



Eastmont Metro Parks & Recreation
255 N. Georgia Ave (map)
East Wenatchee, WA 98802
Phone: (509) 884-8015
Fax: (509) 884-4637

EASTMONT METROPOLITAN PARK DISTRICT

Stormwater Runoff Management Plan

Position 1 Commissioner Mike Vail
Position 2 Commissioner Jim Jahr Jr.
Position 3 Commissioner Fred O. Walk
Position 4 Commissioner Karen Patton
Position 5 Commissioner Bill Williams

Approved November 19, 2007

Director of Parks
David Schwab
255 North Georgia Avenue
East Wenatchee, WA 98802
Office: (509) 884-8015

EASTMONT METROPOLITAN PARK DISTRICT

STORMWATER MANAGEMENT PLAN
TABLE OF CONTENTS

	Page
Introduction	
Organization and Facilities.....	1
Map of Eastmont Community Park.....	2
Map of Tedford Park.....	3
Map of Kenroy Park.....	4
Map of Pangborn Memorial Park.....	5
Area Physical Characteristics and Climate.....	6
Management Plan	
1. Public Education Outreach.....	9
2. Public Participation / Involvement.....	10
3. Illicit Discharge Detection and Elimination.....	10
4. Spill Response Plan.....	11
5. Construction Site Runoff Control.....	11
6. Post-Construction Runoff Control.....	12
7. Pollution prevention / Good Housekeeping.....	12
8. Tracking and Record Keeping.....	15

STORMWATER PLAN INTRODUCTION

The Eastmont Metropolitan Park District (EMPD) is a municipal corporation authorized under House Bill 1303 with statutory authority under Chapter 35.61 RCW. The EMPD was established in May 2004 by popular vote. The EMPD is governed by five elected commissioners. The facilities are operated by the administrative, recreation and maintenance staff. Park Staff provide information to the Park Commissioners who in turn set policy, approve budgets, make operational and capital development decisions.

5 Commissioners

Park Director

Office Manager
Office Assistant

Recreation Supervisor
Recreation Leaders

Maint. Supervisor
Maint. Staff

The EMPD services the Greater East Wenatchee Area with approximately 26,000 residents. The boundaries of the EMPD are the same as the Eastmont School District 206.

The purpose of the EMPD is to provide recreational opportunities to the constituents living within the boundaries of the district and other visitors who choose to recreate at facilities operated and maintained by the EMPD.

The EMPD owns four parks, leases one park area from the Eastmont School District 206 and maintains the portion of the Apple Capital Loop Trail located in Douglas County.

Eastmont Community Park	25 acres
Tedford Park	14 acres
Kenroy Park	5 acres
Pangborn Memorial	½ acre
9 th Street Park	8 acres
Apple Capital Loop Trail	7 miles

MAP OF EASTMONT COMMUNITY PARK
HERE AFTER WE HAVE THE PARK SURVEYED
Page 2

MAP OF TEDFORD PARK
HERE AFTER WE HAVE THE PARK SURVEYED
Page 3

MAP OF KENROY PARK
HERE AFTER WE HAVE THE PARK SURVEYED
Page 4

MAP OF PANGBORN MEMORIAL PARK
HERE AFTER WE HAVE THE PARK SURVEYED
Page 5

EARTH

The Wenatchee Valley is located within the western edge of the North Rocky Mountain System. The mountains were in turn, subject to the action of periodic glacial intrusions – the most recent being the Pleistocene glacial period more than 15,000 years ago. The Pleistocene glacial intrusion gradually carved and flooded Puget Sound, the lowland areas, and other valleys alongside the Cascade foothills. The glacial intrusion also created a series of glacier dams that subsequently breached and flooded the eastern portions of the State creating the Columbia River drainage channels.

The Wenatchee Valley is composed of a series of alluvial benches filled in by the Columbia River. The benches are in turn bisected by a number of tributary drainage corridors created by the Wenatchee River, Number 1 and 2 Canyon Springs, Dry Gulch, Rainey Spring and Sand Canyon, among others. Over time, the river and tributary drainage systems created dramatic hillsides and overlooks, particularly of the Columbia River basin.

Topography ranges from 600 feet in the lowest portion of the valley to about 8,000 feet above sea level in the foothills of the Cascade Mountains. The plateaus and foothills overlooking the Wenatchee Valley drop off abruptly in slopes ranging from 40 to 75 percent.

Eastern Washington soils were created by a combination of elements including the nature of the parent mineral or rock type, climate, and the characteristics of the local terrain. Soils in Eastern Washington have very low organic matter in these arid portions of the State.

WATER

The Wenatchee Valley is drained by two major rivers and a number of minor streams.

Columbia River – drains the northwest region west of the Rocky Mountains merging with the Wenatchee and Snake Rivers to flow into the Pacific Ocean between Oregon and Washington state boundaries.

Wenatchee River – drains the eastern side of the Cascade Mountains merging with the Columbia River in Wenatchee.

Rainey Springs, Sand Canyon and Canyon A – drain into the Columbia River through East Wenatchee and Douglas County. Generally, these streams remain above ground through the developed urban area though the shorelines have been improved in places.

WETLANDS

Small wet spots, bogs, peat and muck deposits of from 1 to 3 acres are scattered throughout the Valley, particularly within river eddies located at the confluence of the Wenatchee and Columbia Rivers and along the east shoreline of Cox's, Porter's and Rock Island Ponds.

The Wenatchee and Columbia Rivers confluence is protected by Confluence State Park and Walla Walla Point Park by the Washington State Park & Recreation Commission and Chelan County PUD respectively.

Porter's Pond is included with a WSDOT property holding that is leased to the Douglas County and managed as a natural area.

Cox's Pond is also adjacent and may be included within WSDOT of Chelan County PUD property holdings.

FLOODPLAINS

Floodplains and flooded areas include alluvial soils – which are former river and stream beds, tidal pools and retention pools, that fill during heavy rainfall, sometimes infrequently, often for extended periods during rainy seasons. There are numerous, sizable flood prone areas within the Wenatchee Valley including:

- The lowlands adjacent to the Columbia and Wenatchee Rivers
- The lowlands within Number 1 and 2 Canyons, Dry Gulch, Pitcher Creek, Rainey Springs, Sand Canyon and Canyon A

The complete shoreline of the Valley has been subjected to flooding during major spring thaws and heavy storms prior to the development of the hydroelectric dams on the Columbia River, and a series of dikes along the Wenatchee River. Some segments along the river shorelines may be potentially affected by the floodwaters possible during the worst storms in an average 100 year period. In such instances, due to the dams and dikes, floodwater depths would be shallow and not very extensive.

LAKES

Lakes are water bodies greater than 20 acres in size and more than 6 feet in depth. There are some ponds of varying sizes located in the Wenatchee Valley particularly the shorelines and waterfronts, have filled valuable wetland habitat areas.

The greatest risk to freshwater zones are contaminants that may enter the storm water runoff from agriculture, septic failures, and other urban land uses. Water quality risks are also dramatically increased were land development or timber clearing activities increase erosion and siltation and/or clear vegetation within the riparian buffer along the freshwater corridor.

Development activities most adversely affect the quality of freshwater habitat by removing vegetation, increasing silt, organic debris, and other stormwater contaminants that enter the natural drainage system. Generally, studies have determined that the hydrological balance of a stream begins to decline when 12 percent of the watershed becomes impervious.

LAND USE IMPLICATIONS

Freshwater and terrestrial habitats contribute to the overall biological diversity of the region and provide a number of additional environment functions and values of interest to valley residents. Many species depend on the constant interaction of all habitat systems for food, cover, nesting and other survival requirements.

Some plant, fish, and wildlife habitat will irretrievably be lost as the Valley population continues to grow. These impacts can be minimized, however, by sensitive land use patterns, innovative design concepts and performance oriented development standards that:

Replant – native vegetation along the shoreline and along drainage corridors

Remove – artificial shoreline constructions and freshwater impoundment or diversions

Control – storm water runoff content and quality that enters the natural drainage systems and within the watershed in natural impoundment on-site where pollutants can be separated from natural drainage.

Cultivate – berry or fruit plants that support and retain native species, and

Cluster – roadways and other improvements to preserve natural shorelines and contiguous open spaces and common lands.

Portions of the most critical remaining habitat, like mature shoreline trees, snags and downed logs, if retained, can sometimes allow wildlife species to coexist in urban areas.

The most effective preservation strategies, however, separate the most intense urban activities from the most sensitive habitats by creating woodland conservancies, open space corridors, and other protected areas.

1. PUBLIC EDUCATION OUTREACH

The Eastmont Metropolitan Park District (EMPD) will provide public education outreach by using the local media, the EMPD website, distributing information at events at EMPD parks, holding public meetings, and dispensing information at the EMPD office to visitors.

The EMPD will use brochures from Countywide Solid Waste Programs of Douglas County and other sources that inform the public on the hazards of pollutants and how to properly dispose of those hazards. The EMPD will distribute these brochures during events at the park, to visitors walking their dogs in the park and other community events held at the park. The EMPD will also work with the primary permittees to assist in their education outreach.

Use the media to inform the public whenever the EMPD will be holding public meetings to develop and update as necessary the EMPD's Stormwater Management Plan (SWMP). Have a link from the EMPD website to the City of East Wenatchee, Douglas County, and the Countywide Solid Waste Program of Douglas County.

The EMPD Storm Water Policy will be placed on the EMPD website for public viewing.

Permanently mark all storm drains on EMPD property with the message "DUMP NO WASTE" and indicate the point of discharge as a river, lake, bay, or ground water.

Dog Waste Stations will be placed through out the parks at locations easily seen by park visitors with dogs. These Dog Waste Stations will have approved bags for the purpose of recovering and disposal of dog waste. Section 5 of the park rules requires pet owners to pick up after their pet.

In the park office there will be brochures available to the public that address:

- How to recycle anti freeze
- How to recycle waste oil
- How to recycle pesticide container
- How to dispose of animal waste
- Problems with illegal dumping
- Don't be a litterbug
- Cover loads
- Household hazardous waste collection
- How to recycle scrap tires
- How to recycle vehicle batteries
- How to recycle appliances
- How to recycle nickel-cadmium batteries
- How storm water affects local water bodies.
- Proper use and application of pesticides and fertilizers.
- Benefits of using well-adapted vegetation.
- Alternative equipment washing practices including cars and trucks that minimize pollutants in storm water.

2. PUBLIC PARTICIPATION / INVOLVEMENT

The EMPD will provide opportunities for citizens to participate in program development and implementation, including public hearings and or encouraging citizens to contribute to the EMPD storm water management policies and procedures.

No later than 180 days before the expiration of the EMPD permit, the EMPD will:

Publish a public notice in the local newspaper and solicit public review of the EMPD SWMP.

Make the latest updated version of the EMPD Storm Water Management Plan available to the public.

The current permit expires February 15, 2012.

3. ILLICIT DISCHARGE DETECTION AND ELIMINATION

The EMPD's plan to detect and eliminate illicit discharges to stormwater run off system is to:

Annually check with primary permittees to make sure all EMPD policies and plans concerning illicit discharge and detection and elimination are still in compliance with the primary permittee's plan.

Hazards associated with:

- Irrigation system run off
- Swimming pool discharges
- Street and sidewalk wash water
- Other discharges as identified

Develop a storm sewer map of all EMPD facilities showing all known storm outfalls and the name of the receiving waters.

Conduct field inspections and visually inspect for illicit discharges at all known outfalls that discharge to surface waters. The inspections will occur after a 2 year 2 hour storm event as identified in the Eastern Washington Stormwater Manual. This is approximately ½ "of rainfall within two hours.

Develop and implement a spill response plan that includes coordination with a qualified spill responder.

Provide staff training on proper best management practices for preventing spills and illicit discharges to all relevant staff.

4. Spill Response Plan

The definition of a spill is any release of material that threatens human health or the environment.

As a rule of thumb you should report a spill when any of the following occur:

- Any person needs, or seeks medical attention as a result of contact with a hazardous material.
- The hazardous material can enter surface water or ground water, directly or indirectly or through a ditch, drain or crack.
- Plants or animals (includes fish) are ill, injured, stressed, or die.
- The release goes into the air so that it can harm people, animals or plants.
- You cannot quickly control, contain, and completely clean up the spill to soil with a bucket or shovel.

Under the state dangerous waste rule, you must immediately report all hazardous material spills to:

1. Call Douglas County Fire District #2 - **509 8846671**
2. The Department of Ecology Regional Office for this area is in Yakima. The phone number to call is **509 575 2490**.

If the spill released anything into the air, you must call the Department of Ecology Regional Office for this area is in Yakima. The phone number to call is **509 575 2490**.

If the spill is to the water you must call:

1. Washington State Division of Emergency Management **800 258 5990**
2. National Response Center/US Coast Guard **800 424 8802**

5. CONSTRUCTION SITE RUNOFF CONTROL

For EMPD projects that disturb one acre or more, apply for a Construction Stormwater General Permit if there is a potential to discharge to surface water (or a storm drain). See Construction Stormwater General Permit on Ecology's Stormwater web page.

<http://www.ecy.wa.gov/programs/wq/stormwater/construction/>.

This website will also help with longitude and latitude information which is required for the permit. For any questions concerning the permit application call Joyce Smith at **360 407 6858** for assistance.

During construction activities on EMPD property, all contractors will be required to comply with the best management practices to control erosion and sediment issues for one or more acres of land and could include silt fences and temporary stormwater detention ponds. These best management practices will be enforced by the EMPD's construction project manager. The EMPD will refer to Chapter 7.23 of the Stormwater Management Manual of Eastern Washington.

There are 19 methods discussed in the Eastern Washington Stormwater Management Manual for controlling run off of which the EMPD staff would use 8 of these without having engineering support. These eight methods are interceptor dike and swale, grass lined channels, triangular silt dike, outlet protection, straw bale barrier, gravel filter berm and silt fence. These 8 will be subjects for training for applicable park staff. After initial introduction to the options for run off treatment staff will have biannual reviews during maintenance staff safety meetings for BMP's.

Annually check with primary permittees to make sure all EMPD policies and plans concerning construction site storm water runoff control are still in compliance with the primary permittees plan.

Include construction phase storm water pollution prevention measures in all public works contracts. The EMPD's project manager will be responsible for contractor compliance.

Train relevant EMPD staff in sediment control and best management practices and requirements.

Contact primary permittees and DOE to see if they are interested in inspecting during active grading and/or the construction period.

6. POST-CONSTRUCTION RUNOFF CONTROL

The EMPD will require post-construction runoff controls for new development or redevelopment areas. These controls will include applicable controls could include preventative actions such as protecting sensitive areas like wetlands, use of structural best practice methods such as porous pavement and or grass swales. These controls could include preventative actions such as protecting sensitive areas like wetlands, use of structural best practice methods such as porous pavement and or grass swales. Contractors will be required to perform best management practices approved by DOE and the primary permittee.

Annually check with primary permittees to make sure all EMPD policies and plans concerning post construction storm water management for new development and redevelopment are still in compliance with the primary permittees plan.

7. POLLUTION PREVENTATION / GOOD HOUSEKEEPING

The EMPD's plan is to prevent and reduce pollutant runoff from EMPD operations. The plan will include EMPD staff training on pollution prevention measures and techniques including but not limited to application of pesticides, ice melting products, spills from gasoline, motor oil, hydraulic oil, anti freeze and the frequent cleaning of catch basins. Whenever possible the EMPD will team with the City and County for training of staff.

Actions to prevent and reduce pollutant runoff include but are not limited to:

Perform quarterly inspections on and remove debris, waste and clean all

- Sewer pipes
- Catch basins
- Open channels
- Culverts
- Structural control installations
- Structural treatment installations
- Flow control facilities

Inspect after every excessive rain storm or after excessive amounts of snow runoff all

- Sewer pipes
- Catch basins
- Open channels
- Culverts
- Structural control installations
- Structural treatment installations
- Flow control facilities

Parking lot and sidewalk snow will be stockpiled at least 100ft from any storm water runoff drain, channel or installation. As snow melts the remaining snow shall be inspected for debris and waste. Dispose of debris and waste in proper containers.

All vehicle maintenance should be scheduled to be performed inside the park equipment shop. Any spill of motor oil, brake fluid, hydraulic oil, differential lube and other types of contaminants will be removed with absorbent pads or rags and disposed of in the proper container.

Any spill of motor oil, brake fluid, hydraulic oil, differential lube and other types of contaminants on graveled areas and lawns require the removal of the contaminated soil or turf and returned to the park shop for mediation or disposal.

Staff performing daily litter pick up in and around parking lots will report to their supervisor all substantial fluid leaks that occur on paved parking lots. The fluid leaks will be cleaned up using a product similar or equal to "Oil Dry". After area has been cleaned up place the product in the waste container located at the park shop provide by the Countywide Solid Waste Programs and turn it in the first Friday of October during the small generators turn in program.

When cleaning or washing the exterior of buildings use as little water as possible to insure minimizing the amount of potential runoff.

Water generated from washing the exterior of a building if not captured by flower planters or turf should be captured to insure solids like paint chips and other solids do not make it to

The storm water collection system. All paint chips and other solids should be picked up and placed in the proper disposal container. Paint that contains lead is hazardous waste. There are currently no EMPD buildings identified with lead paint applied to them. This does not preclude the possibility that future structures acquired by the EMPD might have lead paint on them. Vinyl paint chips can be placed in the dumpster. Properly placed straw waddles would be one BMP to use in this application. Always check with your supervisor for proper procedure in this activity.

When applying fertilizers, pesticides and herbicides make sure mixing and application rates are followed. Do not mix more than you need and use all you mix. It is better to have to mix a little more than to have to save or store excess product.

Fertilizer will be applied at rates as identified by field inspection or soil samples. The best time to apply fertilizer is when rain is not projected to fall on the target area. Irrigation set times will need to be checked after fertilizer application to make sure over watering fertilized areas might wash fertilizer into storm drains. Fertilizer product that is broadcast onto the sidewalks and street will need to be swept up or blown back onto the grass.

At the park shop storage yard there will be a container for the disposal of contaminated soil. Should any vehicle leak and contaminate the gravel area the contaminated soil will immediately need to be removed deep enough to remove the contamination. Every October a walk around inspection will be made of the shop compound to insure all fluid spills have been excavated. The intent is to keep contaminants from being washed into any storm water runoff collection structure, culvert, ditch or any other runoff conveyance.

All park safety meetings for maintenance employees will have a period of the meeting allotted for how maintenance job functions may impact storm water quality.

A vehicle and equipment wash facility needs to be constructed to insure the EMPD can properly perform equipment maintenance and reduce the potential of generating contaminants that could become pollutant run off. This facility should have a separator to remove contaminants from wash water, include storage for spill containment products, storage of contaminated products until proper disposal can be arranged and storage of potential contaminants with spill containment floors as required.

8. TRACKING AND RECORD KEEPING

The Director of Parks or their designee will document all activities related to the requirements for Secondary Permittees pursuant to RCW 36.89. All documents relating to the Stormwater Permit are to be kept for 5 years. All documents will relating to the Stormwater Management Plan will be available to the public. The reports include but are not limited to:

- a. First Year Annual Report due to DOE by March 31, 2008
- b. Second Year Annual Report due to DOE by March 31, 2009
- c. Third Year Annual Report due to DOE by March 31, 2010
- d. Fourth Year Annual Report due to DOE by March 31, 2011
- e. All documents relating to Illicit Discharges and other permit elements