IN WITNESS WHEREOF, the parties hereto have signed these covenants this 9th day of November, 2006.

Evergreen Heights, LLC

By: _____
Roy C. Rice, Jr., Sole Member

STATE OF WASHINGTON)
) **ss.**
COUNTY OF THURSTON)

On this day personally appeared before me ROY C. RICE, JR., to me known to be the Sole Member of Evergreen Heights, LLC, the limited liability company that executed the within and foregoing instrument, and acknowledged said instrument to be the free and voluntary act and deed of said entity, for the uses and purposes therein mentioned, and on oath stated that he is authorized to execute said instrument.

GIVEN under my hand and official seal this 9th day of November, 2006.

_____

Notary Public
State of Washington
TERA N. LINFORD
MY COMMISSION EXPIRES
September 22, 2007

Notary Public in and for the State of Washington, residing at
Olympia WA
My appointment expires
9/22/07

ATTACHMENT A

RESOURCE PROTECTION PLAN

MARVIN ROAD RESIDENTIAL

Integrated Pest Management Plan

Prepared for:

Evergreen Heights, LLC
1868 State Avenue NE
Olympia, WA 98506
(360) 754-7010

Date:

July 19, 2006

Prepared by:

Blake Wilkerson, E.I.T.

Reviewed by:

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HATTON GODAT PANTIER
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Tumwater, WA 98512
(360) 943-1599

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I. INTRODUCTION

Background

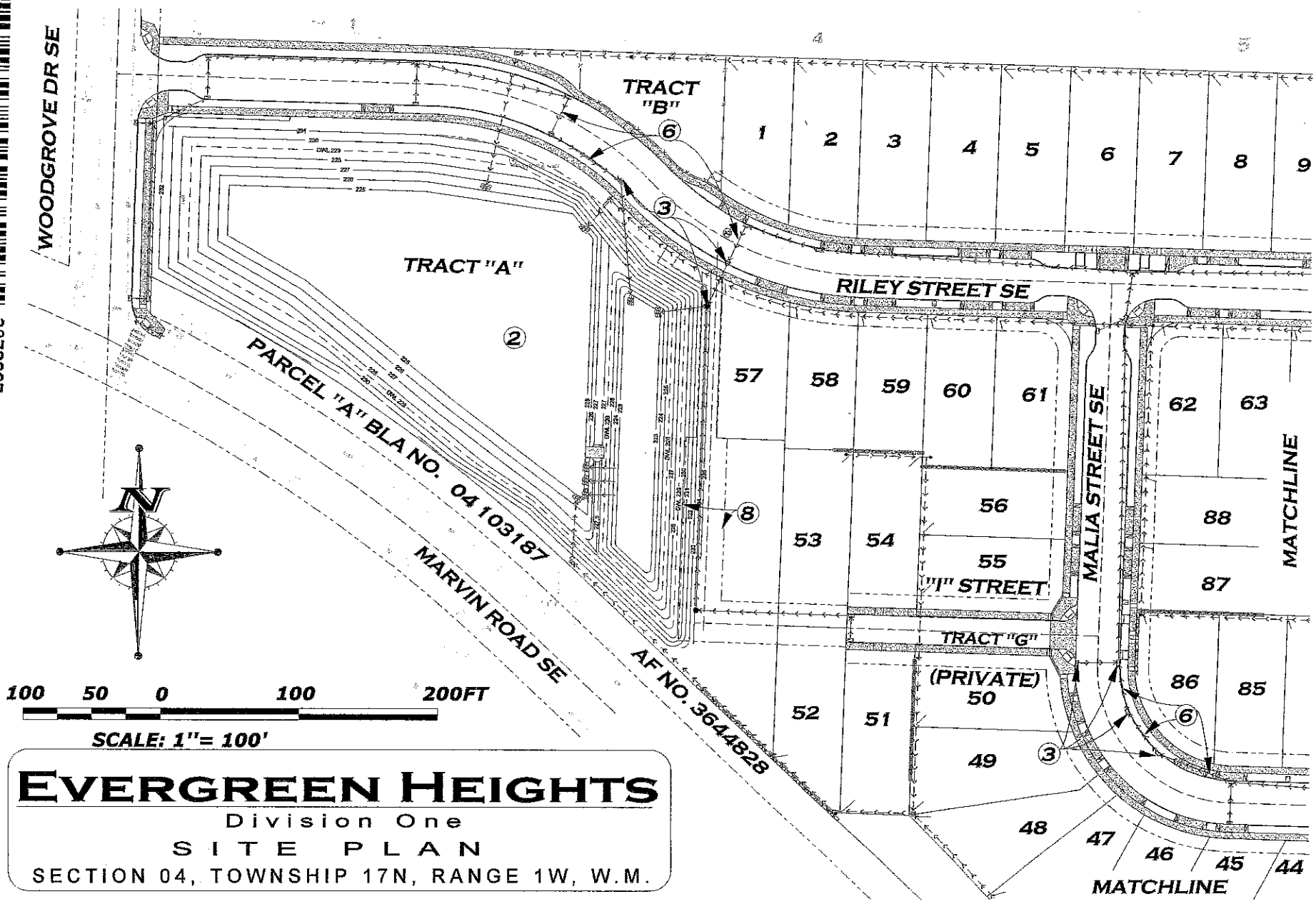
When urban development covers the land with buildings, houses, streets and parking lots, much of the native topsoil, duff, trees, shrubs and grass are replaced by homes, asphalt, concrete, and landscaping. Along with the development, people come bringing the potential for contamination to area lakes, streams, and groundwater supplies.

Much of Thurston County is classified as an "Aquifer Sensitive" area. That is to say that the groundwater resource, upon which the vast majority of Thurston County residents rely for water, is vulnerable to contamination from land activities. Many of the aquifers serving Thurston County are relatively shallow and largely unprotected by intervening impermeable layers of soil. Consequently, activities on the surface can have an impact on the water supply.

This Integrated Pest Management Plan (IPMP) seeks to address potential sources of contamination of both surface and ground waters. Moreover, it provides guidance to future homeowners of this project to identify actions and activities that can be mitigated to reduce the potential for contamination.

A. Responsibility

All property owners within this subdivision are members of the Homeowners Association (HA). The HA is responsible for many of the mitigation measures discussed herein. However, most of the responsibility for protection of our water resources lies with each individual property owner. This IPMP is attached to and a part of the Covenants, Conditions, and Restrictions for this subdivision and, as such, are recorded against the title for all properties within the subdivision. Enforcement of the recommendations of this IPMP lies with the HA, but responsibility rests with each property owner.



EVERGREEN HEIGHTS

Division One

SITE PLAN

SECTION 04, TOWNSHIP 17N, RANGE 1W, W.M.

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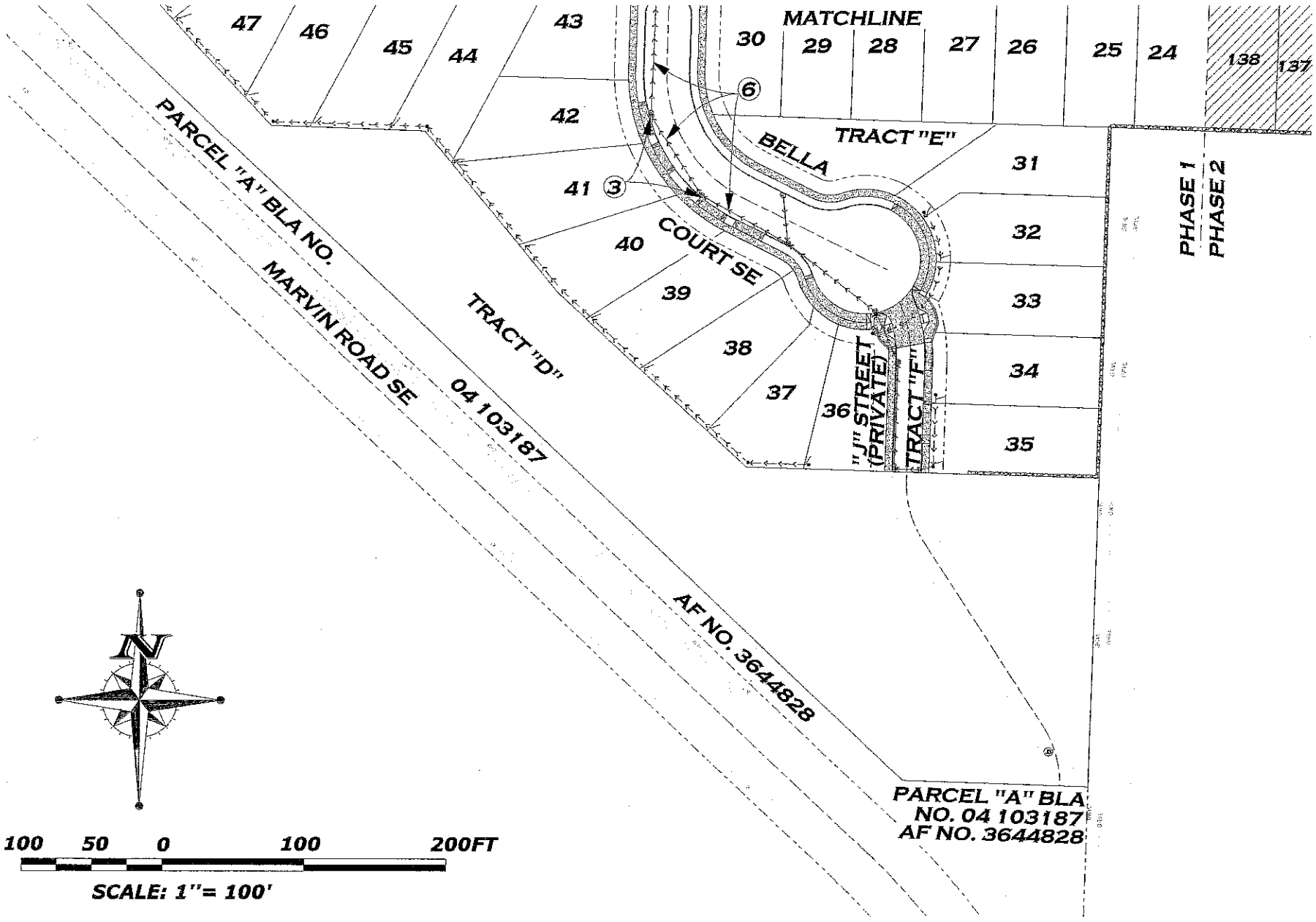

B. Project Description

This project proposes to build 176 single family detached houses in 2 divisions; 88 single family detached houses in Division One and 88 single family detached houses in Division Two. The drainage and erosion control plan for this subdivision is being submitted as part of this project.

The proposed Evergreen Heights site is located in the South half of the Northwest quarter of Section 25, Township 18 North, Range 1 West, Willamette Meridian, Thurston County. The project is east of the intersection of Marvin Road SE and Woodgrove Drive SE within the City of Lacey Urban Growth Boundary (see Site Plan above).

This project will include six internal public roadways and two private roadways to serve the individual lots. The lots will be served by City of Lacey water and STEP sewer. Stormwater from the developed areas of Evergreen Heights will be directed into infiltration ponds by catch basins and piping. Access to the drainage facility will be by an easement and 8.02 acres is designated open space.

Road improvements include the construction of an internal 42-foot wide paved public roadway sections with 50-foot radius cul-de-sacs and 20-foot private roadway sections. The roads will be crowned with a two percent (2%) slope to each side. The ponds have been sized according to the 1994 Thurston County Drainage Manual standards.

Drainage from adjacent property is not tributary to this project. The site is located in the Henderson Inlet and Nisqually River watersheds and zoned Low Density Residential. This zoning allows for 3-6 units per acre. Stormwater associated with this project will be directed via catch basins and piping to wet ponds for treatment then discharged to infiltration ponds to recharge the aquifer.

The western parcel consists mostly of old second growth Douglas-fir trees. The eastern parcel has mostly been cleared with some mowed grass and a few trees. This parcel was used for tree harvesting in the past, but is currently vacant. Three ridges north-south ridges onsite. One ridge is located in the western portion of the site, one that bisects the plat, and one in the eastern portion of the site. A fourth ridge is located just east of the project. The western portion of the western parcel drains to the west. The eastern portion of the western parcel drains to the north. The eastern parcel drains to the north. The elevation ranges from 230 in the northeast to 300 in the west of the western parcel and 250 in the north and 300 in the west of the eastern parcel.

The Thurston County Soils map lists most of the soils on the site as Alderwood gravelly sandy loam, Indianola loamy sand, McKenna gravelly silt loam, Nisqually loamy fine sand, and Spanaway gravelly sandy loam. The Alderwood soils are mapped throughout most of the site and north and east of the site. The Indianola soils are mapped in the northwestern corner of the western parcel. McKenna soils are mapped on the northern boundary of the eastern parcel. The Nisqually soils are mapped along the western boundary of the western parcel while the Spanaway soils are mapped in the southern corner of the western parcel.

A soils investigation by Pacific Rim Soil and Water indicated that surface soils were Indianola loamy sand with shallow till in the western parcel and Nisqually loamy fine sand with a shallow till layer over gravelly loamy sands in the eastern parcel.

The eleven soil logs were dug throughout the site. Four in the location of the west infiltration pond and five in the location of the east infiltration pond, one west of the east pond and the last east of the east pond. Two pits in the location of the east pond were dug to a depth greater than 16 feet revealing a loose well-drained soil layer below the glacial till. The recommended infiltration rate is 1.00 inches per hour for the west pond and 4.00 inches per hour for the east pond. The higher infiltration rate can be achieved if the bottom of the east pond is located within the well-drained soils below the till layer.

Slopes within the majority of the proposed site are at 3 to 15%. The steepest slope is 26% located in the southern portion of the site. The site lies between elevations 228 and 300. The project is located within an aquifer sensitive area as defined by the Northern Thurston County Ground Water Management Plan. There are no wetlands, seeps, springs, or creeks present on the property.

II. COMMON HAZARDS TO WATER RESOURCES

General

Many products commonly used in and around our homes are hazardous to both the environment and people. If used improperly, these products can end up in nearby surface or ground waters. This document provides alternatives, where possible, for many products and common practices that can reduce the potential for adverse impacts to those water resources. The term commonly used to describe environmentally conscientious practices is "Best Management Practices" (BMP). Many BMPs are incorporated into the design of your subdivision. BMPs described herein include "good housekeeping" practices that everyone can use.

It has been said that the average home today contains more chemicals than the average chemical lab of 100 years ago. When these chemicals are used industrially, they typically are subject to various health and safety standards. However, many of these same substances can be used freely and carelessly in our homes. Typical residential pollutant sources are classified as either "point" or "non-point" sources. A point source pollutant is one in which the contaminant can be traced to a specific location or locations. Non-point pollutants are more difficult to locate. Stormwater is a good example wherein tiny bits of contaminant collect over many acres of runoff, eventually reaching a single point. However, the source of the pollutant is anything but a "point" source.

A. Point sources of pollutants

1. Household products

   Many cleaning agents, solvents, polishes, etc. commonly used in the home are considered hazardous. These products may be toxic, corrosive, reactive, flammable, or carcinogenic. It is critical that these products are handled with care and are properly disposed. A list of common household hazardous materials is presented in Table 1.

   In addition, many hazardous household chemicals persist for long periods of time in the environment. Manufacturers may truthfully state that a product is "biodegradable"; most products are biodegradable, but what is important is the rate at which they are broken down and the products they are broken down into. The term "biodegradable" is somewhat misleading unless the product rapidly degrades into harmless substances.

It is important to note here that the term "biodegradable" currently has no legal definition in this state. Consequently, any product can use this term according to the manufacturer's own definition. This definition may not be at all similar to the consumer's perception.

2. Automotive care products

   Common automotive fluids such as oil, gas, antifreeze, degreasers, etc, are easily spread by small amounts of water and can cause significant damage to area ground and surface waters. Table 1 presents a list of these common items and Table 2 suggests alternatives or handling tips to reduce the potential for negative environmental impacts.

B. Non-point sources of pollutants

1. Yard care products

   Pesticides (including insecticides and herbicides) and fertilizers are commonly used by homeowners in the quest for bigger, healthier plants and greener lawns. These chemicals are often overused. Many times, homeowners apply too much chemical or apply the right amount but at the wrong time. (Such as before heavy rains or any time the plants will not be able to absorb the chemicals.) Excess chemicals are easily introduced into stormwater runoff and can cause algae blooms (fertilizers) or kill off aquatic organisms (pesticides) in surface waters. Large quantities of fertilizer can negatively impact nitrate levels in drinking water well supplies as well.

2. Stormwater runoff

   Stormwater runoff needs to be treated because it carries litter, oil, gasoline, fertilizers, pesticides, pet waste, sediments, and anything else that can float, dissolve or be swept along by moving water. Left untreated, polluted stormwater can reach nearby waterways where it can harm or kill aquatic life. Untreated stormwater can pollute groundwater in similar ways. Nationally, stormwater is recognized as a major threat to water quality. Remember to keep everything out of stormwater systems except the rainwater they are designed to collect.

III. REDUCING IMPACTS ON WATER RESOURCES

General

The following ideas should help you reduce the risks of stormwater and ground water contamination from many common products or practices. From a waste management standpoint, automobile maintenance is best done by professionals at facilities designed to handle, store, and dispose of waste products properly. Many of these facilities do an excellent job of dealing with waste oils, antifreezes, other fluids, batteries and tires. If you do repair or maintain your car at home, please consider the tips presented in this plan.

Fertilizing a lawn can be done in an environmentally sensitive manner. Also, rather than bringing out the sprayer whenever a pest infestation occurs in the garden, consider using other alternatives. Evaluate all factors that might affect the garden, including environmental effects, before chemicals are applied. Pesticides should only be used as a last resort. Some proven tactics that can be used to decrease the use of pesticides are discussed below.

A. Household operations

1. Read the label of products before you buy them. Toxic product labels carry many warnings. Either bypass such products entirely or buy them in small quantities. If you cannot use the entire product, try to give it away instead of disposing of it. Thurston County periodically facilitates product exchanges for leftover paints and other hazardous wastes. Call the Thurston County Health Department at 754-4111 for more information.

2. Buy detergents that contain little or no phosphorus. Phosphorus can cause algae blooms if washed into lakes or streams. Most detergents that are low or phosphate free are labeled as such.

3. Use no more than the manufacturer's suggested amount of any cleanser. (More isn't necessarily better.)

4. Products such as oven cleanser, floor wax, furniture polish, drain cleaners, and spot removers often contain chemicals that are toxic. Buy the least toxic product available, and use a non-toxic substitute if one can be found. Ovens, for example, can be cleaned by applying table salt to spills, then scrubbing with a solution of washing soda and water. Table 2 lists substitutes for many commonly used household products.

   If it is necessary to use a product that contains toxic chemicals, use the product only as directed. Do not combine products, as they may become more dangerous when mixed (example: mixing chlorine bleach and ammonia produces dangerous gases). Use eye-wear and rubber gloves as appropriate.

   Contact the Hazardous Substance Hotline at 1-800-633-7585 if you have any questions regarding disposal of a product or empty container. The County has both hazardous waste collection days and permanent facilities where residents can bring hazardous wastes. Call the Thurston County Health Department at 754-4111 for more information.

5. Many chemicals left over from some activities such as photography and auto repair are hazardous and should not be flushed down the sink or toilet. This is especially important if your home is hooked up to a septic system. Toxic chemicals can kill bacteria in the tank that treat sewage and can also pollute water supply wells.

6. Be sure that all toxic material containers are clearly marked.

7. Common (not automobile) household batteries are one of the largest sources of heavy metals (such as lead, nickel, cadmium, and mercury) found in landfills. Instead of throwing batteries away, dispose of them at a hazardous waste collection site.

B. Automotive care and maintenance

1. Cars should be serviced regularly. Leaky lines or valves should be replaced.

2. Dumping oil, degreasers, antifreeze, and other automotive liquids into a stream or storm drain violates city, county and state law. Do not dump them onto the ground because they will end up in stormwater runoff or in groundwater. Do not use oil to reduce dust levels on unpaved areas. Instead, recycle used oil and antifreeze. (Keep them in separate containers.) Call the Recycling Hotline at 1-800-RECYCLE or call the Thurston County Health Department for the location of the nearest recycling center. You may also call your local automotive service centers to see if they take oil for recycling. (Some also take used oil filters.)

3. Wrap empty oil and antifreeze containers in several layers of newspaper, tie securely, and place them in a covered trashcan. (Antifreeze tastes sweet but is poisonous to people, fish, pets, and wildlife.)

4. Sweep your driveway instead of hosing it down. Fluids and heavy metals associated with automobiles can build up on driveway surfaces. When cleaned with a garden hose, these contaminants can be washed into local surface or ground waters. Sweeping up sediment and disposing of it properly can reduce the impact on our water resources.

5. Wash vehicles on the lawn or in a location where soapsuds can be directed onto the lawn or another vegetated area. This will help to keep soapsuds from washing into the storm drain system or local surface water. (Your stormwater pond is not designed to cleanse soapy water from washed cars.)

6. Small spills of oil or other fluids can be absorbed by using materials such as kitty litter or sawdust. Wrap the used kitty litter and any contaminated soil in a plastic bag and then place it in the garbage. If a spill reaches surface water, you must notify the nearest regional office of the Department of Ecology immediately! Southwest Regional Office number: 407-6300. There are fines for failure to notify the appropriate agency when a spill occurs.

7. De-icing chemicals, usually a form of salt, can harm concrete less than three years in age, burn vegetation, and are corrosive to cars and other metal objects. De-icing chemicals and their additives can also be toxic. (Cyanide is formed from the breakdown of a common anti-caking agent used in de-icing chemicals.)

   Urea salts are an alternative to other types of salt de-icers, but great care must be used

in applying them. These salts contain large quantities of nitrogen, which can severely burn plants and encourage algae growth in lakes if over-applied. The use of these chemicals should be minimized or avoided. Instead, shovel walks clear and apply a dusting of sand to improve footing.

C. Landscape design and maintenance

1. One of the best methods of reducing impacts to water resources is by using landscaping materials that do not require extensive care. Native plants have adapted themselves to our region, particularly their root structure and water needs. These plants have also built tolerances over the centuries to local pests and disease. By using native plants in the landscape, we are less likely to need fertilizers, herbicides, and pesticides. Native plants are also more tolerant of drought conditions and typically require less water.

   Native plants come in all shapes and sizes so there is probably one that will fit into your landscape plans. There are deciduous and evergreen varieties of trees, shrubs, and groundcovers. Following is a brief list of just some of the more common varieties of native plants. Contact your local garden supply store for more ideas on use of native plants in your garden.

   Evergreen Plants:

   Trees - western red cedar, douglas fir, western hemlock

   Shrubs – rhododendron, evergreen huckleberry, tall oregon grape

   Ferns – lady fern, sword fern, deer fern

   Groundcover – manzanita, kinnikinnik, common juniper

   Deciduous Plants:

   Trees – big leaf maple, pacific dogwood, bitter cherry

   Shrubs – western azalea, nootka rose, red huckleberry

2. The lawn is a major component of the landscape. Selection of a grass well suited to our area is an important step in reducing the impact to water resources. The *National Turfgrass Evaluation* studies various types of grasses for their resistance to insects, drought tolerance, seasonal appearance, density, the strength of their sod, and leaf texture. Based upon these characteristics, specific grass types are recommended for specific areas throughout the country. Fescue and perennial rye grass are recommended for this area.

3. Use of native plants will greatly reduce the need for fertilizer. Use of mulch may eliminate the need altogether. Mulch acts as a physical barrier to weeds and is an excellent alternative to herbicides. Mulch can be compost, bark or wood chips, or leaves and grass clippings. It should be spread around the base of plants and within flowerbeds. The recommended depth of mulch varies between plant varieties but should typically be two to four inches.

4. Proper use of fertilizers yields better plants and reduces negative impacts to our water resources. Fertilizers typically contain high levels of nitrogen and phosphorus, both of which can damage ground and surface waters. The following are a few tips to optimize the use of fertilizers in your garden.

    - The first step in fixing a problem is to know what that problem is. Therefore, before applying any fertilizer, test your soil. Existing soil conditions, particularly nitrogen, phosphorus, potassium, and pH levels, can be easily determined by using kits available at garden stores or from the WSU Cooperative Extension. Applying fertilizer before knowing the components of the soil could lead to over loading certain areas that may impact our water resources.

    - Proper fertilization is important in maintaining a healthy lawn that resists environmental stress, including competition with weeds and moss and drought stress. Because Spring and Fall are periods of optimal growth, these are the most important times to fertilize. The use of slow release fertilizers is recommended. Natural organic and synthetic organic fertilizers (such as IBDU, sulfur or polymer coated urea, or methylene urea) behave similarly once they are applied to the soil. Although some people feel that natural organic fertilizers provide added benefits to soil health, research has not shown this to be true as a general rule. The natural organic nutrient sources in these products are often supplemented with synthetic plant nutrients anyway. The most important thing to remember is to use a slow release fertilizer. Extensive research around the country has shown that when these materials are applied properly there is very little risk of surface or groundwater contamination, and they provide an even feeding, which is better for your lawn. Remember to sweep granules off pavement to prevent washing into storm drains.

    - Turf fertilization practices for the entire year are built around what is done in the fall. Apply fertilizer in early to mid September to promote regrowth from summer stress. Another application in November is important in keeping the grass competitive with moss through the winter. If you fertilize in November, you probably don't need an early Spring fertilization. If not, your lawn will probably be ready for fertilizer in the Spring. Again, use a slow release fertilizer so that you don't promote a big flush of growth. Fertilize again in early June so that the grass has the nutrients it needs to grow at a moderate rate through the summer stress period.

    - If you want to maintain a lawn of moderate quality, a minimum of three fertilizations through the year is needed. Additional light fertilizations can be added if you are looking for a higher quality lawn. In general, you should apply no more than one pound of actual fertilizer nitrogen per 1000 square feet at a time, although this rate can be increased to 1.5 pounds in the fall when using slow release products. (If the fertilizer analysis is 24-4-12, for example, it contains 24% nitrogen.) To apply 1 pound of N per 1000 square feet, you need to apply 4.2 pounds of fertilizer (1 ÷ 0.24 = 4.2). Return clippings (grasscycle) when you mow to recycle nutrients into the lawn.

- Water plants and lawns before fertilizing. Water enough to dampen the ground thoroughly, but not enough to cause surface runoff. Dampening the soil prevents fertilizer from being washed from the surface of dry soil in the first rain or watering after application.

- Use mulching mowers to return grass clippings directly to the lawn. Essential nutrients from the decomposed grass can then be retained in the soil thereby reducing the need for fertilizer.

- Many soils can benefit from the use of organic fertilizers such as compost or peat. These substances add nutrients to soil and increase the porosity of the soil as well as its ability to hold water.

5. Proper watering can help build strong plants resistant to drought, pests, and disease. Water infrequently but enough to dampen soil down to 10-inches. Be careful not to water so rapidly that water runs off the surface. Infrequent watering promotes shallow root depths making the plants susceptible to damage during periods of drought. Unhealthy plants are easy targets for pests and disease. Also, water during early morning hours rather than during the day or at night. Irrigating during the day loses a sizable amount of water to the atmosphere through evaporation. Watering at night can lead to mold and fungi growth on plants left damp over a cool night.

D. Pest control

1. Use natural predators and pathogens. Because chemical sprays generally kill beneficial insects along with the target pest, it may be necessary to introduce natural predators back into the garden. Ladybugs, lacewings, predatory wasps, and nematodes are all commercially available. Garter snakes and toads are also predators and should not be eliminated from the garden.

   Some bacteria, viruses, and insect parasites are specific to pests and will not harm other insects or animals. A commonly used bacterium in the Puget Sound area is *Bacillus thuringiensis* (Bt), which is intended to control infestations of tent caterpillars. Products containing Bt are available at your nursery.

2. Many times a change of habitat can control pest infestations. Removal of old tires can cut down on the mosquito population by removing a convenient water-filled location for them to breed. Crop rotation, even in a small garden, can reduce the number of pest infestations. Removing last year's leaves from under rose bushes can cut down on the incidence of mildew and blackspot, as these fungi overwinter in dead leaves.

3. Crops that can overwinter, such as leeks and carrots, should be planted in the fall. This gives them time to become established before pests arrive in the spring.

4. Many eggs, larvae, cocoons, and adult insects can be removed by hand. Be sure that the insect is properly identified prior to removing it so beneficial insects are not destroyed in error. Drowning insects in plain water or spraying them with soapy water are alternatives to squashing them.

5. Plants native to this area are often more resistant to pests and climate than are introduced plants. Many plant cultivars have been developed that are resistant to

diseases such as verticilium wilt and peach leaf curl. Grass seed mixes are also available for lawns that require less watering, mowing, and chemical use.

6. Plants, such as hostas, that require some shade are more susceptible to pests when they are grown in the sun. Plants that are not properly fertilized or watered are less vigorous in growth and tend to attract pests. Plants that prefer an acid soil, such as azaleas, will perform better and be less susceptible to pests when they are grown in soil with the proper pH.

E. Pesticide management

1. Know what pest you are spraying for. Use the pesticide according to the manufacturer's instructions and buy only the quantity needed. Many pesticides have a limited shelf life and may be useless or degrade into even more toxic compounds if kept on the shelf.

2. Do not apply more than the specified amount. Overuse can be dangerous to your health as well as wildlife and the environment. If more than one chemical can be used to control the pest, choose the least toxic. The word "Caution" on the label means that the chemical is less toxic than one that is labeled "Warning".

3. Do not spray on windy days, in the morning of what will be a very hot day, or when rain is likely to occur. Herbicides can drift and injure valuable ornamental plants in either yours or your neighbor's back yard. Do not water heavily after application. Plants should be lightly watered BEFORE application to prevent burning the foliage, and to help evenly spread the chemical.

4. Never apply pesticides near streams, ponds, or wetlands (exception: approved applications for aquatic weeds). Do not apply them to bare eroded ground (exception: use of low toxicity herbicides such as Round-up to allow growth of desired planting in small areas). Many pesticides bind to soil particles and can be easily carried into a stream or storm drain.

5. Pesticides should be stored well away from living areas. Ideally, the storage area should have a cement floor and be insulated from temperature extremes. Always keep pesticides in their original containers with labels in tact. Labels often corrode and become illegible in this climate and may have to be taped onto the container.

6. Federal law requires all pesticides to be labeled with an appropriate disposal method. Leftovers should never be dumped anywhere, including a landfill. Take unwanted pesticides to the County's "Hazardous Waste Collection Days" or Hazo House at the landfill. Call the Thurston County Waste Line at 1-800-624-1234, ext. 4348 for more information.

7. Empty containers should be triple-rinsed and the rinse water used as spray. Once containers are triple-rinsed, they are not considered hazardous waste and may be disposed of in most landfills. However, call your local landfill before putting the container in the garbage.

8. If a pesticide is spilled onto pavement, it can be absorbed using kitty litter or sawdust. The contaminated absorbent should be bagged and labeled and taken to Hazo House.

9. If a pesticide is spilled onto dirt, dig up the dirt, place it in a plastic bag and take it to Hazo House.

10. Many pest control companies and licensed applicators have access to pesticides that are more toxic than those available to the consumer. Check with the company before they spray indoors or outdoors to find out what spray they will be using and what precautions, if any, are necessary after the operator leaves.

F. Stormwater control

Your neighborhood has a stormwater control system that includes two wet ponds to treat stormwater runoff and two retention ponds to infiltrate all runoff into the ground. All facilities require certain types of maintenance to assure that they function as intended. A Stormwater Maintenance Agreement has been recorded with the title on all properties within your subdivision, binding the Homeowners Association to implementing the specified maintenance. Copies of the maintenance agreement is included in the covenants filed with the plat and should be included as part of your title policy on your lot.

Stormwater runoff, water that leaves your property during rainy weather, may be the largest source of pollutants to nearby water resources. As this stormwater moves over your property it picks up soil, fertilizers, pesticides, oils and grease, and a multitude of other pollutants from the driveway and roadway areas.

There are stormwater control features designed into this development to help reduce the affects of these pollutants. The infiltration ponds will store stormwater runoff from the roadways, lawns, and open spaces up to and including the 100-year 24-hour event. Proposed stormwater facilities will treat the runoff before discharging to ground as required by the Drainage Manual. While the runoff sits in the swale larger sized particles and attached pollutants are removed or settled out. In addition, the healthy plant life in the treatment ponds will remove a portion of the pollutants through biological processes. Water in the infiltration ponds percolates through the soil where more particles and pollutants are removed. Eventually, the water reaches the aquifer below the pond. Storm runoff from rooftops has few pollutants associated with it and will discharge to drywells on individual lots.

Downstream impacts are not anticipated to any facilities. West Pond will be located on the western boundary of the proposed development while the East Pond will be located in the central portion of the site. All stormwater runoff from the 100-eyar event must be infiltrated and the ponds must drain within 48 hours per Thurston County Drainage and Erosion Control Manual. The design infiltration rate for the west pond is 1.00 inches per hour while the east pond infiltration rate is 4.00 inches per hour. There is a restrictive till soil layer below the west pond, thus reducing the infiltration rate.

The wet ponds will be landscaped with water plants at and above the Dead Water Level. Water and drought tolerant hydroseed will be used to landscape the infiltration ponds. The landscaping in the open spaces will be protected as much as possible during construction. After construction, all disturbed areas will be landscaped with native plants.

G. Erosion control

Prior to commencing any grading or filling upon the site, all erosion control measures, including installation of a stabilized construction entrance, shall be installed in accordance with this plan and the details shown on the drawings. More specifically, the following construction sequence shall be observed:

1. Construction on this site shall be conducted substantially in accordance with the construction sequence described on the plans and in this erosion control plan. Deviations from this sequence shall be submitted to the project engineer and permitting jurisdiction. Deviations must be approved prior to any site disturbing activity not contained within these plans.

2. For each phase of the development of this site, the following general sequence shall be observed:

   a. Install perimeter filter fabric fence as shown.

   b. Install inlet protection for existing inlets in the vicinity of areas to be disturbed.

   c. Call for inspection by the project engineer.

   d. Construct temporary sedimentation trap(s) and outlet(s).

   e. Perform grading directing site runoff towards the sediment trap prior to discharge from the site.

   f. Install temporary piping, as required, to direct runoff towards the sediment trap.

3. Once the site is disturbed, continue operations diligently toward completion.

4. Monitor all erosion control facilities, and repair, modify, or enhance as directed or as required.

Sediment ponds shall be constructed at the beginning of each phase of construction to perform as temporary sediment traps. Protection of offsite properties against sedimentation is an absolute necessity. Additional measures may be required to provide full protection of downstream areas. Additional measures may include, but are not limited to, use of sediment bags in existing catch basins, increased filters within sediment ponds such as hay bales, introduction of coagulants to the sediment ponds, and other such measures. Continuous monitoring of the erosion control systems, depending upon site and weather conditions, shall be ongoing throughout project development.

Vehicle tracking of mud off-site shall be avoided. Installation of a stabilized construction entrance shall be installed at the start of construction at the exit point to be used by equipment. This entrance is a minimum requirement and may be supplemented if tracking of mud onto public rights-of-way becomes excessive. Washing down roads daily to remove excessive mud may be required. Wash water shall be directed to the temporary sediment traps installed on-site and shall not be allowed to discharge downstream without treatment.

Disturbed areas on and off-site shall be hydroseeded or otherwise landscaped or stabilized upon project completion to provide permanent erosion control where required. Erosion control measures shall remain in place until final site stabilization is imminent (e.g., paving scheduled with a favorable weather forecast).

Existing slopes in the area of the stormwater ponds are at a maximum of 4%. The temporary sediment ponds will be excavated into the native soil. No embankment is required.

The Project Engineer, or someone under his direct supervision, and the permit authority shall inspect the temporary erosion control facilities (construction entrance, sediment traps, and erosion control barriers) prior to commencement of construction. During and following construction, the Engineer shall inspect the construction of the permanent stormwater facilities and report to the permit authority his findings as to performance and operability of the completed system.

A centralized equipment marshalling area and containment area is to be provided on-site for equipment maintenance and storage of any equipment service materials. An area on-site will be selected as a temporary debris and stockpile area for materials that will be removed from the site. Erosion control containment and berming of this area will be provided for pollutant containment and sheeting provided for coverage or lining if applicable.

IV. RELATED DOCUMENTS

Resources

A. Contact Numbers

Lacey Water Resources	491-5600
Olympia Water Resources	753-8768
Tumwater Public Works	754-4140
Yelm Public Works	458-3244
Thurston County Storm & Surface Water Management	754-4681
WSU Cooperative Extension	786-5445

Developer Information:

Evergreen Heights, LLC
1868 State Avenue NE
Olympia, WA 98506
(360) 754-7010

Engineer's Information:

HATTON GODAT PANTIER
1840 Barnes Blvd, SW
Tumwater, WA 98512
(360) 943-1599

B. Reference material

Puget Sound Water Quality Authority, Managing Nonpoint Pollution - an Action Plan for Puget Sound Watersheds, 88-31, June 1989.

Washington State Dept. of Ecology, Water Quality Guide - Recommended Pollution Control practices for Homeowners and Small Farm Operators 87-30, revised June 1991.

Washington State Dept. of Ecology, Hazardous Waste Pesticides, 89-41, August 1989.

Gardening with Native Plants of the Pacific Northwest by Arthur Kruckeberg

C. Quick Reference List of Toxic Products and Alternative Products

Table 1 – Hazardous Household Substances
Table 2 - Non-Toxic or Less Toxic Alternatives to Toxic Products