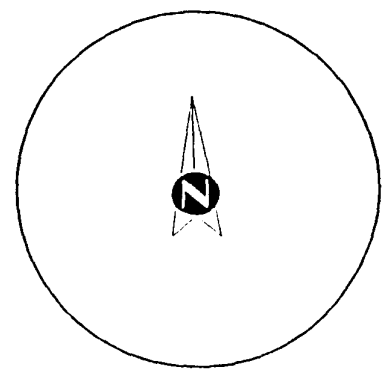
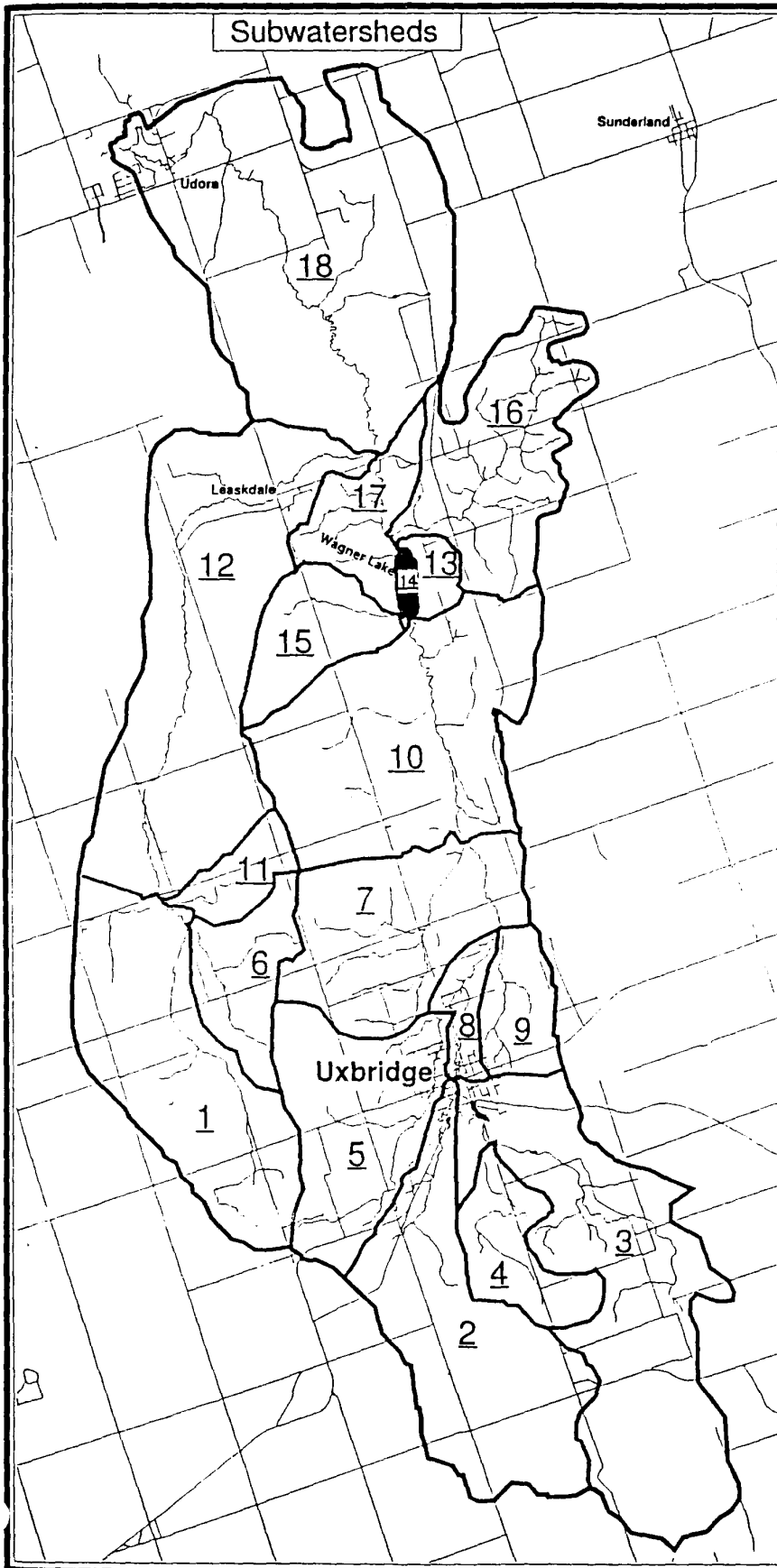


APPENDIX A
SUBWATERSHED AREAS



LEGEND

- Uxbridge Brook Watershed
- roads
- rivers
- subwatershed boundary

SCALE

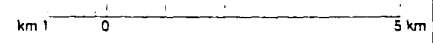


Figure 4.0



Project: Uxbridge Brook Watershed Study

Subwatershed Map

Data Source: LSPCA & OBM Maps

LSPCA 015 01

Table 7.2 Subwatershed 2 Recommendations

RECOMMENDATIONS	BMP CATEGORY	COMP. TARGET	RESPONSIBILITY
1) All new development shall meet Level 1 quality control criteria with state of the art phosphorus removal systems.	Regulation	ongoing	LSRCA MOEE
2) Trace and correct problems associated with inadequate or faulty septic systems for residences.	Remedial project	ongoing	Homeowners Durham Health Unit
3) Encourage homeowners to reduce their use of commercial lawn chemicals.	Education	ongoing	Homeowners LSRCA
4) Road salt, sand and dust suppressant should be applied sparingly; dust suppressant should be environmentally friendly.	Policy	ongoing	Uxbridge Durham
5) Construct soil erosion structures such as grass waterways, terraces and windbreaks.	Remedial project	5 years	Landowners OMAFRA LSRCA
6) Promote conservation tillage practices and the retirement of fragile lands.	Education	ongoing	OMAFRA LSRCA
7) Ensure farmers are well-educated regarding pesticide and herbicide application.	Education	ongoing	OMAFRA MOEE
8) Establish vegetated buffer zones along exposed watercourses (2.0 km).	Remedial project	5 years	Landowners LSRCA
9) Adopt Oak Ridges Moraine Policies relating to recharge/discharge areas.	Policy	5 years	Durham Uxbridge
10) All new developments are to provide 24 hour detention for runoff from a 40 mm storm event.	Policy	ongoing	LSRCA MOEE Uxbridge
11) All new developments are to provide full peak control for site runoff (post to pre) for up to and including the 1:100 year storm event.	Policy	ongoing	LSRCA MOEE Uxbridge



Table 7.2 Continued

RECOMMENDATIONS	BMP CATEGORY	COMP. TARGET	RESPONSIBILITY
12) Remove beaver and man-made dams where possible; alternately construct fish ladders or alternate channels to facilitate fish migration.	Remedial project	10 years	Landowners Uxbridge LSRCA
13) Remove on-line ponds; alternately install bottom draw mechanisms to reduce temperature.	Remedial project	10 years	Landowner LSRCA
14) Restore bottom draw in Electric Light Pond	Remedial project	1 year	Uxbridge LSRCA
15) Restore confined channels using natural channel design.	Remedial project	5 years	Landowners LSRCA MNR
16) Install sediment traps and restore degraded habitat.	Remedial project	5 years	Landowners LSRCA MNR
17) Promote the planting of native material close to natural areas.	Education	ongoing	Uxbridge LSRCA
18) Establish a trail system.	Remedial project	10 years	Landowners Uxbridge
19) Prohibit the use of recreational vehicles on sensitive public land.	Legislation	5 years	Uxbridge
20) Naturalize park areas where practical; review current pesticide and fertilizer application practices.	Policy	10 years	Uxbridge
21) Disconnect roof leaders from storm sewer	Remedial project	5 years	Uxbridge LSRCA
22) Establish a yearly clean-up for garbage removal and enforce illegal dumping laws.	Remedial project	ongoing	Uxbridge



Table 7.3 Subwatershed 3 Recommendations

RECOMMENDATIONS	BMP CATEGORY	COMP. TARGET	RESPONSIBILITY
1) All new development shall meet Level 1 quality control criteria with state of the art phosphorus removal systems.	Policy	ongoing	LSRCA MOEE
2) Trace and correct problems associated with inadequate or faulty septic systems for residences.	Remedial project	ongoing	Homeowners Durham Health Unit
3) Encourage homeowners to reduce their use of commercial lawn chemicals.	Education	ongoing	Homeowners LSRCA
4) Road salt, sand and dust suppressant should be applied sparingly; dust suppressant should be environmentally friendly.	Policy	ongoing	Uxbridge Durham
5) Construct soil erosion structures such as grass waterways, terraces and windbreaks.	Remedial project	5 years	Landowners OMAFRA LSRCA
6) Promote conservation tillage practices and the retirement of fragile lands.	Education	ongoing	OMAFRA LSRCA
7) Ensure farmers are well-educated regarding pesticide and herbicide application.	Education	ongoing	OMAFRA MOEE
8) Establish vegetated buffer zones along exposed watercourses (4.2 km).	Remedial project	5 years	Landowners LSRCA
9) Adopt Oak Ridges Moraine Policies relating to recharge/discharge areas.	Policy	5 years	Durham Uxbridge
10) All new developments are to provide 24 hour detention for runoff from a 40 mm storm event.	Policy	ongoing	LSRCA MOEE Uxbridge
11) All new developments are to provide full peak control for site runoff (post to pre) for up to and including the 1:100 year storm event.	Policy	ongoing	LSRCA MOEE Uxbridge
12) Remove beaver and man-made dams where possible; alternately construct fish ladders or alternate channels to facilitate fish migration.	Remedial project	10 years	Landowners Uxbridge LSRCA



Table 7.3 Continued

RECOMMENDATIONS	BMP CATEGORY	COMP. TARGET	RESPONSIBILITY
13) Remove on-line ponds; alternately install bottom draw mechanisms to reduce temperature.	Remedial project	10 years	Landowner LSRCA
14) Restore bottom draw in Elgin Mills Pond.	Remedial project	1 year	Uxbridge LSRCA
15) Restore confined channels using natural channel design.	Remedial project	5 years	Landowners LSRCA MNR
16) Install sediment traps and restore degraded habitat.	Remedial project	5 years	Landowners LSRCA MNR
17) Promote the planting of native material close to natural areas.	Education	ongoing	Uxbridge LSRCA
18) Establish wildlife corridors between key natural areas.	Remedial project	10 years	Landowners LSRCA Uxbridge
19) Establish a trail system.	Remedial project	10 years	Landowners Uxbridge
20) Prohibit the use of recreational vehicles on sensitive public land.	Legislation	5 years	Uxbridge
21) Naturalize park areas where practical; review current pesticide and fertilizer application practices.	Policy	10 years	Uxbridge
22) Disconnect roof leaders from storm sewer	Remedial project	5 years	Uxbridge LSRCA
23) Establish a yearly clean-up for garbage removal and enforce illegal dumping laws.	Remedial project	ongoing	Uxbridge



Table 7.4 Subwatershed 4 Recommendations

RECOMMENDATIONS	BMP CATEGORY	COMP. TARGET	RESPONSIBILITY
1) Road salt, sand and dust suppressant should be applied sparingly; dust suppressant should be environmentally friendly.	Policy	ongoing	Uxbridge Durham
2) Establish vegetated buffer zones along exposed watercourses (1.2 km).	Remedial project	5 years	Landowners LSRCA
3) Remove beaver and man-made dams where possible; alternately construct fish ladders or alternate channels to facilitate fish migration.	Remedial project	10 years	Landowners Uxbridge LSRCA
4) Remove on-line ponds; alternately install bottom draw mechanisms to reduce temperature.	Remedial project	10 years	Landowner LSRCA
5) Prohibit the use of recreational vehicles on sensitive public land.	Legislation	5 years	Uxbridge
6) Establish a yearly clean-up for garbage removal and enforce illegal dumping laws.	Remedial project	ongoing	Wagner Lake Ratepayers Uxbridge



Table 7.5 Subwatershed 5 Recommendations

RECOMMENDATIONS	BMP CATEGORY	COMP TARGET	RESPONSIBILITY
1) All new development shall meet Level 1 quality control criteria with state of the art phosphorus removal systems.	Policy	ongoing	LSRCA MOEE
2) Trace and correct problems associated with inadequate or faulty septic systems for residences in NW end of town.	Remedial project	ongoing	Homeowners Durham Health Unit
3) Encourage homeowners to reduce their use of commercial lawn chemicals.	Education	ongoing	Homeowners LSRCA
4) Road salt, sand and dust suppressant should be applied sparingly; dust suppressant should be environmentally friendly.	Policy	ongoing	Uxbridge Durham
5) Construct soil erosion structures such as grass waterways, terraces and windbreaks.	Remedial project	5 years	Landowners OMAFRA LSRCA
6) Promote conservation tillage practices and the retirement of fragile lands.	Education	ongoing	OMAFRA LSRCA
7) Restrict livestock access to watercourse (1 site)	Remedial project	5 years	Landowner LSRCA
8) Construct manure storage, clean water diversions and establish buffer strips (1 site).	Remedial project	5 years	Landowner LSRCA
9) Promote proper manure management, soil and manure testing, and discontinue winter manure spreading.	Education	ongoing	Landowners OMAFRA LSRCA
10) Ensure farmers are well-educated regarding pesticide and herbicide application.	Education	ongoing	OMAFRA MOEE
11) Ensure sludge spreading follows Provincial Guidelines and owners have certificate; discontinue winter spreading.	Legislation	5 years	OMAFRA MOEE
12) Establish vegetated buffer zones along exposed watercourses (4.0 km).	Remedial project	5 years	Landowners LSRCA
13) Adopt Oak Ridges Moraine Policies relating to recharge/discharge areas.	Policy	5 years	Durham Uxbridge
14) All new developments are to provide 24 hour detention for runoff from a 40 mm storm event.	Policy	ongoing	LSRCA MOEE Uxbridge



Table 7.5 Continued			
RECOMMENDATIONS	BMP CATEGORY	COMP TARGET	RESPONSIBILITY
15) All new developments are to provide full peak control for site runoff (post to pre) for up to and including the 1:100 year storm event.	Policy	ongoing	LSRCA MOEE Uxbridge
16) Remove beaver and man-made dams where possible; alternately construct fish ladders or alternate channels to facilitate fish migration.	Remedial project	10 years	Landowners Uxbridge LSRCA
17) Remove on-line ponds; alternately install bottom draw mechanisms to reduce temperature.	Remedial project	10 years	Landowner LSRCA
18) Restore confined channels using natural channel design.	Remedial project	5 years	Landowners LSRCA MNR
19) Install sediment traps and restore degraded habitat.	Remedial project	5 years	Landowners LSRCA MNR
20) Promote the planting of native material close to natural areas.	Education	ongoing	Uxbridge LSRCA
21) Establish wildlife corridors between key natural areas.	Remedial project	10 years	Landowners LSRCA Uxbridge
22) Increase forested area to 25% of total by promoting planting assistance programs (175 ha).	Remedial project	20 years	Landowner LSRCA Uxbridge
23) Promote the protection and rehabilitation of wetlands.	Policy	ongoing	Durham Uxbridge LSRCA MNR
24) Establish a trail system.	Remedial project	10 years	Landowners Uxbridge
25) Prohibit the use of recreational vehicles on sensitive public land.	Legislation	5 years	Uxbridge
26) Naturalize park areas where practical; review current pesticide and fertilizer application practices.	Policy	10 years	Uxbridge
27) Disconnect roof leaders from storm sewer	Remedial project	5 years	Uxbridge LSRCA
28) Establish a yearly clean-up for garbage removal and enforce illegal dumping laws.	Remedial project	ongoing	Uxbridge



Table 7.7 Subwatershed 7 Recommendations

RECOMMENDATIONS	BMP CATEGORY	COMP. TARGET	RESPONSIBILITY
1) Road salt, sand and dust suppressant should be applied sparingly; dust suppressant should be environmentally friendly.	Policy	ongoing	Uxbridge Durham
2) Trace and correct problems associated with inadequate or faulty septic systems for residences.	Remedial project	ongoing	Homeowners Durham Health Unit
3) Restrict livestock access to watercourse. (1 site)	Remedial project	5 years	Landowner LSRCA
4) Construct soil erosion structures such as grass waterways, terraces and windbreaks	Remedial project	5 years	Landowners OMAFRA LSRCA
5) Promote conservation tillage practices and the retirement of fragile lands.	Education	ongoing	OMAFRA LSRCA
6) Promote proper manure management, and soil and manure testing.	Education	ongoing	Landowners OMAFRA LSRCA
7) Ensure farmers are well-educated regarding pesticide and herbicide application.	Education	ongoing	OMAFRA MOEE
8) Ensure sludge spreading follows Provincial Guidelines and owners have certificate; discontinue winter spreading.	Legislation	5 years	OMAFRA MOEE
9) Establish vegetated buffer zones along exposed watercourses (3.5km).	Remedial project	5 years	Landowners LSRCA
10) Remove beaver and man-made dams where possible; alternately construct fish ladders or alternate channels to facilitate fish migration.	Remedial project	10 years	Landowners Uxbridge LSRCA
11) Remove on-line ponds; alternately install bottom draw mechanisms to reduce temperature.	Remedial project	10 years	Landowner LSRCA
12) Establish wildlife corridors between key natural areas.	Remedial project	10 years	Landowners LSRCA Uxbridge
13) Increase forested area to 25% of total by promoting planting assistance programs (14 ha).	Remedial project	20 years	Landowners LSRCA Uxbridge



Table 7.8 Subwatershed 8 Recommendations

RECOMMENDATIONS	BMP CATEGORY	COMP. TARGET	RESPONSIBILITY
1) All new development shall meet Level 1 quality control criteria with state of the art phosphorus removal systems.	Policy	ongoing	LSRCA MOEE
2) Trace and correct problems associated with inadequate or faulty septic systems.	Remedial project	ongoing	Homeowners Durham Health Unit
3) Encourage homeowners to reduce their use of commercial lawn chemicals.	Education	ongoing	Homeowners LSRCA
4) Road salt, sand and dust suppressant should be applied sparingly; dust suppressant should be environmentally friendly.	Policy	ongoing	Uxbridge Durham
5) Establish vegetated buffer zones along exposed watercourses (1.0 km).	Remedial project	5 years	Landowners LSRCA
6) Adopt Oak Ridges Moraine Policies relating to recharge/discharge areas.	Policy	5 years	Durham Uxbridge
7) All new developments are to provide 24 hour detention for runoff from a 40 mm storm event.	Policy	ongoing	LSRCA MOEE Uxbridge
8) All new developments are to provide full peak control for site runoff (post to pre) for up to and including the 1:100 year storm event.	Policy	ongoing	LSRCA MOEE Uxbridge
9) Restore confined channels using natural channel design.	Remedial project	5 years	Landowners LSRCA MNR
10) Install sediment traps and restore degraded habitat.	Remedial project	5 years	Landowners LSRCA MNR
11) Promote the planting of native material close to natural areas.	Education	ongoing	Uxbridge LSRCA
12) Establish a trail system.	Remedial project	10 years	Landowners Uxbridge
13) Prohibit the use of recreational vehicles on sensitive public land.	Legislation	5 years	Uxbridge
14) Naturalize park areas where practical; review current pesticide & fertilizer application practices.	Policy	10 years	Uxbridge
15) Disconnect roof leaders from storm sewer	Remedial project	5 years	Uxbridge LSRCA
16) Establish a yearly clean-up for garbage removal and enforce illegal dumping laws.	Remedial project	ongoing	Uxbridge



Table 7.9 Subwatershed 9 Recommendations

RECOMMENDATIONS	BMP CATEGORY	COMP. TARGET	RESPONSIBILITY
1) All new development shall meet Level 1 quality control criteria with state of the art phosphorus removal systems.	Policy	ongoing	LSRCA MOEE
2) Trace and correct problems associated with inadequate or faulty septic systems.	Remedial project	ongoing	Homeowners Durham Health Unit
3) Encourage homeowners to reduce their use of commercial lawn chemicals.	Education	ongoing	Homeowners LSRCA
4) Road salt, sand and dust suppressant should be applied sparingly; dust suppressant should be environmentally friendly.	Policy	ongoing	Uxbridge Durham
5) Construct soil erosion structures such as grass waterways, terraces and windbreaks	Remedial project	5 years	Landowners OMAFRA LSRCA
6) Promote conservation tillage practices and the retirement of fragile lands.	Education	ongoing	OMAFRA LSRCA
7) Promote proper manure management, soil and manure testing, and discontinue winter manure spreading.	Education	ongoing	Landowners OMAFRA LSRCA
8) Ensure farmers are well-educated regarding pesticide and herbicide application.	Education	ongoing	OMAFRA MOEE
9) Ensure sludge spreading follows Provincial Guidelines and owners have certificate; discontinue winter spreading.	Legislation	5 years	OMAFRA MOEE
10) Establish vegetated buffer zones along exposed watercourses (1.8 km).	Remedial project	5 years	Landowners LSRCA
11) Adopt Oak Ridges Moraine Policies relating to recharge/discharge areas.	Policy	5 years	Durham Uxbridge
12) All new developments are to provide 24 hour detention for runoff from a 40 mm storm event.	Policy	ongoing	LSRCA MOEE Uxbridge
13) All new developments are to provide full peak control for site runoff (post to pre) for up to and including the 1:100 year storm event.	Policy	ongoing	LSRCA MOEE Uxbridge



Table 7.9 Continued

RECOMMENDATIONS	BMP CATEGORY	COMP. TARGET	RESPONSIBILITY
14) Remove beaver and man-made dams where possible; alternately construct fish ladders or alternate channels to facilitate fish migration.	Remedial project	10 years	Landowners Uxbridge LSRCA
15) Remove on-line ponds; alternately install bottom draw mechanisms to reduce temperature.	Remedial project	10 years	Landowner LSRCA
16) Restore confined channels using natural channel design.	Remedial project	5 years	Landowners LSRCA MNR
17) Install sediment traps and restore degraded habitat.	Remedial project	5 years	Landowners LSRCA MNR
18) Promote the planting of native material close to natural areas.	Education	ongoing	Uxbridge LSRCA
19) Establish wildlife corridors between key natural areas.	Remedial project	10 years	Landowners LSRCA Uxbridge
20) Increase forested area to 25% of total by promoting planting assistance programs (41 ha).	Remedial project	20 years	Landowner LSRCA Uxbridge
21) Establish a trail system.	Remedial project	10 years	Landowners Uxbridge
22) Naturalize park areas where practical; review current pesticide and fertilizer application practices.	Policy	10 years	Uxbridge
23) Disconnect roof leaders from storm sewer	Remedial project	5 years	Uxbridge LSRCA
24) Establish a yearly clean-up for garbage removal and enforce illegal dumping laws.	Remedial project	ongoing	Uxbridge



APPENDIX B
RESOURCE TARGETS

APPENDIX C
~~PROPOSED OPTION FOR TORONTO STREET~~
~~SOUTH GATEWAY ROAD DESIGN~~

~~APPENDIX D~~
~~MAJOR VACANT DEVELOPMENT SITES~~

issues and concerns specific to these subwatersheds. Specific resource targets for subwatersheds were established by the Steering and the Public Advisory Committees. These targets were then used to evaluate specific recommendations for each subwatershed and are listed in Table 7.0.

Table 7.0 Resource Targets for Management Issues

Management Issues	Resource Target
Water Quality	To protect ground and surface waters which currently meet the Ministry of Environment and Energy Provincial Water Quality Objectives (PWQOs) and Ontario Drinking Water Objectives (ODWOs). To enhance ground and surface waters which do not meet objectives to at least meet these objectives recognizing that in certain areas exceptional water may require more stringent criteria. Furthermore, in some situations natural conditions may make attaining this goal undesirable.
Water Quantity	To protect and maintain the existing flow regime both in terms of peak flows and flow volume and enhance these functions where they have been degraded wherever possible.
Aquatic Habitat	To maintain and where possible improve aquatic habitat of Uxbridge Brook to ensure the continued and improved health of the aquatic ecosystem.
Terrestrial Habitat	Protect and enhance existing terrestrial habitat within the watershed including forests, wetlands, meadows, wildlife corridors and feeding grounds. Rehabilitate degraded habitat wherever possible.
Recreational and Aesthetic Amenities	Provide environmentally sound recreational opportunities.

The following tables outline the recommended BMPs and agencies or groups responsible for implementation for each of the eighteen (18) subwatersheds.

