North Bay	Saddle Creek
Bradford of Novi	Villas	Saratoga Circle
Briarwood Homes	Island Lake - North Woods	Simmons Orchard
Briarwood Condominiums	Island Lake - Vineyards	South Pointe Condos
Briarwood Village North	Jamestown Green	Stonehenge
Briarwood Village South	Kirkway Place	Summerlin
Bristol Corners	Knightsbridge	Summit Hills
Broadmoor Park	Lakes Area Homeowners	Timber Ridge
Brookhaven	Assoc. (LAHA)	Tree Top Apartments
Cambridge Drive	Lakewoode Parkhomes	Turnberry Estates
Camden Court	Lexington Green	Turtle Creek
Carlton Forest	Lilley Pond	Village Oaks
Carriage Hill	Lochmoor Village	Vista Hills
Cedarspring Estates I & II	Main Street Village	Walden Woods 1
Cedarspring Estates III & IV	Maple Greens	Walden Woods 2
Charrington Green	Maple Heights	Warrington Manor
Chase Farms	Maple Hills of Novi	Weathervane Village
Chelsea Knoll	Maples of Novi	Westridge Downs
Condominiums	Maybury Park	Westminster Village
Cheltenham Estates	Meadowbrook Glens	Westmont Village
Churchill Crossing	Meadowbrook Lake	Weston Estates
Connemara Hills	Meadowbrook Manor	Whispering Meadows
Country Cousins	Meadowbrook Townhomes	Willowbrook
Country Place Condos	Mission Pines	Willowbrook Farms
Creek Crossing	Mockingbird Glen	Windridge Place
Crosswinds West Condos	Mystic Forest	Wintergreen
Deerbrook	North Hills Estates	Woods of Novi
Delfino Estates	Nottingham Woods	Yerkes Manor
Dunbarton Pines	Novi Heights	Yorkshire Place



Emergency Preparedness

Escape Routes

Draw a floor plan of your home. Use a blank sheet of paper for each floor. Mark two escape routes from each room. Make sure children understand the drawings. Post a copy of the drawings at eye level in each child's room.

Where to Meet

Establish a place to meet in the event of an emergency, such as a fire. Record the locations below:

Location	Where to meet...
Near the home	For example, the next door neighbor's telephone pole
Outside the immediate area	For example, the neighborhood grocery store parking lot

Family Communications

Your family may not be together when disaster strikes, so plan how you will contact one another. Think about how you will communicate in different situations.

Complete a contact card for each family member. Have family members keep these cards handy in a wallet, purse, backpack, etc. You may want to send one to school with each child to keep on file. Pick a friend or relative who lives out-of-state for household members to notify they are safe.

Family Communications Plan should be completed and posted so the contact information is readily accessible to all family members. A copy should also be included in your family disaster supplies kit.

Insurance and Vital Records

Obtain property, health, and life insurance if you do not have them. Review existing policies for the amount and extent of coverage to ensure that what you have in place is what is required for you and your family for all possible hazards.

Flood Insurance

If you live in a flood-prone area, consider purchasing flood insurance to reduce your risk of flood loss. Buying flood insurance to cover the value of a building and its contents will not only provide greater peace of mind, but will speed the recovery if a flood occurs. You can call 1 (888) FLOOD29 to learn more about flood insurance.



Inventory Home Possessions

Make a record of your personal property, for insurance purposes. Take photos or a video of the interior and exterior of your home. Include personal belongings in your inventory.

Important Documents

Store important documents such as insurance policies, deeds, property records, and other important papers in a safe place, such as a safety deposit box away from your home. Make copies of important documents for your disaster supplies kit.

Money

Consider saving money in an emergency savings account that could be used in any crisis. It is advisable to keep a small amount of cash or traveler's checks at home in a safe place where you can quickly access them in case of evacuation.

Assemble a Disaster Supplies Kit

You may need to survive on your own after a disaster. This means having your own food, water, and other supplies in sufficient quantity to last for at least three days. Local officials and relief workers will be on the scene after a disaster, but they cannot reach everyone immediately. You could get help in hours, or it might take days.

Basic services such as electricity, gas, water, sewage treatment, and telephones may be cut off for days, or even a week or longer. Or, you may have to evacuate at a moment's notice and take essentials with you. You probably will not have the opportunity to shop or search for the supplies you need.

A disaster supplies kit is a collection of basic items that members of a household may need in the event of a disaster.

Kit Locations

Since you do not know where you will be when an emergency occurs, prepare supplies for home, work, and vehicles.

Home	Work	Car
Your disaster supplies kit should contain essential food, water, and supplies for at least three days. Keep this kit in a designated place and have it ready in case you have to leave your home quickly. Make sure all family members know where the kit is kept. Additionally, you may want to consider having supplies for sheltering for up to two weeks.	This kit should be in one container, and ready to "grab and go" in case you are evacuated from your workplace. Make sure you have food and water in the kit. Also, be sure to have comfortable walking shoes at your workplace in case an evacuation requires walking long distances.	In case you are stranded, keep a kit of emergency supplies in your car. This kit should contain food, water, first aid supplies, flares, jumper cables, and seasonal supplies.



Water

How Much Water do I Need?

You should have at least a three-day supply of water and you should store at least one gallon of water per person per day. A normally active person needs at least one-half gallon of water daily just for drinking.

The following are things to consider when putting together your food supplies:

- Avoid foods that will make you thirsty. Choose salt-free crackers, whole grain cereals, and canned foods with high liquid content.
- Stock canned foods, dry mixes, and other staples that do not require refrigeration, cooking, water, or special preparation. You may already have many of these on hand. (Note: Be sure to include a manual can opener.)
- Include special dietary needs.

Additionally, in determining adequate quantities, take the following into account:

- Children, nursing mothers, and ill people need more water.
- Very hot temperatures can double the amount of water needed.
- A medical emergency might require additional water.

How Should I Store Water?

To prepare safest and most reliable emergency supply of water, it is recommended you purchase commercially bottled water. Keep bottled water in its original container and do not open it until you need to use it. Observe the expiration or “use by” date.

If you are preparing your own containers of water

It is recommended you purchase food-grade water storage containers from surplus or camping supplies stores to use for water storage. Before filling with water, thoroughly clean the containers with dishwashing soap and water, and rinse completely so there is no residual soap. Follow directions below on filling the container with water.

If you choose to use your own storage containers, choose two-liter plastic soft drink bottles – not plastic jugs or cardboard containers that have had milk or fruit juice in them. Milk protein and fruit sugars cannot be adequately removed from these containers and provide an environment for bacterial growth when water is stored in them. Cardboard containers also leak easily and are not designed for long-term storage of liquids. Also, do not use glass containers, because they can break and are heavy.



If storing water in plastic soda bottles, follow these steps

Thoroughly clean the bottles with dishwashing soap and water, and rinse completely so there is no residual soap. Sanitize the bottles by adding a solution of 1 teaspoon of non-scented liquid household chlorine bleach to a quart of water. Swish the sanitizing solution in the bottle so that it touches all surfaces. After sanitizing the bottle, thoroughly rinse out the sanitizing solution with clean water.

Filling water containers

Fill the bottle to the top with regular tap water. If the tap water has been commercially treated from a water utility with chlorine, you do not need to add anything else to the water to keep it clean. If the water you are using comes from a well or water source that is not treated with chlorine, add two drops of non-scented liquid household chlorine bleach to the water. Tightly close the container using the original cap. Be careful not to contaminate the cap by touching the inside of it with your finger. Place a date on the outside of the container so that you know when you filled it. Store in a cool dark place. Replace the water every six months if not using commercially bottled water.

Food

The following are things to consider when putting together your food supplies:

- Avoid foods that will make you thirsty. Choose salt-free crackers, whole grain cereals, and canned foods with high liquid content.
- Stock canned foods, dry mixes, and other staples that do not require refrigeration, cooking, water, or special preparation. You may already have many of these on hand. (Note: Be sure to include a manual can opener.)
- Include special dietary needs.

Basic Disaster Supplies Kit

The following items are recommended for inclusion in your basic disaster supplies kit:

- Three-day supply of non-perishable food.
- Three-day supply of water - one gallon of water per person, per day.
- Portable, battery-powered radio or television and extra batteries.
- Flashlight and extra batteries.
- First aid kit and manual.
- Sanitation and hygiene items (moist towelettes and toilet paper).
- Matches and waterproof container.
- Whistle.
- Extra clothing.
- Kitchen accessories and cooking utensils, including a can opener.
- Photocopies of credit and identification cards.
- Cash and coins.
- Special needs items, such as prescription medications, eye glasses, contact lens solutions, and hearing aid batteries.
- Items for infants, such as formula, diapers, bottles, and pacifiers.



If you live in a cold climate, you must think about warmth. It is possible that you will not have heat. Think about your clothing and bedding supplies. Be sure to include one complete change of clothing and shoes per person, including:

- Jacket or coat.
- Long pants.
- Long sleeve shirt.
- Sturdy shoes.
- Hat, mittens, and scarf.
- Sleeping bag or warm blanket (per person).

Be sure to account for growing children and other family changes.

Maintaining Your Disaster Supplies Kit

Just as important as putting your supplies together is maintaining them so they are safe to use when needed. Here are some tips to keep your supplies ready and in good condition:

- Keep canned foods in a dry place where the temperature is cool.
- Store boxed food in tightly closed plastic or metal containers to protect from pests and to extend its shelf life.
- Throw out any canned good that becomes swollen, dented, or corroded.
- Use foods before they go bad, and replace them with fresh supplies.
- Place new items at the back of the storage area and older ones in the front.
- Change stored food and water supplies every six months. Be sure to write the date you store it on all containers.
- Re-think your needs every year and update your kit as your family needs change.
- Keep items in airtight plastic bags and put your entire disaster supplies kit in one or two easy-to-carry containers, such as an unused trashcan, camping backpack, or duffel bag.

Tornadoes

Tornadoes are nature's most violent storms. Spawned from powerful thunderstorms, tornadoes can cause fatalities and devastate a neighborhood in seconds. A tornado appears as a rotating, funnel-shaped cloud that extends from a thunderstorm to the ground with whirling winds that can reach 300 miles per hour. Damage paths can be in excess of one mile wide and 50 miles long. Every state is at some risk from this hazard.

Some tornadoes are clearly visible, while rain or nearby low-hanging clouds obscure others. Occasionally, tornadoes develop so rapidly that little, if any, advance warning is possible.



Before a tornado hits, the wind may die down and the air may become very still. A cloud of debris can mark the location of a tornado even if a funnel is not visible. Tornadoes generally occur near the trailing edge of a thunderstorm. It is not uncommon to see clear, sunlit skies behind a tornado.

Following are facts about tornadoes:

- They may strike quickly, with little or no warning.
- They may appear nearly transparent until dust and debris are picked up or a cloud forms in the funnel.
- The average tornado moves Southwest to Northeast, but tornadoes have been known to move in any direction.
- The average forward speed of a tornado is 30 MPH, but may vary from stationary to 70 MPH.
- Tornadoes can accompany tropical storms and hurricanes as they move onto land.
- Waterspouts are tornadoes that form over water.
- Tornadoes are most frequently reported east of the Rocky Mountains during spring and summer months.
- Peak tornado season in the southern states is March through May; in the northern states, it is late spring through early summer.
- Tornadoes are most likely to occur between 3 p.m. and 9 p.m., but can occur at any time.

Familiarize yourself with these terms to help identify a tornado hazard:

Tornado Watch

Tornadoes are possible. Remain alert for approaching storms. Watch the sky and stay tuned to NOAA Weather Radio, commercial radio, or television for information.

Tornado Warning

A tornado has been sighted or indicated by weather radar. Take shelter immediately.

Take Protective Measures Before a Tornado

Be alert to changing weather conditions:

- Listen to NOAA Weather Radio or to commercial radio or television newscasts for the latest information.
- Look for approaching storms.

Look for the following danger signs:

- Dark, often greenish sky
- Large hail
- A large, dark, low-lying cloud (particularly if rotating)
- Loud roar, similar to a freight train.



If you see approaching storms or any of the danger signs, be prepared to take shelter immediately.

During a Tornado

If you are under a tornado WARNING, seek shelter immediately!

If you are in:	Then:
A vehicle, trailer, or mobile home	Get out immediately and go to the lowest floor of a sturdy, nearby building or a storm shelter. Mobile homes, even if tied down, offer little protection from tornadoes.
A structure (e.g. residence, small building, school, nursing home, hospital, factory, shopping center, high-rise building)	Go to a pre-designated shelter area such as a safe room, basement, storm cellar, or the lowest building level. If there is no basement, go to the center of an interior room on the lowest level (closet, interior hallway) away from corners, windows, doors, and outside walls. Put as many walls as possible between you and the outside. Get under a sturdy table and use your arms to protect your head and neck. Do not open windows.
The outside with no shelter	<p>Lie flat in a nearby ditch or depression and cover your head with your hands. Be aware of the potential for flooding.</p> <p>Do not get under an overpass or bridge. You are safer in a low, flat location.</p> <p>Never try to outrun a tornado in urban or congested areas in a car or truck. Instead, leave the vehicle immediately for safe shelter.</p> <p>Watch out for flying debris. Flying debris from tornadoes causes most fatalities and injuries.</p>

Preparing a Safe Room

Extreme windstorms in many parts of the country pose a serious threat to buildings and their occupants. Your residence may be built “to code,” but that does not mean it can withstand winds from extreme events such as tornadoes and major hurricanes. The purpose of a safe room or a wind shelter is to provide a space where you and your family can seek refuge that provides a high level of protection. You can build a safe room in one of several places in your home.

- Your basement.
- Atop a concrete slab-on-grade foundation or garage floor.
- An interior room on the first floor.

Safe rooms built below ground level provide the greatest protection, but a safe room built in a first-floor interior room also can provide the necessary protection. Below-ground safe rooms must be designed to avoid accumulating water during the heavy rains that often accompany severe windstorms.



- To protect its occupants, a safe room must be built to withstand high winds and flying debris, even if the rest of the residence is severely damaged or destroyed. Consider the following when building a safe room:
- The safe room must be adequately anchored to resist overturning and uplift.
- The walls, ceiling, and door of the shelter must withstand wind pressure and resist penetration by windborne objects and falling debris.
- The connections between all parts of the safe room must be strong enough to resist the wind.
- Sections of either interior or exterior residence walls that are used as walls of the safe room, must be separated from the structure of the residence so that damage to the residence will not cause damage to the safe room.

Winter Storms and Extreme Cold

Heavy snowfall and extreme cold can immobilize an entire region. Even areas that normally experience mild winters can be hit with a major snowstorm or extreme cold. Winter storms can result in flooding, storm surge, closed highways, blocked roads, downed power lines and hypothermia.

Familiarize yourself with these terms to help identify a winter storm hazard:

Freezing Rain: Rain that freezes when it hits the ground, creating a coating of ice on roads, walkways, trees, and power lines.

Sleet: Rain that turns to ice pellets before reaching the ground. Sleet also causes moisture on roads to freeze and become slippery.

Winter Storm Watch: A winter storm is possible in your area. Tune in to NOAA Weather Radio, commercial radio, or television for more information.

Winter Storm Warning: A winter storm is occurring or will soon occur in your area.

Blizzard Warning: Sustained winds or frequent gusts to 35 miles per hour or greater and considerable amounts of falling or blowing snow (reducing visibility to less than a quarter mile) are expected to prevail for a period of three hours or longer.

Frost/Freeze Warning: Below freezing temperatures are expected.

Take Protective Measures Before Winter Storms and Extreme Cold

Include the following in your disaster supplies kit:

- Rock salt to melt ice on walkways
- Sand to improve traction
- Snow shovels and other snow removal equipment.



Winterize your home to extend the life of your fuel supply by insulating walls and attics, caulking and weather-stripping doors and windows, and installing storm windows or covering windows with plastic.

To winterize your car, attend to the following:

- Battery and ignition system should be in top condition and battery terminals clean.
- Ensure antifreeze levels are sufficient to avoid freezing.
- Ensure the heater and defroster work properly.
- Check and repair windshield wiper equipment; ensure proper washer fluid level.
- Ensure the thermostat works properly.
- Check lights and flashing hazard lights for serviceability.
- Check for leaks and crimped pipes in the exhaust system; repair or replace as necessary. Carbon monoxide is deadly and usually gives no warning.
- Check brakes for wear and fluid levels.
- Check oil for level and weight. Heavier oils congeal more at low temperatures and do not lubricate as well.
- Consider snow tires, snow tires with studs, or chains.
- Replace fuel and air filters. Keep water out of the system by using additives and maintaining a full tank of gas.

Dress for the Weather

- Wear several layers of loose fitting, lightweight, warm clothing rather than one layer of heavy clothing. The outer garments should be tightly woven and water repellent.
- Wear mittens, which are warmer than gloves.
- Wear a hat.
- Cover your mouth with a scarf to protect your lungs.

During a Winter Storm

The following are guidelines for what you should do during a winter storm or under conditions of extreme cold:

- Listen to your radio, television, or NOAA Weather Radio for weather reports and emergency information.
- Eat regularly and drink ample fluids, but avoid caffeine and alcohol.
- Avoid overexertion when shoveling snow. Overexertion can bring on a heart attack—a major cause of death in the winter. If you must shovel snow, stretch before going outside.
- Watch for signs of frostbite. These include loss of feeling and white or pale appearance in extremities such as fingers, toes, ear lobes, and the tip of the nose. If symptoms are detected, get medical help immediately.
- Watch for signs of hypothermia. These include uncontrollable shivering, memory loss, disorientation, incoherence, slurred speech, drowsiness, and apparent exhaustion. If symptoms of hypothermia are detected, get the victim to a



warm location, remove wet clothing, warm the center of the body first, and give warm, non-alcoholic beverages if the victim is conscious. Get medical help as soon as possible.

- Conserve fuel, if necessary, by keeping your residence cooler than normal. Temporarily close off heat to some rooms.
- Maintain ventilation when using kerosene heaters to avoid build-up of toxic fumes.
- Refuel kerosene heaters outside and keep them at least three feet from flammable objects.

Drive only if it is absolutely necessary. If you must drive, consider the following:

- Travel in the day, don't travel alone, and keep others informed of your schedule
- Stay on main roads; avoid back road shortcuts

If a blizzard traps you in the car, keep these guidelines in mind:

- Pull off the highway. Turn on hazard lights and hang a distress flag from the radio antenna or window.
- Remain in your vehicle where rescuers are most likely to find you. Do not set out on foot unless you can see a building close by where you know you can take shelter. Be careful; distances are distorted by blowing snow. A building may seem close, but be too far to walk to in deep snow.
- Run the engine and heater about 10 minutes each hour to keep warm. When the engine is running, open an upwind window slightly for ventilation. This will protect you from possible carbon monoxide poisoning. Periodically clear snow from the exhaust pipe.
- Exercise to maintain body heat, but avoid overexertion. In extreme cold, use road maps, seat covers, and floor mats for insulation. Huddle with passengers and use your coat for a blanket.
- Take turns sleeping. One person should be awake at all times to look for rescue crews.
- Drink fluids to avoid dehydration.
- Be careful not to waste battery power. Balance electrical energy needs - the use of lights, heat, and radio - with supply.
- Turn on the inside light at night so work crews or rescuers can locate you, if stranded in a remote area, stomp large block letters in an open area spelling out HELP or SOS and line with rocks or tree limbs to attract the attention of rescue personnel who may be surveying the area by airplane.
- Leave the car and proceed on foot - if necessary - once the blizzard passes.

Fires

Each year, more than 4,000 Americans die and more than 25,000 are injured in fires, many of which could be prevented. Direct property loss due to fires is estimated at \$8.6 billion annually.

To protect yourself, it is important to understand the basic characteristics of fire. Fire spreads quickly; there is no time to gather valuables or make a phone call. In just two minutes, a fire can become life-threatening. In five minutes, a residence can be engulfed in flames.

Heat and smoke from fire can be more dangerous than the flames. Inhaling the super-hot air can sear your lungs. Fire produces poisonous gases that make you disoriented and drowsy. Instead of being awakened by a fire, you may fall into a deeper sleep. Asphyxiation is the leading cause of fire deaths, exceeding burns by a three-to-one ratio.

Take Protective Measures

Before a Fire

Smoke Alarms:

- Install smoke alarms. Properly working smoke alarms decrease your chances of dying in a fire by half.
- Place smoke alarms on every level of your residence. Place them outside bedrooms on the ceiling or high on the wall (4 to 12 inches from ceiling), at the top of open stairways, or at the bottom of enclosed stairs and near (but not in) the kitchen.
- Test and clean smoke alarms once a month and replace batteries at least once a year. Replace smoke alarms once every 10 years.

Escaping the Fire:

- Review escape routes with your family. Practice escaping from each room.
- Make sure windows are not nailed or painted shut. Make sure security gratings on windows have a fire safety opening feature so they can be easily opened from the inside.
- Consider escape ladders if your residence has more than one level, and ensure that burglar bars and other anti-theft mechanisms that block outside window entry are easily opened from the inside.
- Teach family members to stay low to the floor (where the air is safer in a fire) when escaping from a fire.
- Clean out storage areas. Do not let trash, such as old newspapers and magazines, accumulate.

Flammable Items:

- Never use gasoline, benzene, naphtha, or similar flammable liquids indoors.
- Store flammable liquids in approved containers in well-ventilated storage areas.



- Place heaters at least three feet away from flammable materials. Make sure the floor and nearby walls are properly insulated.
- Use only the type of fuel designated for your unit and follow manufacturer's instructions.
- Store ashes in a metal container outside and away from your residence.
- Keep open flames away from walls, furniture, drapery, and flammable items.
- Keep a screen in front of the fireplace.
- Have heating units inspected and cleaned annually by a certified specialist.

Matches and Smoking:

- Keep matches and lighters up high, away from children, and, if possible, in a locked cabinet.
- Never smoke in bed or when drowsy or medicated. Provide smokers with deep, sturdy ashtrays. Douse cigarette and cigar butts with water before disposal.

Electrical Wiring:

- Have the electrical wiring in your residence checked by an electrician.
- Inspect extension cords for frayed or exposed wires or loose plugs.
- Make sure outlets have cover plates and no exposed wiring.
- Make sure wiring does not run under rugs, over nails, or across high-traffic areas.
- Do not overload extension cords or outlets. If you need to plug in two or three appliances, get a UL-approved unit with built-in circuit breakers to prevent sparks and short circuits.
- Make sure insulation does not touch bare electrical wiring.

Other:

- Sleep with your door closed.
- Install A-B-C-type fire extinguishers in your residence and teach family members how to use them.
- Consider installing an automatic fire sprinkler system in your residence.
- Ask your local fire department to inspect your residence for fire safety and prevention.

During a Fire

If your clothes catch on fire, you should:

- Stop, drop, and roll - until the fire is extinguished. Running only makes the fire burn faster.

To escape a fire, you should:

- Check closed doors for heat before you open them. If you are escaping through a closed door, use the back of your hand to feel the top of the door, the doorknob, and the crack between the door and door frame before you open it. Never use the palm of your hand or fingers to test for heat - burning those areas could impair your ability to escape a fire (i.e., ladders and crawling).



Hot Door	Cool Door
Do not open. Escape through a window. If you cannot escape, hang a white or light-colored sheet outside the window, alerting fire fighters to your presence.	Open slowly and ensure fire and/or smoke is not blocking your escape route. If your escape route is blocked, shut the door immediately and use an alternate escape route, such as a window. If clear, leave immediately through the door and close it behind you. Be prepared to crawl. Smoke and heat rise. The air is clearer and cooler near the floor.

- Crawl low under any smoke to your exit - heavy smoke and poisonous gases collect first along the ceiling.
- Close doors behind you as you escape to delay the spread of the fire.
- Stay out once you are safely out. Do not reenter. Call 9-1-1.

After a Fire

The following are guidelines for different circumstances in the period following a fire:

- If you are with burn victims, or are a burn victim yourself, call 9-1-1; cool and cover burns to reduce chance of further injury or infection.
- If you detect heat or smoke when entering a damaged building, evacuate immediately.
- If you are a tenant, contact the landlord.
- If you have a safe or strong box, do not try to open it. It can hold intense heat for several hours. If the door is opened before the box has cooled, the contents could burst into flames.
- If you must leave your home because a building inspector says the building is unsafe, ask someone you trust to watch the property during your absence.

Thunderstorms and Lightning

All thunderstorms are dangerous. Every thunderstorm produces lightning. In the United States, an average of 300 people are injured and 80 people are killed each year by lightning. Although most lightning victims survive, people struck by lightning often report a variety of long-term, debilitating symptoms.

Other associated dangers of thunderstorms include tornadoes, strong winds, hail, and flash flooding. Flash flooding is responsible for more fatalities—more than 140 annually—than any other thunderstorm-associated hazard.

Dry thunderstorms that do not produce rain that reaches the ground are most prevalent in the western United States. Falling raindrops evaporate, but lightning can still reach the ground and can start wildfires.

The following are facts about thunderstorms:

- They may occur singly, in clusters, or in lines.
- Some of the most severe occur when a single thunderstorm affects one location for an extended time.



- Thunderstorms typically produce heavy rain for a brief period, anywhere from 30 minutes to an hour.
- Warm, humid conditions are highly favorable for thunderstorm development.
- About 10 percent of thunderstorms are classified as severe - one that produces hail at least three-quarters of an inch in diameter, has winds of 58 miles per hour or higher, or produces a tornado.

The following are facts about lightning:

- Lightning’s unpredictability increases the risk to individuals and property.
- Lightning often strikes outside of heavy rain and may occur as far as 10 miles away from any rainfall.
- “Heat lightning” is actually lightning from a thunderstorm too far away for thunder to be heard. However, the storm may be moving in your direction!
- Most lightning deaths and injuries occur when people are caught outdoors in the summer months during the afternoon and evening.
- Your chances of being struck by lightning are estimated to be 1 in 600,000, but could be reduced even further by following safety precautions.
- Lightning strike victims carry no electrical charge and should be attended to immediately.

Familiarize yourself with these terms to help identify a thunderstorm hazard:

Severe Thunderstorm: Watch tells you when and where severe thunderstorms are likely to occur. Watch the sky and stay tuned to NOAA Weather Radio, commercial radio, or television for information.

Severe Thunderstorm Warning: Issued when severe weather has been reported by spotters or indicated by radar. Warnings indicate imminent danger to life and property to those in the path of the storm.

Before Thunderstorms and Lightning

To prepare for a thunderstorm, you should do the following:

- Remove dead or rotting trees and branches that could fall and cause injury or damage during a severe thunderstorm.
- Remember the 30/30 lightning safety rule: Go indoors if, after seeing lightning, you cannot count to 30 before hearing thunder. Stay indoors for 30 minutes after hearing the last clap of thunder.



Thunderstorms

The following are guidelines for what you should do if a thunderstorm is likely in your area:

- Postpone outdoor activities.
- Get inside a home, building, or hard top automobile (not a convertible). Although you may be injured if lightning strikes your car, you are much safer inside a vehicle than outside.
- Remember, rubber-soled shoes and rubber tires provide NO protection from lightning. However, the steel frame of a hard-topped vehicle provides increased protection if you are not touching metal.
- Secure outdoor objects that could blow away or cause damage.
- Shutter windows and secure outside doors. If shutters are not available, close window blinds, shades, or curtains.
- Avoid showering or bathing. Plumbing and bathroom fixtures can conduct electricity.
- Use a corded telephone only for emergencies. Cordless and cellular telephones are safe to use.
- Unplug appliances and other electrical items such as computers and turn off air conditioners. Power surges from lightning can cause serious damage.
- Use your battery-operated NOAA Weather Radio for updates from local officials.

Avoid the following:

- Natural lightning rods such as a tall, isolated tree in an open area
- Hilltops, open fields, the beach, or a boat on the water
- Isolated sheds or other small structures in open areas
- Anything metal—tractors, farm equipment, motorcycles, golf carts, golf clubs, and bicycles

During a Thunderstorm

If you are:	Then:
In a forest	Seek shelter in a low area under a thick growth of small trees.
In an open area	Go to a low place such as a ravine or valley. Be alert for flash floods.
Anywhere you feel your hair stand on end (which indicates that lightning is about to strike)	Squat low to the ground on the balls of your feet. Place your hands over your ears and your head between your knees. Make yourself the smallest target possible and minimize your contact with the ground. DO NOT lie flat on the ground.



The following are things you should check when you attempt to give aid to a victim of lightning:

- Breathing - if breathing has stopped, begin mouth-to-mouth resuscitation.
- Heartbeat - if the heart has stopped, administer CPR.
- Pulse - if the victim has a pulse and is breathing, look for other possible injuries. Check for burns where the lightning entered and left the body. Also be alert for nervous system damage, broken bones, and loss of hearing and eyesight.

Floods

Floods are one of the most common hazards in the United States. Flood effects can be local, impacting a neighborhood or community, or very large, affecting entire river basins and multiple states.

However, all floods are not alike. Some floods develop slowly, sometimes over a period of days. But flash floods can develop quickly, sometimes in just a few minutes and without any visible signs of rain. Flash floods often have a dangerous wall of roaring water that carries rocks, mud, and other debris and can sweep away most things in its path. Overland flooding occurs outside a defined river or stream, such as when a levee is breached, but still can be destructive. Flooding can also occur when a dam breaks, producing effects similar to flash floods.

Be aware of flood hazards no matter where you live, but especially if you live in a low-lying area, near water or downstream from a dam. Even very small streams, gullies, creeks, culverts, dry streambeds, or low-lying ground that appear harmless in dry weather can flood. Every state is at risk from this hazard.

Familiarize yourself with these terms to help identify a flood hazard:

Flood Watch: Flooding is possible. Tune in to NOAA Weather Radio, commercial radio, or television for information.

Flash Flood Watch: Flash flooding is possible. Be prepared to move to higher ground; listen to NOAA Weather Radio, commercial radio, or television for information.

Flood Warning: Flooding is occurring or will occur soon; if advised to evacuate, do so immediately.

Flash Flood Warning: A flash flood is occurring; seek higher ground on foot immediately.



Before a Flood

To prepare for a flood, you should:

- Avoid building in a floodplain unless you elevate and reinforce your home.
- Elevate the furnace, water heater, and electric panel if susceptible to flooding.
- Install "check valves" in sewer traps to prevent flood water from backing up into the drains of your home.
- Construct barriers (levees, beams, floodwalls) to stop floodwater from entering the building.
- Seal walls in basements with waterproofing compounds to avoid seepage.

During a Flood

If a flood is likely in your area, you should:

- Listen to the radio or television for information.
- Be aware that flash flooding can occur. If there is any possibility of a flash flood, move immediately to higher ground. Do not wait for instructions to move.
- Be aware of streams, drainage channels, canyons, and other areas known to flood suddenly. Flash floods can occur in these areas with or without such typical warnings as rain clouds or heavy rain.

If you must prepare to evacuate, you should do the following:

- Secure your home. If you have time, bring in outdoor furniture. Move essential items to an upper floor.
- Turn off utilities at the main switches or valves if instructed to do so. Disconnect electrical appliances. Do not touch electrical equipment if you are wet or standing in water.

If you have to leave your home, remember these evacuation tips:

- Do not walk through moving water. Six inches of moving water can make you fall. If you have to walk in water, walk where the water is not moving. Use a stick to check the firmness of the ground in front of you.
- Do not drive into flooded areas. If floodwaters rise around your car, abandon the car and move to higher ground if you can do so safely. You and the vehicle can be quickly swept away.

Driving Flood Facts

The following are important points to remember when driving in flood conditions:

- Six inches of water will reach the bottom of most passenger cars causing loss of control and possible stalling.
- A foot of water will float many vehicles.
- Two feet of rushing water can carry away most vehicles including sport utility vehicles (SUV's) and pick-ups.



After a Flood

The following are guidelines for the period following a flood:

- Listen for news reports to learn whether the community's water supply is safe to drink.
- Avoid floodwaters; water may be contaminated by oil, gasoline, or raw sewage. Water may also be electrically charged from underground or downed power lines.
- Avoid moving water.
- Be aware of areas where floodwaters have receded. Roads may have weakened and could collapse under the weight of a car.
- Stay away from downed power lines, and report them to the power company.
- Return home only when authorities indicate it is safe.
- Stay out of any building if it is surrounded by floodwaters.
- Use extreme caution when entering buildings; there may be hidden damage, particularly in foundations.
- Service damaged septic tanks, cesspools, pits, and leaching systems as soon as possible. Damaged sewage systems are serious health hazards.
- Clean and disinfect everything that got wet. Mud left from floodwater can contain sewage and chemicals.

Additional Information

Flood Insurance

Consider the following facts:

- Flood losses are not covered under homeowners' insurance policies.
- FEMA manages the National Flood Insurance Program, which makes federally-backed flood insurance available in communities that agree to adopt and enforce floodplain management ordinances to reduce future flood damage.
- Flood insurance is available in most communities through insurance agents.
- There is a 30-day waiting period before flood insurance goes into effect, so don't delay.
- Flood insurance is available whether the building is in or out of the identified flood

Hazardous Materials Incidents

Chemicals are found everywhere. They purify drinking water, increase crop production, and simplify household chores. But chemicals also can be hazardous to humans or the environment if used or released improperly. Hazards can occur during production, storage, transportation, use, or disposal. You and your community are at risk if a chemical is used unsafely or released in harmful amounts into the environment where you live, work, or play.

Chemical manufacturers are one source of hazardous materials, but there are many others, including service stations, hospitals, and hazardous materials waste sites.



Before a Hazardous Materials Incident

Many communities have Local Emergency Planning Committees (LEPCs) whose responsibilities include collecting information about hazardous materials in the community and making this information available to the public upon request. The LEPCs also are tasked with developing an emergency plan to prepare for and respond to chemical emergencies in the community. Ways the public will be notified and actions the public must take in the event of a release are part of the plan. Contact the LEPCs to find out more about chemical hazards and what needs to be done to minimize the risk to individuals and the community from these materials. The local emergency management office can provide contact information on the LEPCs.

You should add the following supplies to your disaster kit:

- Plastic sheeting.
- Duct tape.
- Scissors.

If you are:	Then:
Asked to evacuate	Do so immediately.
Caught Outside	Stay upstream, uphill, and upwind! In general, try to go at least one-half mile (usually 8-10 city blocks) from the danger area. Do not walk into or touch any spilled liquids, airborne mists, or condensed solid chemical deposits.
In a motor vehicle	Stop and seek shelter in a permanent building. If you must remain in your car, keep car windows and vents closed and shut off the air conditioner and heater.
Requested to stay indoors	<p>Close and lock all exterior doors and windows. Close vents, fireplace dampers, and as many interior doors as possible.</p> <p>Turn off air conditioners and ventilation systems. In large buildings, set ventilation systems to 100 percent recirculation so that no outside air is drawn into the building. If this is not possible, ventilation systems should be turned off.</p> <p>Go into the pre-selected shelter room. This room should be above ground and have the fewest openings to the outside.</p> <p>Seal the room by covering each window, door, and vent using plastic sheeting and duct tape.</p> <p>Use material to fill cracks and holes in the room, such as those around pipes.</p>



Shelter Safety for Sealed Rooms

Ten square feet of floor space per person will provide sufficient air to prevent carbon dioxide build-up for up to five hours, assuming a normal breathing rate while resting. However, local officials are unlikely to recommend the public shelter in a sealed room for more than 2-3 hours because the effectiveness of such sheltering diminishes with time as the contaminated outside air gradually seeps into the shelter. At this point, evacuation from the area is the better protective action to take. Also you should ventilate the shelter when the emergency has passed to avoid breathing contaminated air still inside the shelter.

After a Hazardous Materials Incident

The following are guidelines for the period following a hazardous materials incident:

- Return home only when authorities say it is safe. Open windows and vents and turn on fans to provide ventilation.
- Act quickly if you have come into contact with or have been exposed to hazardous chemicals. Do the following:
 - Follow decontamination instructions from local authorities. You may be advised to take a thorough shower, or you may be advised to stay away from water and follow another procedure.
 - Seek medical treatment for unusual symptoms as soon as possible.
 - Place exposed clothing and shoes in tightly sealed containers. Do not allow them to contact other materials. Call local authorities to find out about proper disposal.
 - Advise everyone who comes in to contact with you that you may have been exposed to a toxic substance.
- Find out from local authorities how to clean up your land and property.
- Report any lingering vapors or other hazards to your local emergency services office.

General Information About Terrorism

Terrorism is the use of force or violence against persons or property in violation of the criminal laws of the United States for purposes of intimidation, coercion, or ransom. Terrorists often use threats to:

- Create fear among the public.
- Try to convince citizens that their government is powerless to prevent terrorism.
- Get immediate publicity for their causes.

Acts of terrorism include threats of terrorism; assassinations; kidnappings; hijackings; bomb scares and bombings; cyber attacks (computer-based); and the use of chemical, biological, nuclear and radiological weapons.



High-risk targets for acts of terrorism include military and civilian government facilities, international airports, large cities, and high-profile landmarks. Terrorists might also target large public gatherings, water and food supplies, utilities, and corporate centers. Further, terrorists are capable of spreading fear by sending explosives or chemical and biological agents through the mail.

Within the immediate area of a terrorist event, you would need to rely on police, fire, and other officials for instructions. However, you can prepare in much the same way you would prepare for other crisis events.

General Safety Guidelines:

1. Be aware of your surroundings.
2. Move or leave if you feel uncomfortable or if something does not seem right.
3. Take precautions when traveling. Be aware of conspicuous or unusual behavior. Do not accept packages from strangers. Do not leave luggage unattended. You should promptly report unusual behavior, suspicious or unattended packages, and strange devices to the police or security personnel.
4. Learn where emergency exits are located in buildings you frequent. Plan how to get out in the event of an emergency.
5. Be prepared to do without services you normally depend on—electricity, telephone, natural gas, gasoline pumps, cash registers, ATMs, and Internet transactions.
6. Work with building owners to ensure the following items are located on each floor of the building:
 - Portable, battery-operated radio and extra batteries.
 - Several flashlights and extra batteries.
 - First aid kit and manual.
 - Hard hats and dust masks.
 - Fluorescent tape to rope off dangerous areas.

Homeland Security Advisory System-- Guidance for Federal Departments and Agencies

Low Condition (Green): This condition is declared when there is a low risk of terrorist attacks.

Guarded Condition (Blue): This condition is declared when there is a general risk of terrorist attacks.

Elevated Condition (Yellow): An Elevated Condition is declared when there is a significant risk of terrorist attacks.

High Condition (Orange): A High Condition is declared when there is a high risk of terrorist attacks

Severe Condition (Red) A Severe Condition reflects a severe risk of terrorist attacks.

Community Emergency Response Team (CERT)

The Community Emergency Response Team (CERT) Program educates people about disaster preparedness for hazards that may impact their area and trains them in basic disaster response skills, such as fire safety, light search and rescue, team organization, and disaster medical operations. Using the training learned in the classroom and during exercises, CERT members can assist others in their neighborhood or workplace following an event when professional responders are not immediately available to help. CERT members also are encouraged to support emergency response agencies by taking a more active role in emergency preparedness projects in their community.

***Novi residents 18 years of age and over with a valid driver's license may apply.
For more information, contact Kathy Kendra, Novi Police Department,
(248) 347-0504***



First Aid Supplies

Supplies	Home	Vehicle	Work
Adhesive bandages, various sizes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5 " x 9 " sterile dressing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Conforming roller gauze bandage	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Triangular bandages	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3 " x 3 " sterile gauze pads	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4 " x 4 " sterile gauze pads	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Roll 3 " cohesive bandage	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Germicidal hand wipes or waterless, alcohol-based hand sanitizer	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Antiseptic wipes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Pairs large, medical grade, non-latex gloves	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tongue depressor blades	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Adhesive tape, 2 " width	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Antibacterial ointment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cold pack	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Scissors (small, personal)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tweezers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Assorted sizes of safety pins	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cotton balls	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Thermometer	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tube of petroleum jelly or other lubricant	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sunscreen	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
CPR breathing barrier, such as a face shield	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
First aid manual	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Non-Prescription and Prescription Medicine

Supplies	Home	Vehicle	Work
Aspirin and non-aspirin pain reliever	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Anti-diarrhea medication	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Antacid (for stomach upset)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Laxative	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Vitamins	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Prescriptions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Extra eyeglasses/contact lenses	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Sanitation and Hygiene Supplies

Item		Item	
Washcloth and towel	<input type="checkbox"/>	Heavy-duty plastic garbage bags and ties for personal sanitation uses and toilet paper	<input type="checkbox"/>
Towelettes, soap, hand sanitizer	<input type="checkbox"/>	Medium-sized plastic bucket with tight lid	<input type="checkbox"/>
Tooth paste, toothbrushes	<input type="checkbox"/>	Disinfectant and household chlorine bleach	<input type="checkbox"/>
Shampoo, comb, and brush	<input type="checkbox"/>	A small shovel for digging a latrine	<input type="checkbox"/>
Deodorants, sunscreen	<input type="checkbox"/>	Toilet paper	<input type="checkbox"/>
Razor, shaving cream	<input type="checkbox"/>	Contact lens solutions	<input type="checkbox"/>
Lip balm, insect repellent	<input type="checkbox"/>	Mirror	<input type="checkbox"/>
Feminine supplies	<input type="checkbox"/>		

Equipment and Tools

Tools		Kitchen items	
Portable, battery-powered radio or television and extra batteries	<input type="checkbox"/>	Manual can opener	<input type="checkbox"/>
NOAA Weather Radio, if appropriate for your area	<input type="checkbox"/>	Mess kits or paper cups, plates, and plastic utensils	<input type="checkbox"/>
Flashlight and extra batteries	<input type="checkbox"/>	All-purpose knife	<input type="checkbox"/>
Signal flare	<input type="checkbox"/>	Household liquid bleach to treat drinking water	<input type="checkbox"/>
Matches in a waterproof container (or waterproof matches)	<input type="checkbox"/>	Sugar, salt, pepper	<input type="checkbox"/>
Shut-off wrench, pliers, shovel, and other tools	<input type="checkbox"/>	Aluminum foil and plastic wrap	<input type="checkbox"/>
Duct tape and scissors	<input type="checkbox"/>	Resealable plastic bags	<input type="checkbox"/>
Plastic sheeting	<input type="checkbox"/>	Small cooking stove and a can of cooking fuel (if food must be cooked)	<input type="checkbox"/>
Whistle	<input type="checkbox"/>		
Small canister, ABC-type fire extinguisher	<input type="checkbox"/>	<i>Comfort items</i>	
Tube tent	<input type="checkbox"/>	Games	<input type="checkbox"/>
Compass	<input type="checkbox"/>	Cards	<input type="checkbox"/>
Work gloves	<input type="checkbox"/>	Books	<input type="checkbox"/>
Paper, pens, and pencils	<input type="checkbox"/>	Toys for kids	<input type="checkbox"/>
Needles and thread	<input type="checkbox"/>	Foods	<input type="checkbox"/>
Battery-operated travel alarm clock	<input type="checkbox"/>		

Food and Water

Supplies	Home	Vehicle	Work
Water	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ready-to-eat meats, fruits, and vegetables	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Canned or boxed juices, milk, and soup	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
High-energy foods such as peanut butter, jelly, low-sodium crackers, granola bars, and trail mix	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Vitamins	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Special foods for infants or persons on special diets	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cookies, hard candy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Instant coffee	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cereals	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Powdered milk	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Clothes and Bedding Supplies

Item	
Complete change of clothes	<input type="checkbox"/>
Sturdy shoes or boots	<input type="checkbox"/>
Rain gear	<input type="checkbox"/>
Hat and gloves	<input type="checkbox"/>
Extra socks	<input type="checkbox"/>
Extra underwear	<input type="checkbox"/>
Thermal underwear	<input type="checkbox"/>
Sunglasses	<input type="checkbox"/>
Blankets/sleeping bags and pillows	<input type="checkbox"/>

Documents and Keys

Item	Stored
Personal identification	<input type="checkbox"/>
Cash and coins	<input type="checkbox"/>
Credit cards	<input type="checkbox"/>
Extra set of house keys and car keys	<input type="checkbox"/>
Copies of the following:	<input type="checkbox"/>
Birth certificate	<input type="checkbox"/>
Marriage certificate	<input type="checkbox"/>
Driver's license	<input type="checkbox"/>
Social Security cards	<input type="checkbox"/>
Passports	<input type="checkbox"/>
Wills	<input type="checkbox"/>
Deeds	<input type="checkbox"/>
Inventory of household goods	<input type="checkbox"/>
Insurance papers	<input type="checkbox"/>
Immunization records	<input type="checkbox"/>
Bank and credit card account numbers	<input type="checkbox"/>
Stocks and bonds	<input type="checkbox"/>
Emergency contact list and phone numbers	<input type="checkbox"/>
Map of the area and phone numbers of places you could go	<input type="checkbox"/>

Protecting Water Quality

They're Our Waterways

Did you know that the major source of pollution of our creeks, ponds, and streams is stormwater runoff? As rain water flows over land it picks up a variety of pollutants, including eroded soil, trash, fertilizers and pesticides. Automobile fluids, including motor oil, antifreeze, gasoline, and brake fluid, contain trace metals and chemicals that often leak from the vehicles onto streets and parking lots. These pollutants may make their way into storm sewers and ultimately into nearby streams and rivers.

The Rouge River and Huron River are the watersheds within the City of Novi. A watershed is the land area that a river system drains into, and in Novi that includes the Rouge River, and its tributaries including Bishop Creek, Chapman Creek, Ingersol Creek, Miller Creek, Thornton Creek, and the Seely Drain. A portion of the Huron River watershed lies within Novi, but the river itself does not enter the City of Novi boundary.

Novi is fortunate to have many high quality waterways. If they are to stay that way, we must all play a part; even activity on the land has an impact on our water resources.

What You Can Do

The following information is presented to inform local homeowners and Homeowner Associations of the role they can play in pollution prevention and stream protection.

Topics covered include:

- Pollutants—Their Sources and Impacts
- Catch Basin Care
- Maintaining Septic Systems
- Car Care
- Storm Water Pond Maintenance
- Controlling Garden Pests
- Landscaping at the Water's Edge
- Rethinking Lawn Care

POLLUTANTS: *Their Sources and Impacts*

A pollutant is any substance that can harm living things. Pollutants commonly found in the City of Novi include:

SOIL/SEDIMENT

Sources: Construction sites and other non-vegetated lands.

Impacts: Uncontrolled soil erosion can result in excess sediment that clogs catch basins, storm sewers and detention basins, leading to high maintenance costs and flooding. As it settles, sediment can smother fish eggs and bottom-dwelling organisms, and destroy aquatic habitat. Suspended sediment can lower the transmission of light through water and can negatively affect aquatic animals. Other pollutants can attract soil particles. When sediments run off the ground into waterways they carry these pollutants with them.

NUTRIENTS

Sources: Septic systems, lawn fertilizers, animal waste, cleaning products, plant debris and eroded soil.

Impacts: Phosphorous and nitrogen can over-stimulate aquatic weed and algae growth. As they decay, excess weeds and algae use oxygen in the water, which is needed by fish and other aquatic life.

TOXIC COMPOUNDS

Sources: Toxic substances include vehicle fluids, solvents, lawn herbicides and pesticides, paints, and metals such as chromium, copper and mercury.

Impacts: Toxins can accumulate in the aquatic food chain, as one larger organism eats many smaller ones that have been contaminated. Even in very small concentrations, oil and other toxic substances can harm aquatic plants and animals.

LITTER AND DEBRIS

Sources: Grass clippings, leaves and litter generated by careless disposal practices.

Impacts: Litter and leaves that wash into storm sewers can clog detention basin inlets and outlets, and eventually pollute streams and rivers. Excessive leaves and other organic materials decompose and lower the amount of oxygen available to aquatic life.



Catch Basin Care

Why Be Concerned?

Catch basins are storm sewer inlets that filter out debris such as leaves and litter. They are typically located next to street curbs or in the rear yards of residential areas.

It is important to maintain catch basins to prevent storm blockages and minimize the amount of pollutants entering storm sewers. Storm sewers either discharge into detention basins or directly into streams.

Clogged catch basins can also cause water to pond along streets and in yards. This flooding can be a nuisance to motorists and homeowners.

Are You Responsible For Catch Basin Care?

Your Homeowner's Association is responsible for catch basin maintenance if you live in a subdivision, site condominium or attached condominium neighborhood with private roads. The Road Commission for Oakland County and the City of Novi Department of Public Works maintains catch basins in public roads.

Stormwater draining systems are typically designed to remove water from a developed area as quickly as possible during a storm. While these systems are convenient for urban residents, they also carry pollutants to surface waters at a "rapid transit" pace. Contrary to popular belief, pet wastes, oil and other materials dumped into storm sewer grates do not go to the waste water treatment plant, but flow directly into streams and lakes. For example: dumping oil into a storm sewer grate has almost unthinkable consequences. When it reaches the water, five quarts of oil can create a slick as large as two football fields and persist on mud or plants for six months or more.

How are Catch Basins Maintained?

Remove the Debris from Grates

The grates of catch basins can become clogged with litter or leaves, especially in the spring and fall. Regularly inspect the grate and remove debris. Encourage neighbors to adopt the catch basins in front of their homes, and keep them free of debris.

Remove Debris from Storage Area

Catch basins should be cleaned out before the storage area is half full. Once this level is reached, debris begins to wash into sewer pipes. Cleaning should be done in the spring after the first large snow melt, in the fall after the trees have shed their leaves, and additionally if needed. To find out how much material has accumulated in the storage area of a catch basin, insert a long pipe or broom stick into the storm drain grate.

Notice where the pipe or stick hits the debris and continue to the bottom to estimate the depth of accumulation. Cleaning these storage areas should be performed by a private contractor.



Stenciling Your Storm Drains

Stenciling or applied decals that read “Dump No Waste - Drains to River” are a good reminder that nothing but water belongs down a storm drain.

Maintaining Septic Systems

Why Be Concerned?

Septic systems are wastewater treatment systems designed to collect all wastewater from residences where sanitary sewer systems are not available. They are typically designed to be effective over a 20-year period if properly maintained.

Poorly maintained and failing septic systems can cause serious problems. Sewage from overloaded systems can pond on the ground near the drainfield or back up into buildings. Inadequately treated septic liquids can contaminate ditches, creeks, and shallow drinking water supplies. Animals and people may become ill from contact with these polluted waters. In addition to public health concerns, it is costly to repair or replace a failing system.

How The Septic System Works

A septic system consists of a septic tank and drainfield. Wastewater flows from the house to the septic tank where natural bacteria begin to break down the solid materials. This breakdown reduces solids in the wastewater, but leaves a sludge residue behind in the tank that builds up and must be removed to prevent it from entering the drainfield and clogging the system.

The center liquid layer flows slowly from the tank into the drainfield. The drainfield is made up of perforated pipes that equally distribute the wastewater across the gravel-filled drainfield. The liquid then soaks into the soil that acts as the final filter for treatment of wastewater received from the septic tank.

Do's and Don'ts If You are on a Septic System

Do's

- Learn the location of your septic tank and drainfield. Keep a sketch of it handy with your maintenance record for service visits.
- Obtain a copy of your septic permit from the Oakland County Health Department.
- Connect laundry and kitchen water to the septic tank.
- Divert other sources of water, like roof drains, house footing drains and sump pumps, to lawn areas away from the septic system, excessive water keeps the soil in the drainfield saturated and prevents adequate treatment of the waste water.
- Have your septic tank pumped out by a licensed operator every two to three years.
- Have the operator make sure there is a tee or baffle on the outlet of a septic tank. The baffles stop the scum from floating into the drainfield.
- Check with the Oakland County Health Department if you are having problems. Staff can assist you with operation, maintenance and design questions.
- Take leftover hazardous household chemicals to your approved home toxics waste collection center for disposal.
- Use bleach, disinfectants and toilet bowl cleaners sparingly and in accordance with product labels. Preferably use alternate cleaning products as recommended in the Home Toxics Guide included with this handbook.

Limiting water entering your tank:

- Use water-saving faucets, showers and toilets.
- Minimize the amount of water used for bathing and dishwashing
- Drain appliances one at a time.
- Spread clothes washing over the entire week and avoid half-loads.
- Check toilets for leaks at least once a year by putting a few drops of food coloring into the toilet tank. If colored water appears in the toilet bowl, you have a leaking toilet.

Don'ts

- Don't enter a septic tank. Toxic gases are produced by the natural treatment processes and can kill humans in minutes. Take extreme care when inspecting a septic tank, even when just looking in the lid opening. Better yet, leave this to a septic system professional.
- Don't allow heavy vehicles to drive over, or park on top of the septic system.
- Don't plant trees or shrubs on, or directly adjacent to, the septic tank or drainfield. The roots from the plants could damage the system.
- Don't cover the drainfield with a hard surface such as concrete, asphalt, above-ground pools or decks.
- Don't repair your septic system without checking with the Oakland County Health Department to see if you need a permit.
- Don't use a kitchen garbage disposal unit. Heavy use adds large quantities of solids and shortens the life span of the septic system.
- Don't use commercial septic tank additives. These products do not help, but may harm our system in the long run.
- Don't use your toilet or sink as a trash can. Pouring harsh chemicals and cleansers down the drain can kill the beneficial bacteria that treat your wastewater and contaminate the groundwater.

Do not flush or wash solids down the drain:

- Coffee grinds
- Meat fat
- Grease or oil
- Cigarette butts
- Disposable diapers
- Personal hygiene items
- Dental floss
- Kitty litter
- Paper towels

The same goes for hazardous chemicals, such as:

- Paints
- Paint thinners
- Oils
- Photographic solutions
- Varnishes
- Pesticides
- Gasoline
- Household cleaning products



What to do if Your System is Failing:

Signs that your systems is failing:

- Sewage backup in drains or toilets
- Slow flushing toilets, sinks or drains.
- Visible liquid on the surface of the ground near the septic system. It may or may not have an odor associated with it.
- Lush, green grass over the drainfield, even during dry weather. Often, this indicates that an excessive amount of liquid from the system is moving through the soil, instead of downward, as it should.
- Build-up of aquatic weeds or algae in lakes or ponds adjacent to your home. This may indicate that nutrient-rich septic system waste is leaching into the surface water.
- Unpleasant odors around your house.
- Gurgling sounds in the sinks or drains.

If your system exhibits one or more failure indicators, contact Oakland County Health Department staff for assistance in assessing the situation. Sometimes the system can be repaired without complete replacement. Sewage contains harmful bacteria, so keep pets and children away from the system. Limit water use until repairs can be made. If a new system or major repairs are needed, a permit is required from the Oakland County Health Department.

Car Care

Why be Concerned?

Washing cars in your driveway can add pollutants to streams and rivers. Wash water that enters storm drains often contains detergents, oils, grease, heavy metals and dirt. Storm drains eventually discharge directly to local waterways.

Vehicle fluids dumped down a storm drain or directly into a waterway can cause serious problems. Four quarts of oil, the amount it takes to fill automobile's engines, can form an eight-acre oil slick in a river. Other vehicle fluids such as antifreeze are poisonous to people, fish and wildlife. Many cats and dogs have died from drinking sweet-tasting puddles of antifreeze found on driveways, in ditches or near storm drains.



Washing Tips

- Wash your car at a commercial car wash that uses water efficiently and disposes of the wash water properly. Or, wash your car on the lawn to prevent soapy runoff from entering storm drains or roadside ditches.
- Remove dirt from around the wheels first with a wire brush. Collect the soil with a broom and dispose of it in a manner that will keep it out of storm drains.
- Use plain water whenever possible or non-phosphate biodegradable detergents and mild soaps, such as vegetable oil-based soaps.
- Wash one section of the car at a time and rinse quickly using a pistol grip nozzle with high pressure and low volume.
- You may want to check with your City or Township to determine whether parking your car on your lawn for a brief period of time to accomplish car washing is permitted

Car Maintenance Tips

- If you change vehicle fluids like motor oil or antifreeze at home, take the waste fluids to a recycling center or an oil change facility.
- Always use a drip pan under your work or funnels when transferring fluids. Investigate using an oil change kit designed to absorb used oil.
- Never mix waste oil with gasoline, solvents or other liquids before recycling.
- Change vehicle fluids in the garage whenever possible. If a spill occurs, pour kitty litter, sawdust, or cornmeal on the spill to absorb the liquid. Place the waste material in a strong plastic bag and dispose with your trash.
- Inspect vehicles regularly for leaking oil and fluids, and make repairs immediately after problems are detected.

Recreation Vehicles and the Disposal of Sanitary Waste

Currently, there are no municipal authorities in Oakland County that provide sanitary waste disposal generated from recreation vehicles. Be certain to properly dispose of RV sanitary wastes at your campground or park designated facility since it may be difficult to locate alternative facilities that will accept sanitary wastes from RV's not using their campground services. Check the telephone directory for any local campgrounds that may provide this service.



Stormwater Pond Maintenance

Why be Concerned?

Homeowners' Associations and business owners have first line responsibility for maintaining their stormwater ponds. Called detention or retention basins, these facilities require maintenance to ensure they function properly. Poorly maintained basins, regardless of their design, lose their ability both to control flooding on private property and prevent pollutants like sediments, fertilizers and pesticides from entering local creeks and streams near homes and business.

What are Stormwater Ponds?

Stormwater ponds are included in new development to control the stormwater runoff from a developed site, to prevent downstream flooding and channel erosion, and to improve water quality. There are several different pond designs that can serve these functions. Some ponds are generally dry, holding water only after rainstorms, and metering it gradually off-site and downstream. Others are permanently wet ponds, and others are a combination, with a wetland area surrounded by a dry area for storage of stormwater. When stormwater is held in a pond, sediments and other pollutants can filter out before water leaves the site. Ponds with wetland vegetations can provide habitat as well as effective removal of many water pollutants carried in stormwater. Pond outlets are designed to ensure proper storage time, and gradual release rates.

What Kind of Maintenance Do Stormwater Ponds Require?

No matter how well designed, stormwater ponds must be maintained regularly to prevent folding, and to protect the quality of local waterways. Litter and debris can clog inlets and outlets, accumulated sediment can take up important storage capacity, and structural failures can result. At a minimum, a homeowners' association should conduct a comprehensive annual inspections of its stormwater ponds (and entire stormwater management system), as well as spot inspection after all major storms. It is advisable to secure the services of a professional engineer to inspect the structural elements of the pond annually and to compare them to the "as built" engineering plans for the pond. The engineering design plans for the stormwater ponds in your subdivision or site condominium may be available from the Oakland County Drain Commissioner or the City of Novi Engineering Division.

Obtain a Copy of Your Stormwater System Maintenance Plan

For developments designed after 1994 and reviewed by the Oakland County Drain Commissioner, a maintenance plan and budget should be on file with that office. The plan should identify the components of the stormwater system and the type of frequency of maintenance required for each. In addition, an estimated cost of annual maintenance should be included. This can help homeowners' associations to budget for the necessary work. If a plan is not available, the Drain Commissioner's staff will help your association with stormwater pond maintenance.



Remove Accumulated Sediment

The sediment that collects in stormwater ponds should be removed every 5-10 years, or more frequently, depending on accumulation. Professional services should be secured for this job. Most ponds have adjacent areas where sediment can be spread, seeded, and covered with mulch for stabilization. Make sure that sediment cannot run back into the pond from this area. If there is no suitable common area for spreading sediment, it may have to be transported off site to an approved facility.

Newer ponds, constructed after 1995 should have a sedimentation “forebay”, a separate excavated area at the pond inlet, designed to capture sediment. By isolating the sediment in a smaller area, maintenance is easier and less costly, though it may have to be preformed more frequently.

What is the Drain Commissioner's Role in Stormwater Pond Maintenance?

Many subdivisions and site condominiums are County Drainage Districts. This means that the Oakland County Drain Commissioner's staff will perform stormwater system maintenance and charge the costs to the homeowners through special assessments. Maintenance, however, can often be more timely and cost effective when undertaken by property owners' associations. The Drain Commissioner will provide technical advice to property owners' associations free of charge, to help them plan and undertake stormwater system maintenance. You must obtain a permit from that office prior to performing any major maintenance or structural repair.

Examine the Side Slopes for Erosion

Twice each year (spring and fall) and after a major storm check for gullies or sloughing of the banks and other disturbances from animals or vehicles. Any damage observed should be repaired immediately by filling any eroded areas with topsoil and seeding with appropriate vegetation. It is also important to place mulch or straw over the seed to prevent it from being washed into the basin. If problems continue, contact the Oakland County Drain Commissioner's Office or MSU Extension Office for additional guidance and advice.

Inspect for Litter and Debris

Twice each year (spring and fall) and after a major storm, check for debris near the inlets, in the basin and at the outlet. Remove and dispose of debris or litter.



Inlet Pipes direct stormwater from developments into stormwater ponds. Typically, there are two or three inlet pipes in a detention basin. Check the following:

- Structural integrity - Inspect the pipe to make sure it isn't crumbling or broken.
- Rip rap – Rip rap (typically pieces of stones) is placed around the pipe where it enters the basin to prevent erosion. Check for erosion around the piped or missing rip rap.
- Obstructions – Inspect the pipe end to determine if sediment, dirt, or debris is obstructing the flow of water from the pipe into the basin. Minor amounts of sediment around pipe openings can be removed with a shovel and wheelbarrow, spread evenly on upland areas and seeded with turf grass.
- Riser pipes – Riser pipes are upright pipes located near the pond outlet, usually surrounded by a “jacket” of small stone, which filters out sediment and debris. The pipe is perforated, and stormwater flows through these holes to exit the pond at a controlled rate. Periodically (every several years), the pipe must be exposed to ensure that it is free-flowing and not clogged with sediment or debris. After the blockage is removed, clean stone should be replaced around the riser pole. This job will require the services of a contractor with appropriate equipment

If any of these problems are occurring, or if you have any questions, contact the Drain Commissioner's Office. Staff may be able to assist you directly (if the system is a county drain) or direct you to other agencies or private contractors.

Outlet Pipes direct stormwater from a detention basin off site to a nearby creek or stream. Typically, there is only one outlet associated with a basin. The outlet generally consists of a single pipe or riser pipe. Check the following:

- Structural integrity- Check the pipe to ensure that it isn't crumbling or broken.
- Obstructions – Inspect the pipe end to determine if sediment, dirt or debris is obstructing the flow of water into the pipe and preventing water from leaving the basin.
- Stone around the outlet pipe may need to be replaced if it becomes too clogged with sediment..



Inspect Vegetation

In the spring and fall, inspect the vegetation on the banks and in the basin. Maintenance activities will vary depending on the type of basin. If you have a pond with wetland vegetation, dead cattails and other decomposing vegetation in the basin should be removed if they are clogging pipe openings. Living vegetation greatly improves water quality by filtering out pollutants such as fertilizers, pesticides, oils and grease from the stormwater.

Late fall is a good time to cut down cattails. This will minimize clogging in the spring with dead vegetation. Cut cattails should be disposed of with other compost materials.

Remove invasive non-native plants like purple loosestrife. Although its bright purple flowers are pretty, purple loosestrife forms dense colonies, crowding out native wetland plants that are important sources of nutrients for birds and other wildlife. The plant is such a problem that it is illegal to sell it in the State of Michigan.

Removal of purple loosestrife should be done before the plant sets seeds in August. Remove by pulling the entire plant out of the ground, including the roots. Dispose of properly with other yard waste that is composted.

Repair bare spots along banks with turf grass seeds, meadow grass, or wildflowers. Native landscaping like meadow grasses and wildflowers grown along the banks of the stormwater pond will reduce long-term landscape maintenance, filter pollutants, and discourage geese. Consult with professional landscape architects and nurseries to learn more about planting, or consult with the MSU Extension Office for advice.

Mowing

Frequency of mowing required at a stormwater pond is determined by pond type and desired appearance. Maintaining a buffer of taller vegetation plantings at a stormwater pond edge filters pollutants from runoff and also discourages nesting and visits of geese. No lawn care chemicals should be used within 25 feet of the pond. Typically, a stormwater pond planted with turf grass only needs to be mowed two or three times a year. Basins with native grasses and wildflowers should be mowed only once a year in the late fall or early spring. More frequent mowing will prevent the wildflowers from blooming and producing seed.

Record Keeping

Keep records of all inspections including date, name of inspector or maintenance contractor, observations, and maintenance activities performed. Keep records of all costs for inspections, such as consulting with professional engineers, and repair costs. Good records will help you make adjustments to the maintenance programs as needed.



Controlling Garden Pests

Why be Concerned?

Chemicals and pesticides are poisonous substances. Many of them are harmful to plants, pets and children, and can pollute creeks, ponds, rivers and groundwater resources. The approach of Integrated Pest Management (IPM) is an alternative to purely chemical pest control. It provides a safer, less expensive and more consistent eradication of any pest over the long term.

What is Integrated Pest Management (IPM)?

IPM recognizes that pests are an integral part of the natural system. This approach works to keep pests at tolerable levels by using cultural, mechanical and biological controls instead of chemical ones, whenever possible. IPM involves paying attention to the landscape and managing it in a way that provides optimum growing conditions for those plants desired, since healthy plants are less susceptible to pests. This includes working to eliminate conditions favorable to pests and promoting natural controls such as beneficial insects.

Chemical Pesticides: A Last Resort

In IPM, chemicals are just one small part of the whole plan. If pesticides are used, the least toxic one should be chosen and applied at the most effective time in the pest's life cycle.

Choosing Plants

Choosing the right plants is the best way to avoid pest problems. Choose plants that are naturally free of major pests and diseases, and that are well adapted to our climate and to the specific soil, light and moisture conditions on-site. Plants that require shade, for example, are more susceptible to pests when grown in full sun. The pH level of soil can also affect a plant's ability to withstand pests. To help identify the plants best suited for your purposes and site, contact MSU Extension, a local nursery, or a landscape architect.

Keeping Plants Healthy

Weeds, pests, and diseases are usually the *result* of poor growing conditions and unhealthy plants, not the *cause* of them. To keep plants healthy, use good horticultural techniques. Maintaining healthy soil conditions is the foundation of any IPM program:

- Space, thin and prune shrubs and trees to promote air circulation.
- Plant seedlings after the threat of frost and before hot weather.
- Maintain a variety of plants instead of only one or two species, to minimize the spread of disease.
- Aerate and add organic matter to the soil.
- Water and fertilize plants only as needed.
- Mow grasses as high as possible and leave the clippings on the lawn.

Protecting Sensitive Areas

Consider whether the site is near a water body, stormwater pond, vegetable garden, children's play area, or public place. If it is, select a pest management technique that minimizes harm to these sensitive areas. The wise use of pesticides protects water quality in ponds or streams. If used near lakeshores or streambanks, even in modest amounts, the chemical may quickly find their way into the water.

The Secrets of Chemical Free Pest Control

Use methods of pest control that are the least disruptive to human health and the environment.

Plant Selection

Select disease – and pest-resistant plant varieties. Consult with the MSU Extension Office or a professional landscape architect and/or nursery for help in plant selection.

Low Cost/Simple Control Methods

Simple methods to control pests include:

- Removing weeds by pulling or hoeing;
- Covering planting areas with 2" – 3" of mulch to prevent weed germination;
- Removing pest-infected plant residue in the fall; and
- Removing insect eggs, larvae, cocoons, and adults from plants by hand.

Retain and Promote Natural Pest Controls

Many organisms feed on, or infect, pests. These natural enemies frequently prevent pest populations from reaching damaging levels. Natural enemies include insect and non-insect predators, parasites, and bacterial, fungal and viral pathogens. Contact the MSU Extension Office for more information.



Managing Gypsy Moths

Gypsy moths have been identified in Oakland County. There is no need for alarm, however, since the moths can be managed and do not typically kill trees. Homeowners are encouraged to learn more about this pest. For more information, contact the Oakland County MSU Extension Office for more information .

Natural Enemies

Common garden pests include grubs, aphids, scale insects, mealybugs and whiteflies. Natural enemies such as predatory bugs and other animals may keep populations of these insects in control. Lady beetles (or “ladybugs”) and lacewings, for example, feed on aphids. Robber fly larvae can substantially reduce grub populations in the soil. Garden spiders capture insects in their webs and kill their prey by injecting them with venom. Birds, frogs, toads and small mammals such as mice, shrews, and moles also help control insect populations.

You can help encourage these natural enemies of garden pests by minimizing or avoiding use of chemicals that are poisonous to all insects and insect feeding animals.

Landscaping Near the Water's Edge

Why be Concerned?

A zone of trees and other plants growing at the water's edge help keep water pure, cool and clean. Vegetation buffers, or riparian areas, provide shade, filter pollutants, prevent erosion and reduce sedimentation.

In contrast, grassy buffers offer little protection to shorelines and stream banks. Their comparatively shallow roots are less effective at infiltrating runoff and preventing erosion—both major problems locally.

Lastly, riparian areas provide wonderful backyard habitat and discourage nuisance geese. For more information, see the National Wildlife Federation.

Landscaping Near the Water's Edge

Landscaping designs next to waterways and stormwater ponds protect and enhance riparian vegetation to benefit homeowners, wildlife and water quality. When thinking about re-landscaping riparian areas, consider these factors:

- Planned use of the landscape
- Aesthetics
- Long-term maintenance



Use – Typically, the backyard is the most actively used outdoor area at home. Often, the total area available for different uses is relatively small, and wise use of space is necessary.

Aesthetics – Views from the home and backyard are another factor to consider in landscape design. Many people value the views of an adjacent stream and want access to the water’s edge. Views can be directed by sensitive placement of trees and shrubs in relationship to viewing points, such as windows, outdoor paths and patios.

Maintenance – Traditional grass lawns provide an ideal surface for many outdoor activities and permit open views, but they also require regular maintenance with little corresponding benefit to the environment.

Adding Vegetation to the Banks

Planting a variety of shrubs and wildflowers along the banks of streams and stormwater ponds can promote bird habitat and provide seasonal color and interest. Many varieties of wetland shrubs and wildflowers grow well in damp soil. Several native trees have also adapted to grow near water.

As an alternative to cattails, wetland plants such as softstem and hardstem bulrush, blue flag iris, woolgrass, water plantain, pickerel weed and arrowhead can be planted in stormwater pond areas. (If landscaping near a stormwater basin, please remember to leave room for maintenance vehicles. Contact the Oakland County Drain Commissioner’s Office for Information.)

Nurseries that specialize in wetland plants are increasing in number. For more information, contact the MSU Extension Office for Oakland County in the “Getting Help” section.

Landscape Zones

A Landscape Zone plan can be drawn in a simple way to visualize how a residential property that borders a waterway can be designed by use, views and desired maintenance levels.

What’s “Native”?

“Native” refers to plant communities that were here before Europeans settled in Michigan in the 1700’s. Since then, thousands of plants have been introduced and have become naturalized in North America at an unprecedented rate and scale. “Naturalized” refers to non-natives, or alien species, that have been introduced over time. Once introduced, some non-natives are difficult to control because they have no natural enemies.

Approximately 30% of the 2,600 plant species growing in Michigan are non-natives that have become naturalized, largely over the last hundred years.



Planting Tips for Riparian Buffers

- Retain existing or plant native trees, shrubs, grasses and wildflowers along the water's edge.
- The width of the vegetated area buffer zone is likely to be influenced by many factors; ideally, the zone should be at least 25 feet in width.
- Many communities have adopted ordinances and regulations requiring buffer zones of varying widths. Contact township or city officials for more information.
- Choose plants that are compatible with site conditions (soil type, pH, sun, exposure, etc.)
- Avoid selecting non-native plants because they typically require more chemical use to sustain their health.

Native Michigan Plants to Consider Planting Near Water

Trees: green ash, swamp white oak, tuliptree, black walnut, sycamore, silver maple and red maple.

Understory Trees and Large Shrubs: alternate-leaf dogwood, redbud, serviceberry, nannyberry viburnum, American hazelnut and black chokeberry.

Shrubs: red-osier dogwood, silky dogwood, buttonbush, common elder and black raspberry.

Wildflowers and Groundcovers for Shade: blue cohosh, may apple, wild ginger, bloodroot, jack-in-the-pulpit, trillium, wild geranium, woodland phlox, marsh marigold and Dutchman's breeches.

Wildflowers for Sunny Wet Areas: New England aster, joe-pye-weed, boneset, ironweed, cardinal flower and swamp milkweed.

Wildflowers for Sunny Dry Areas: blazing-star, beebalm, black-eyed susan, yellow coneflower, stiff goldenrod, showy goldenrod, wild strawberry, turtlehead, and Michigan lily.

A number of native ferns, grasses, rushes, and sedges should also be considered for the riparian zone.

Rethinking Lawn Care

Why be Concerned?

The amount of space taken up by lawns in the U.S. equals the size of Pennsylvania. Mowed, manicured and irrigated lawns, unlike native prairies, do not occur naturally. That is why it takes so much energy to keep them alive.

Yard care may be a very rewarding pastime for some, but an unwanted chore for others. In addition to the time commitment, homeowners frequently rely on



chemical products to maintain their lawns and grounds. These products can work well if applied correctly, but overuse can be unsafe for children, animals, and fish.

Reducing lawn size, using lawn care products carefully, and conserving water will help maintain appearance while promoting a safe and healthy environment.

The Natural Processes

Ever since the lawnmower was invented, lawns have become the “accepted look” that says a neighborhood is safe, tidy and maintained. There are many important reasons, however, to have as small a mowed lawn as possible.

An estimated 70 percent of pesticides used in the United States is applied to our nation’s lawns. Lawns provide little wildlife benefit, are a source of water pollution (erosion and chemicals) and can be visually uninteresting.

Manicured, irrigated and fertilized lawns do not take advantage of the natural processes that we associate with the great outdoors. In nature, soil organisms decompose leaves and vegetation; plants recycle these nutrients to produce new growth. Over time, leaf litter builds up in the top layer of soil. This organic matter moderates temperature, retains water and nutrients more efficiently, and reduces polluted runoff.

We cannot expect these processes to be duplicated everywhere, but if you enjoy working outdoors, there are many ways to reintroduce nature’s magic into your landscape.

If your lawn has an area that often seems wet, these spots can often be restored to a wet meadow wildlife pond. Throughout the yard, landscaping that includes shrubs, wildflowers, and prairie grasses can add beauty and improve water quality. This is especially important to waterfront property.

If you have “wild” areas on your property, consider maintaining this natural state instead of converting them to lawn. Natural landscapes often require less time and money than formal landscapes.

How much lawn you need depends on the size, shape, and uses of your property. If you need a place for active sports or pets, a long rectangular area may suffice. If the only activity on portions of your lawn is mowing, consider converting those areas to wildflowers or locally occurring plants, which are better rooted in the natural world.

Beware of the “Dangerous Diet”!

Use of yard chemicals has become so routine that a “healthy respect” for their proper application has diminished. Even well intentioned use of fertilizer and pesticides can do more harm than good.



When confronted by lengthy directions and warnings in fine print, it’s tempting

to skip the instructions on chemical labels and just “get the job done.” Remember the suffix “icide” means “to kill.” While more target-specific and improved products are continually developed, the fact remains that pesticides sometime kill things other than their targets.

When using pesticides, a careful diagnosis of the problem and conservative application procedures is critical. Diagnose the problems, follow application directions and resist the urge for a quick chemical solution. The key is an understanding of the target pests and the chemicals you plan to use. If you need help, there are several sources of information in the “Getting Help” section. Also, consider the use of more natural alternatives. Informed homeowners can select safe and reliable chemical treatments for specific yard care problems.

Tips For A Safer Lawn

- *Test Soil Compaction* – Compacted soils are unhealthy for plants and generate as much runoff as pavement. Try sinking a screwdriver into the ground. If it does not penetrate easily, consider aerating your lawn.
- *Leave Grass Clippings on the Lawn* – Clippings left on the lawn provide important moisture and nutrients. Up to half of the nitrogen needed by your lawn can actually be provided by these clippings. If your lawn grows quickly, consider collecting some of the clippings to use as mulch or in compost.
- *Compost Yard Waste* – Composting keeps yard waste and other decomposable materials out of landfills. Composting also creates a rich material that can be used in flowerbeds or on the lawn to aid growth. (see page 19 for information on composting)

Fertilizers and Pesticides

- Before applying any fertilizer to our lawn, have your soil tested by Oakland County MSU Extension or your landscape contractor. Based on the results, you will know the exact type and amount of fertilizer your soil needs.
- Determine the size of your lawn to help correctly apply the recommended amount of fertilizer.
- One fall application of low phosphorus fertilizer is adequate to promote a “green flush” next spring.
- Slow release fertilizers last longer and reduce polluted runoff. Look for Water Insoluble Nitrates (WIN) in the list of ingredients.
- Buy only what you need. Time and freezing garage temperatures can render stored products less effective without reducing their hazardous qualities. As yard care chemicals pile up, proper storage and disposal can be difficult. Curious children and pets may also be at risk.
- Chemicals spilled on pavement during mixing and loading will wash off into local waterways with the next rainstorm. Mixing and loading away from pavement greatly reduces this risk.
- Many of the rates recommended on labels are generous and designed so that the products remain effective under less optimal conditions. Do not exceed application rates.
- Under-application of yard care chemicals can also create problems. Remember that pest populations subjected to non-lethal doses may begin to develop resistance to the chemicals designed to kill them.
- Do not apply chemicals within the last few feet of grass along a driveway, sidewalk or swale. The next rainfall will wash a good portion of these pellets into the nearest creek.

Ideas for Around Your Home

It doesn't matter where you live, or whether you have a little or a lot of time and money to invest in your yard; there are many things you can do to conserve water and improve water quality. Conserving water saves money, protects watersheds, and helps keep groundwater tables high. The ideas found on this and the last page highlight some of the ways that you can contribute to clean water and a healthy environment.



An Old Idea Reconsidered

Do you remember the rain barrel from years ago? Its simple purpose: to collect rainfall from a roof and store it for watering flowers and garden plants when the weather turns dry.

Gardeners of past years knew from experience what chemistry teaches us today: Rainwater can be better for plants than water pumped from the ground or from a municipal source since it is not chlorinated, fluoridated or loaded with dissolved salts. Rainwater is also mildly acidic, which helps plants absorb important minerals from the soil.

The rain barrel you choose should be equipped with a drain spigot compatible with garden hose threading so that rainwater may be directed to drip irrigation systems. An overflow outlet for the barrel is necessary to provide bypass runoff during major rain storms. It is important that your rain barrel be designed with a removable, child-resistant cover, and mosquito screening on all water entry holes. Remember that water from rain barrels is not potable.

The rain barrel can be attractively included in landscaping plans for patio and deck designs.

Other Water Saving Tips

- Lawns generally need an inch of water per week. A rain gauge (or tuna fish can) can help keep track of precipitation amounts.
- Water lawns during the early morning hours when temperatures and wind speed are the lowest.
- Drip irrigation and soaker hoses are excellent water-efficient irrigation methods.
- If you have an automated sprinkler system, install a rain sensor that turns it off after a .25-inch rain.

More Ideas for Around Your Home

- Mow often enough to leave grass clippings on the lawn. Mow the lawn high – at least three inches. Alternatively, use clippings as mulch or compost them along with leaves that might otherwise end up fertilizing local waters.
- Keep fallen leaves out of street side gutters and swales. Consider using a “mulching” mower and using the mulch around the yard.
- Plant that extra tree for many environmental benefits, especially where it becomes part of a planting bed or “naturalized” landscape area that recycles leaves, twigs and other yard “wastes”.
- Consider native plants when planning landscaping purchases.
- Seed bare soil and cover it with a mulch as soon as possible to minimize erosion. Disturb no more soil than necessary for a project and consider native grown covers instead of lawn turf while preserving existing vegetation.
- Direct roof downspouts away from foundations and driveways to planting beds or lawns where water can safely soak into the ground. Consider using a rain barrel if practical.
- Use lawn and garden chemicals carefully and sparingly. Pesticides, including weed killer, should be considered as a last resort; use other, more natural controls first.
- Limit the use of toxic or hazardous products in general, especially keeping them away from storm drains, lakes and streams.
- Collect used oil and other automotive products for recycling.
- Wash cars on the lawn, where cleaning products can’t quickly run toward the nearest storm sewer, picking up other pollutants as they go. Wash your car with plain water.
- Keep cars and equipment tuned up and in good operating condition. Check for drips and repair leaks immediately to keep nuisance oils and fluids off pavement.
- For waterfront property, grow a “buffer strip” of dense, natural vegetation along the water’s edge as a last defense to filter pollutants from the water and stabilize the shoreline.
- If using a septic tank system, maintain it properly through regular professional inspections and licensed pumping.

